



GUAM ENVIRONMENTAL PROTECTION AGENCY

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SUBJECT: Comments on Draft EIS/OEIS, Guam and CNMI Military Relocation

Dear Madam/ Sir:

Hafa Adai! Guam Environmental Protection Agency is pleased to submit our comments on the Draft EIS/OEIS for the Guam and CNMI Military Relocation.

We reviewed this exceedingly large Draft EIS/OEIS that was released on November 21, 2009 within the 90 days allowed time. Your cooperation in addressing our comments in the upcoming Final EIS/OEIS is greatly appreciated.

Please contact Jesse Cruz, Environmental Monitoring & Surveillance Administrator, or Ray Calvo, Planner IV, at (671) 646-1658/28 if there are questions on these comments or more information is needed. Si Yu'us Ma'ase.

Sincerely,

LORILEE T. CRISOSTOMO
Administrator

Enclosure

"ALL LIVING THINGS OF THE EARTH ARE ONE"

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001	001	1	ES-4 ES-5	Guam EPA		<i>Proposed Actions</i> include a) Marine - Construction of infrastructure and facilities; b) Navy - Construction of new wharf with shoreside infrastructure; c) Army - Construction of infrastructure and AMTF	
J-001	002			Guam EPA		Each of the Volumes of the DEIS describe <u>general</u> activities related to the main components of the <i>Proposed Actions</i> described above. Considering the lack of specific information on all the materials to be used, the impact of solid, toxic and hazardous waste management has not been provided and therefore <u>cannot be adequately evaluated</u> for each of the specific activities described in the Volumes. Therefore, to facilitate clarity and consistency, Guam EPA recommends that a <u>separate Solid Waste Management & Disposal Plan</u> . <i>This Plan must include a waste composition study to address the anticipated wastes associated with each activity, its impact to the existing management options, and how will the waste streams be managed.</i>	
J-001	003		ES-27 Figure ES-6a	Guam EPA		According to Figure ES-6a, "Basic alternative]Use existing Navy Apra Harbor Landfill Until New Public Landfill at Layon is Ready. However, both facilities are <u>not permitted to accept all wastes</u> at their respective locations. Although the Layon Municipal Solid Waste Landfill (MSWL) was permitted in November 23, 2009, the facility, once operational, is only permitted to accept residential and commercial solid waste. The Layon MSWL is <u>not permitted to accept certain wastes streams such as, but not limited to, hazardous waste, asbestos, lead-abatement wastes, construction & demolition wastes, and green wastes.</u>	
J-001	004			Guam EPA		Based on the <i>Proposed Actions</i> , the <i>Plan</i> must address at a minimum, but not limited to, the following waste streams:	

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J-001-001

Thank you for your comment. The proposed actions are complex, inter-related, multi-service proposals and are not discrete individual actions of the different military services. The National Environmental Policy Act specifically prohibits segmentation of a large proposal into smaller actions for environmental analysis. As this EIS shows, the proposed and related actions clearly are having effects on the same resource areas and must be considered together to determine the full potential for environmental effects. Further, a comprehensive analysis helps define the best mitigation and management practices to lessen adverse effects.

J-001-002

Thank you for your comment. DoD has prepared the Guam Solid Waste Utility Study that looks at the existing and projected solid waste volumes generated from the future Marine Corp buildup. Estimates for this Utility Study were developed using Marine Corps Base (MCB) Hawaii, Kaneohe Bay (KB) solid waste characterization analysis. Solid waste generation activities for military installation on Guam and MCB Hawaii-KB are similar. Both military installations have similar facilities including maintenance shops, administrative offices, commissary and exchange facilities, fast-food establishments, club operations, family housing and unaccompanied personnel housing. The results of the solid waste characterization study will be incorporated into the FEIS.

The DoD has also prepared a Construction and Demolition (C&D) Debris Reuse and Diversion Study which addresses the anticipated waste streams during the demolition of old buildings and construction of new facilities identified in the EIS. The study also addresses green waste that will be generated from clearing many acres of vegetation. The goal of the study is to divert 50% of the C&D debris by the end of fiscal year 2015.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001	004			Guam EPA		1. Construction & Demolition Debris - Options must be described for the management of these wastes either for land disposal, reuse or recycling. As a reminder, all the storage, processing, and disposal of construction & demolition debris requires a Guam EPA-issued solid waste management facility permit <u>prior</u> to any action taken. Moreover, the transportation of construction and demolition debris must be from a company with a valid Solid Waste Collection Permit.	
				Guam EPA		2. Green Waste - In anticipation of the vegetative wastes generated from clearing and grading, beneficial use options must be described for the management of this waste stream.	
				Guam EPA		3. Municipal Solid Waste - The Plan must include clear instructions that all municipal solid wastes generated from temporary workers, military personnel, military dependants, and support services are to be disposed <u>only</u> at Guam EPA-permitted Solid Waste Management Facilities.	

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The non-DoD project solid waste volumes will be handled in accordance with the existing Guam Integrated Solid Waste Management Plan (ISWMP). GBB is expediting the closure of Ordot and the opening of Layon in the most expeditious manner possible.

DoD is in the process of updating the military Integrated Solid Waste Management Plan (ISWMP) to reflect how waste will be managed now and in the future. The updated DoD ISWMP will include any new information from studies and reports that have been conducted as part of the NEPA process.

J-001-003

Thank you for your comment. DoD acknowledges that certain waste streams will not be allowed at Layon Landfill including hazardous waste, asbestos, lead-abatement wastes, construction and demolition (C&D) debris, green wastes, corrugated cardboard, junk vehicles, and white goods. All solid wastes will be disposed in accordance with applicable federal and Guam regulations.

C&D debris will continue to be disposed at the Navy Hardfill and asbestos will be disposed at Navy Sanitary Landfill at Apra Harbor.

J-001-004

Thank you for your comment. DoD is in the process of updating the military Integrated Solid Waste Management Plan (ISWMP) to reflect how waste will be managed now and in the future. The updated DoD ISWMP will include any new information from studies and reports that have been conducted as part of the NEPA process. Waste streams such as waste munitions; hazardous waste; ship-generated hazardous waste and sewage; dredged spoils will not be covered by the ISWMP. These waste streams will be addressed in other plans or service directives.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-004	1	2.2.4	2-15	Guam EPA		4. Waste Munitions - The Plan must describe the management of waste munitions generated from training activities related to the <i>Small Arms Range Complex, Machine Gun Multi-Purpose Range, Hand Grenade Range, and Demolition Range</i> , to include at a minimum, but not limited to, disposal practices of spent casings, scheduled inspections, and periodic sampling and analysis to identify impacts, if any, to the environment and biota.	
				Guam EPA		5. Hazardous Waste - The <i>Plan</i> must describe the management of all hazardous waste generated, as defined under RCRA C, and meet all the requirements specified under <i>Guam's Hazardous Waste Management Regulations</i> .	
				Guam EPA		6. Ship-Generated Waste and Cargo Residues - The <i>Plan</i> must describe the management of all ship-generated waste, that is, any kind of waste, including sewage, and residues other than cargo residues, which are generated during the operation of a ship and cargo-associated waste. The disposal of this waste stream may only be offered to reception facilities suitable for receiving ship-generated waste or cargo residues which have a valid Guam EPA Solid Waste Management Facility permit. This shall include fixed facilities as well as floating and mobile units. Wastes classified as a Hazardous Waste must be managed according to Guam's Hazardous Waste Management Regulations.	

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The Navy is preparing a Recycling and Solid Waste Diversion Study for DoD Bases, Guam that has established a diversion goal of 50 percent, not including construction and demolition debris. The Study is considering the following alternatives: 1) DoD would construct two refuse transfer facilities, one in northern Guam and one in Southern Guam; 2) DoD would implement a source separation recycling program at all facilities; 3) DoD would construct recycling center(s); and 4) DoD would construct a materials resource recovery facility.

Additionally, the Navy is preparing a Construction and Demolition (C&D) Debris Reuse and Diversion Study for DOD Bases, Guam that addresses waste characterization, processing, recycling and disposal of construction debris. Information from this study will be used to update the FEIS.

The study is considering the following alternatives: 1) Contractors would continue to process all C&D debris, and DoD would construct a composting facility to process green waste and 2) DoD would construct a C&D debris central processing facility and a composting facility to process green waste.

Through project specific contractual requirements, DoD contractors would be required to process and divert 50% of C&D debris that is generated on each project. Another alternative would be for the DoD to construct a central processing facility that would be used to recover and reuse or recycle scrap metal, concrete (without lead-based paint), asphalt concrete, and untreated wood. Contractors would be required to haul C&D to this facility. Based on the C&D debris composition assumed in the study, the Navy will be able to achieve a C&D debris waste diversion goal of greater than 50% by the end of fiscal year 2015. A site for the central processing facility is currently being evaluated but will most likely be located in northern Guam. Disposal of C&D debris that is not divertible or recyclable will be disposed at the Navy Hardfill at Apra

Harbor. The study also evaluates the construction of a composting facility to handle green waste generated by land clearing activities required for new development.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001	004			Guam EPA		7. Medical & Dental Wastes - The Plan should address the management of common wastes associated with this activity, such as, but not limited to chemical solutions, x-ray processing wastes, sterilizing solutions (ex. Glutaraldehyde and orthophthaldehyde), formalin, biohazardous wastes, lead foil film backing, mercury, scrap dental amalgam, fluorescent tubes and batteries.	
				Guam EPA		8. Dredged Spoils - The Plan should address the assessment and management of dredged spoils in a way that will prevent pollution of the marine environment. The Plan must include the sampling and analysis of substances that are toxic, persistent or liable to accumulation in biological materials or sediments. In addition, the Plan must include all background or historical data referenced to support the assumptions made. The characterization of this waste stream, whether through upland placement, beneficial use, or ocean disposal.	
				Guam EPA		9. Waterfront Wastes - The Plan must address the management of wastes generated from equipment cleaning & biohazards	
				Guam EPA		10. Special Wastes - The Plan must address the management of wastes tires, white goods, brown goods, junk vehicles, ferrous and non-ferrous wastes.	
						RECOMMENDED ACTIONS:	

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Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-004						a. Based on the insufficient information provided on wastes generation, I am recommending NO ACTION .	
						b. Although DoD has expressed that it eventually will be a rate paying customer to the Government of Guam, DoD should be tasked to contribute to the construction and development of the Layon Municipal Solid Waste Landfill prior to operation. The percentage of contribution to the construction and development of the Layon MSW Landfill should be based on the amount of waste generated from DoD and non-DoD proposed action related projections.	
J-001-005	1	ES	1	17-25	Guam EPA	Why aren't three separate, less unwieldy EIS's being done for the individual Army, Navy and Marines actions? The Air Force is also expanding facilities on Guam which must relate to and coordinate with the other three branches, but the Air Force actions are being treated separately under NEPA.	
	1	ES	1	17-25	Guam EPA	Why aren't three separate, less unwieldy EIS's being done for the individual Army, Navy and Marines actions? The Air Force is also expanding facilities on Guam which must relate to and coordinate with the other three branches, but the Air Force actions are being treated separately under NEPA.	
J-001-006	1	ES	52	Population	Guam EPA	Construction population impacts of workers depends on how many are H-2. Numbers of preferred US or FAS citizen workers should be increased over 472. XXX just one sector?	
	1	ES	56	Population	Guam EPA	Population, Labor Force, Housing Demand, Public Services, etc. impacts should be much higher if preferred US and FAS workers are employed rather than H-2 workers. XXX just one sector?	

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J-001-005

Thank you for your comment. The proposed actions are complex, inter-related, multi-service proposals and are not discrete individual actions of the different military services. The National Environmental Policy Act specifically prohibits segmentation of a large proposal into smaller actions for environmental analysis. As this EIS shows, the proposed and related actions are having effects on the same resource areas and must be considered together to determine the full potential for environmental effects. Further, a comprehensive analysis helps define the best mitigation and management practices to lessen adverse effects.

J-001-006

Thank you for your comment. On-island residents would be hired if they are qualified for the positions during the construction and operations periods. Because the number of qualified on-island residents would likely be exhausted, especially in the anticipated years of construction (2010 through 2016), thousands of H2B visa foreign workers are anticipated. See the detailed discussion on workers in Section 4.3 of the SIAS.

Your comments are in agreement with the analysis in the SIAS, beneficial economic impacts would likely be greater if more FAS and U.S. Mainland workers were employed. The SIAS identifies approximate numbers of civilian employees to be hired by the DoD and estimates their origin; specific hiring procedures are not addressed in the DEIS. U.S. workers on the mainland and in Hawaii will likely not be a large labor pool because of the lower wages paid in Guam for construction workers (excludes supervisory and professional engineering positions).

Vol	Ch	Pg	Line, Tbl, Fig	Org	Comment or (last	Comment	Responder
J-001-007	1	ES	ES-34	ES-4	Guam EPA	Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation was not provided. Mitigation is a critical part of the NEPA process and impacts need to be mitigated.	
J-001-008	1	ES	ES-34	ES-4	Guam EPA	Overland flight path noise from aircraft operations/airdrop and from AFB, NWF, Landing Zones and Orote would be a significant impact to residents and endangered species especially during the off-hours operations. This potential noise impact was not addressed in the DEIS. No alternatives were provided. No mitigation was provided cumulative noise impacts would also need to be addressed.	
J-001-009	1	2	12	3-5	Guam EPA	Explain why mechanical dredging is environmentally better or worse than hydraulic dredging. Would hydraulic dredging create less silt and sediment impacts at dredge impact sites, if proper dewatering to protect the marine waters is practiced?	
J-001-010	1	2	12	14 & 15	Guam EPA	Beneficial uses can be found related to the numerous activities ongoing and proposed on DOD bases on Guam. Also beneficial uses outside of military activities must be considered. There must be consideration of use as land fill cover, road base, rehabilitation of old quarries, fill for port expansion, fill for adaptation to sea level rise, etc. Beneficial uses must be investigated and discussed in the EIS. Information on the quality of materials to be dredged and their appropriate beneficial uses is necessary in the EIS.	
J-001-011	1	2	12	24 & 25		What are the levels of contamination in recently dredged materials from Inner Apra Harbor and near Bravo Wharf that are in confined areas on Navy Base now? Are there restrictions on their re-use and have beneficial uses been planned for them? Can they be included in beneficial uses to be identified for dredging actions addressed in this EIS?	
J-001-012	1	2	15	40	Guam EPA	Are the "high value munitions, being stored at NMS? Are there special safety arcs and restrictions on them?	

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J-001-007

Thank you for your comments. It is acknowledged that no mitigation measures were proposed for traffic noise impacts at most locations in the north and central regions of Guam. The noise abatement analyses for the north and central regions presented in Volume 6, Chapter 8 (pages 8-21 to 8-35) of the FEIS indicate that most locations where impacts would occur require abatement measures that would not be feasible. This is because the affected areas consist of residential areas where residences have driveways that provide direct access to the roads, thereby resulting in issues of sound wall discontinuity. For a sound wall to provide sufficient noise reduction, it must be high enough and long enough to shield the receptor from the road. Access openings in the noise barrier for streets, driveways, and maintenance severely reduce the effectiveness of the noise barrier to the point that it would not be feasible to construct a barrier. Furthermore, for most of the locations, there are not enough residences per area to allow a noise barrier to be reasonable due to the cost per benefited receptor. FHWA and Guam DPW policies provide that only abatement measures that have been determined to be feasible and reasonable would be incorporated into road projects. It should be noted, however, that the analyses indicate that sound walls for one out of 16 locations in the north region and nine out of 48 locations in the south region met the feasible and reasonable criteria for construction. This will be further verified during the design process.

J-001-008

Thank you for your comment. Noise associated with airlift, airdrop, and landing zone operations are described in Volume 2, Section 6.2 and referred to as Aviation Training. Flight paths from Andersen AFB to Northwest Field (NWF) are included in the noise contours shown on Figure 6.2-1. All other flight paths from Andersen AFB to the other training areas would occur over water. Aviation noise as a result of the USMC Relocation to Guam are such that mitigation is not required.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-013	1	2	22	20-22	Guam EPA	Explain why mechanical dredging is claimed to be environmentally worse than hydraulic dredging. Experience with dredging to proposed depths for CVN use, using mechanical dredging, as at Kilo Wharf, proves that silt curtains are not able to contain silt at depths over 30 feet. Wouldn't hydraulic dredging create less silt and sediment impacts at dredge impact sites at these depths, if proper dewatering to protect the marine waters is practiced? If so, it should be the preferred method.	
J-001-014	1	2	33	Tbl	Guam EPA	In the peak construction year of 2014, why does the DEIS propose over 30,000 of the needed construction workers will not be from off-Guam? Is this possible, to have that many local construction workers?	
J-001-015	1	2	35	31	Guam EPA	If aggregate is not being imported, what quarries will supply this? What quantities will be needed? Will any quarries on DOD land be used? What are impacts of the increased quarrying activity?	
J-001-016	1	3	6	4	Guam EPA	How far off shore would the SDZ extend? How many acres of submerged land would be included?	
J-001-017	1	3	15	28	Guam EPA	Was the option of improving the removal of TCE from water produced at the Maui infiltration tunnel in Tumon considered and renewing use of this highly productive DOD facility? This could re-establish use of a dependable water source while removing contaminants from Guam's Northern Aquifer (established as a sole source aquifer by US EPA). Carbon filtration, as used at a Guam International Airport well may need to replace the existing AAFB air stripping facility for TCE removal.	
J-001-018	1	4	3	BMP 7 to 21	Guam EPA	Aren't Marine Bio. Resources also protected by these BMP's?	

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Please refer to Volume 7, Chapter 4 for more details about the cumulative impact analysis.

J-001-009

Thank you for your comment. The differences between the environmental effects of mechanical and hydraulic dredging are discussed in Chapter 2, Volume 4 and Appendix D of the EIS. Mechanical dredging involves use of a clamshell or fixed bucket that excavates the dredge sediment from the harbor floor and then carries the sediment in the full bucket through the water column before lifting the bucket out of the water and placing the dredged sediment in a nearby barge or scrow. During this movement, a small fraction of the collected sediment will escape from the bucket and create suspended sediment in the lower and higher levels of the water column. On the other hand, a hydraulic dredge works solely on the harbor floor and any suspended sediment will emanate only in the lower portion of water column. As a result, the plume of suspended sediment is generally greater with use of conventional clam shell bucket as compared with a hydraulic dredge. However, use of hydraulic dredging is generally limited to soft bottom sediment on relatively flat surfaces. Mechanical dredging, which has historically been used in Apra Harbor, was chosen as the dredging method for evaluating environmental impacts as it presents the most adverse impact scenario.

A sediment plume is an inevitable effect of in-water construction activities. The Navy proposes to minimize sedimentation by using best management practices such as silt curtains and operational controls of dredging equipment. Final mitigation measures for all dredging activities will be determined and agreed upon during the permit phase of the projects.

J-001-010

Thank you for your comment. The DoD is considering several options for

Vol	Ch	Pg	Line, Tbl, Fig	Org	Com ment er (last	Comment	Responder
J-001-019	1	4	3	BMP 19	Guam EPA	Besides silt curtains, bubble curtains and alternative dredging techniques should be considered	
J-001-020	1	4	5	BMP 32, 36 & 37	Guam EPA	Aren't Marine Bio. Resources also protected by these BMP's?	
J-001-021	1	All			Guam EPA	In all activities creating impervious areas from buildings, roads, docks, parking lots, etc., stormwater must be managed on site and pollutants removed before it is discharged to any surface waters.	
J-001-022	1	ES	ES-34	ES-4	Guam EPA	Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation was not provided. Mitigation is a critical part of the NEPA process and impacts need to be mitigated.	
J-001-023	1	ES	ES-34	ES-4	Guam EPA	Overland flight pathnoise from aircraft operations/airdropsto and from AFB,NWF,Landing Zones and Orote would be a significant impact to residents and endangered species especially during the off-hours operations. This potential noise impact was not addressed in the DEIS. No alternatives were provided. No mitigation was provided cumulative noise impacts would also need to be addressed.	
J-001-024	1	All			Guam EPA	The Socio-Economic Impact Study(SEIS) done for these proposed actions apparently has been completed for some time and its results should be added to the DEIS and the SEIS should be appended to the DEIS.	
J-001-025	2	2	137	2	Guam EPA	Why can't dredged material from the CVN project be used beneficially for berms at firing ranges?	

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disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

J-001-011

Thank you for your comment. Text includes a discussion of recent sediment sampling results. Text added regarding the priority to utilize dredged material (DM) for beneficial purpose including the uses noted by the commenter such as landfill cover, road base, backfill, beach re-nourishment if suitable, etc. Beneficial reuse is preferred and would be examined on a case-by-case basis. Receiver of DM would need to be responsible for disposal or reuse of DM.

J-001-012

Thank you for your comment. Please refer to Volume 9, Appendix D, Project Description Technical Appendix, Munitions, for a discussion of the munitions and constituents of concern associated with the proposed ranges.

J-001-013

Thank you for your comment. The differences between the environmental effects of mechanical and hydraulic dredging are

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-026	2	2	97	41	Guam EPA	Beach landings have not been on-going at Dadi and Tipalso, except for a trial LCAC landing years ago that proved damaging. They should not be approved nor undertaken there because of impacts to marine life.	
J-001-027	2	2	111	10	Guam EPA	The dredged material also might be used beneficially for berms at firing ranges. Can quantities needed and quality related to expected dredged material be discussed or assessed?	
J-001-028	2	2	113	25	Guam EPA	What is a "typical Guam storm event", used as a basis of design? A 25-year storm?	
J-001-029	2	3	3-39	line 35	Guam EPA	The upland placement sites are enclosed by earthen berms approximately 16 to 30 ft in height. Considering 5-sites for upland placement, this will require large volume of materials (Table D-1 Vol 9 Appendix D : Approx. vol=1.8 million cu. yd.) to be used as earthen berms; where is the source or supply be coming from? It was mentioned in line 37 that no soil or fill would be brought to site for construction, Is this means that earthen berm will be taken at the site? EIS must clearly identify the source in order for the reviewer to fully figure out the consequences.	
J-001-030	6	3	3-20		Guam EPA	South Finegayan; the wastewater collection system is a gravity sewer system connected to GWA ww collection system. EIS must consider collection system assessment from downline of connection point (GWA line) existing collection system might not capable of handling additional flow like: pump station design capacity, existing pipeline design and generator capacity. In relation to collection system and treatment facility's, <u>who will be responsible in the operation and maintenance.</u> If DoD will utilize NDWWTP Is there any agreement between DoD and GWA regarding operation and maintenance of both collection systems and treatment systems, EIS need to specify to ensure that proper operation and maintenance of the system will be applied to ensure that overflow problems and public health issues will be eliminated.	

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discussed in Chapter 2, Volume 4 and Appendix D of the EIS. Mechanical dredging involves use of a clamshell or fixed bucket that excavates the dredge sediment from the harbor floor and then carries the sediment in the full bucket through the water column before lifting the bucket out of the water and placing the dredged sediment in a nearby barge or scrow. During this movement, a small fraction of the collected sediment will escape from the bucket and create suspended sediment in the lower and higher levels of the water column. On the other hand, a hydraulic dredge works solely on the harbor floor and any suspended sediment will emanate only in the lower portion of water column. As a result, the plume of suspended sediment is generally greater with use of conventional clam shell bucket as compared with a hydraulic dredge. However, use of hydraulic dredging is generally limited to soft bottom sediment on relatively flat surfaces. Mechanical dredging, which has historically been used in Apra Harbor, was chosen as the dredging method for evaluating environmental impacts as it presents the most adverse impact scenario.

A sediment plume is an inevitable effect of in-water construction activities. The Navy proposes to minimize sedimentation by using best management practices such as silt curtains and operational controls of dredging equipment. Final mitigation measures for all dredging activities will be determined and agreed upon during the permit phase of the projects.

J-001-014

Thank you for your comment. It should be noted that this is an unconstrained estimate representing the maximal numbers of construction workers. The table referred to in your comment does not call for 30,000 Guam construction workers. The table (Table 2.7-7, in Volume 1, Chapter 2 of the DEIS) calls for 2,668 local Guam construction workers during the peak year of 2014. The table points out that 21,041 total construction workers would be required to work on

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-031	6	3	3-54	Guam EPA	-	Desalination with reverse osmosis was chosen as the long term alternative for water supply. Where should be the planned point of discharge for any waste or residue from treatment process?	
J-001-032	6	2	2-84	Guam EPA		Item 2.3.7.1 Build new DoD stand alone secondary treatment plant and construct a new ocean outfall. The planned location of outfall (based on page 2-89 map) is within the western coastline, GEPA is not confident to allow additional outfall to the two existing outfall located close to each other.	
J-001-033	7	2	2-6 Table 2.1-1	Guam EPA		Item #7 LID- In consideration that Northern Watershed are mostly covered of DoD land and within the Ground Water Sole Source Aquifer, it must also consider Watershed protection management approach by : 1. Participating in the development of watershed management plan and implement and adopt specific watershed protection strategies. 2. Better site design or effective land use planning techniques to reduce or shift impervious cover. 3. Land conservation and other in order to ensure or obtain consensus of the most important water resources goals	
J-001-034	2	2	115 20	Guam EPA		Would hydrology supporting nearby wetlands or mangroves be impacted by the road and facilities?	
J-001-035	2	4	53	Guam EPA		Throughout Section 4.2, for each resource concern, the DEIS simply notes that BMP's will be used and laws followed and therefore there will not be significant impacts and that impacts and practices will be similar to other alternatives or other sites, keeps being repeated without specifying the impacts and practices and mitigation for specific resources and sites. This repetition implies that the impacts, BMP's and mitigation for actions at each site were not adequately assessed in the preparation of this DEIS and this coverage in the DEIS is meaningless. Although issues may be addressed in other chapters, this makes the DEIS difficult for reviewers to evaluate.	

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construction projects related to the proposed action in 2014 and that 18,373 (87%) of them are expected to come from off-island. The number of jobs filled by Guam residents is based on the qualified on-island workers available; it is anticipated that the number of qualified Guam construction workers would be exhausted and off-island workers would need to fill the required labor demand.

J-001-015

Thank you for your comment.

About 141,500 tons of aggregate are being imported from Japan for use only on roadways. Existing quarries on Guam will provide the rest of the fill required for projects described in the DEIS. Where ever possible, cut will be reused as fill at project sites to minimize need for fill to come from quarries. The existing quarries can support fill requirements and are not expected to be negatively impacted by increased activity.

J-001-016

Thank you for your comment. The acreage of Surface Danger Zone (SDZ) over submerged lands for Training Range Complex Alternative A is approximately 4,439 acres and for Alternative B, approximately 6,003 acres. These values are in the Draft EIS Volume 2, Section 2.3.

The greatest distance from coastline to outer edge of the SDZ for Alternative A is approximately 3.3 miles, and for Alternative B, approximately 3.2 miles. This information is added to the Final EIS in the same section as the SDZ acreage.

J-001-017

Thank you for your comment. Rehabilitation of the Tumon Maui well was

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-036	2	4	12 & 13	Guam EPA		"Nearshore" waters averaging 10 meters depth does not relate to Guam, where where reef flats and steep reef slopes predominate. Rewrite this.	
J-001-037	2	4	13 G-2 and G-3	Guam EPA		The mapped GWMPZ is no longer applicable under Guam law. Protected groundwater area is now recognized as land over the entire Northern Guam Aquifer, from coastline to coastline, not an arbitrarily mapped zone that excluded coastal lands. This removal of the application of the earlier GWMPZ mapped boundaries is based on Guam Public Law.	
J-001-038	2	4	19 28 & 29	Guam EPA		All of Andersen AFB lies over the Guam Northern Aquifer. The mapped GWMPZ is no longer applicable under Guam law. Protected groundwater area is now recognized as land over the entire Northern Guam Aquifer, from coastline to coastline, not an arbitrarily mapped zone that excluded coastal lands. This removal of the application of the earlier GWMPZ mapped boundaries is based on Guam Public Law.	
J-001-039	2	4	19 33 & 34	Guam EPA		TCE and PCE contaminants from previous Andersen AFB discharges remain in the Guam Northern Aquifer and remain a risk. AAFB has stopped the active removal of this contaminant, which it had done in recent years. To allow safe expanded production of well water to meet future needs, the DOD should not leave such contamination in the groundwater for those using this water to clean up or limiting the availability of safe groundwater to develop. Instead, the DOD should remove these toxics and allow safe water to be produced again in the currently contaminated areas.	
J-001-040	2	4	10 10	Guam EPA		Provide a map showing NGLA subbasins locations.	

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considered by DoD. This option was not carried through for further analysis because the sub-basin where this well is located does not have any remaining available yield considering the 1991 sustainable yield estimate and the combined production well capacity in the sub-basin.

J-001-018

Thank you for your comment. Suggested section/table will be reviewed and revised accordingly.

J-001-019

Thank you for your comment. These and other dredge BMPs and potential mitigation measures are presented in Tables 2.1-1 and 2.2-1, respectively.

J-001-020

Thank you for your comment. This table will be revise for the FEIS.

J-001-021

Thank you for your comment. DoD and regulatory agencies are equally concerned about preventing contamination of surface waters and groundwater (particularly drinking water aquifers). The EIS describes numerous programs and actions that will be taken to protect surface waters and groundwater from stormwater runoff. Construction of new facilities will use Low Impact Development (LID) principles to the extent practical. LID is a design philosophy that seeks to reduce the impact to the environment from new construction projects through the reduction of impervious surfaces. LIDs principles incorporate the design of facilities with the use of native vegetation, pervious (porous) surfaces to reduce storm water runoff and encourage recharge of groundwater, and water conservation. DoD is currently conducting a LID study that will identify specific types of alternative designs that can be incorporated into the construction of facilities associated with the buildup. DoD is also

Vol	Ch	Pg	Line. Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-041	2	4	41	9 & 10	Guam EPA	Change sentence. Note the industrial uses still on-going, including power production, ship repair, large scale fuel transfer and storage, etc.	
J-001-042	2	4	41	15	Guam EPA	Surface flow westward is not continuous but varies with wind direction.	
J-001-043	2	4	44	10	Guam EPA	ODMDS precluded from proposed EPA designated site?	
J-001-044	2	4	45	3	Guam EPA	Aren't Atantano, Sasa, Laguas and Aguada rivers flowing through Navy property?	
J-001-045	2	4	49	26	Guam EPA	What is correct capacity?	
J-001-046	2	4	53	25 & 26	Guam EPA	Direct and indirect impacts can occur during construction and curing operations.	
J-001-047	2	4	67	26 & 27	Guam EPA	Large depth to the groundwater lens does not ensure contaminants do not quickly enter the Sole Source Aquifer in Guam's Karst geology.	

preparing a stormwater pollution prevention plan (SWPPP) and will apply for permits that regulate stormwater discharges during construction. The permit and plan is focused on reducing the amount of earth and soil that is exposed to stormwater during earth-disturbing activities (such as land clearing and grading), providing stabilization of soils during construction through the use of ground covers, and sediment ponds and traps/screens to reduce pollutants getting into storm runoff and from percolating into the ground. These plans also have specific requirements for containment of potential pollutants at construction sites (such as storage areas for equipment fuel). Lastly, DoD is developing a construction and demolition (C&D) waste management plan in consort with the stormwater construction plan that calls for the use of mulch on exposed soils, mulch that will be generated during the clearing of trees and low growth during land clearing activities. Once construction is complete, a SWPPP will be developed to control stormwater runoff and infiltration from base operations. This is being done on a regional DoD Guam-wide scale, and has the involvement of Guam EPA.

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J-001-022

Thank you for your comments. It is acknowledged that no mitigation measures were proposed for traffic noise impacts at most locations in the north and central regions of Guam. The noise abatement analyses for the north and central regions presented in Volume 6, Chapter 8 (pages 8-21 to 8-35) of the FEIS indicate that most locations where impacts would occur require abatement measures that would not be feasible. This is because the affected areas consist of residential areas where residences have driveways that provide direct access to the roads, thereby resulting in issues of sound wall discontinuity. For a sound wall to provide sufficient noise reduction, it must be high enough and long enough to shield the receptor from the road. Access openings in the noise barrier for streets, driveways, and maintenance severely reduce the effectiveness of the noise barrier to the point that it would not be feasible to construct a barrier. Furthermore, for most of the locations,

Vol	Ch	Pg	Line. Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-048	2	4	68	35 to 42	Guam EPA	The beneficial uses of dredged materials are being completely ignored, but should receive highest priority. This DEIS must make more of an effort to plan for and assess and prioritize beneficial uses for dredged material. Even fine sediments can be treated to use as well-performing building materials. This and other uses, such as landfill cover, construction fill, firing range berms, rehabilitation of quarries, etc. need to be seriously considered in this DEIS, and not just military project uses but beneficial uses on other Guam or regional projects. E.g., could the ships bringing in bulk aggregate or construction materials to Guam leave Guam carrying dredged material to Yap where the State Government needs fill for construction projects but lacks it? Or, is the Navy agreement with Port Authority of Guam to provide dredged material for dock construction still valid? Why isn't this seriously evaluated in the DEIS? Also, with projected sea level rise, shouldn't dredged material be incorporated into adaptation plans to raise land levels to avoid coastal flooding?	
J-001-049	2	4	57	18 & 19	Guam EPA	Would the increased pumping of new production wells cause a possible significant impact on the GNLA, since the dynamics of this aquifer are not yet satisfactorily understood?	
J-001-050	2	4	67	19 to 27	Guam EPA	Nearshore waters, Operations. This is another example of skipping discussion of review of what will cause impacts, such as ammunition entering the marine environment. Throughout Section 4.2, for each resource concern, the DEIS simply notes that BMP's will be used and laws followed and therefore there will not be significant impacts and that impacts and practices will be similar to other alternatives or other sites. This keeps being repeated without specifying the impacts and practices and mitigation for specific resources and sites. This repetition implies that the impacts, BMP's and mitigation for actions at each site were not adequately assessed in the preparation of this DEIS and this coverage in the DEIS is meaningless. Referring back to partial coverage in another chapter does not serve reviewers adequately.	

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there are not enough residences per area to allow a noise barrier to be reasonable due to the cost per benefited receptor. FHWA and Guam DPW policies provide that only abatement measures that have been determined to be feasible and reasonable would be incorporated into road projects. It should be noted, however, that the analyses indicate that sound walls for one out of 16 locations in the north region and nine out of 48 locations in the south region met the feasible and reasonable criteria for construction. This will be further verified during the design process.

J-001-023

Thank you for your comment. Please see response to J-001-008.

J-001-024

Thank you for your comment. The draft of the Socioeconomic Impact Assessment Study (SIAS) was completed just prior to the DEIS and is the basis for the socioeconomic impact assessment in the DEIS. The study is available and included as Appendix F in Volume 9 of the DEIS.

J-001-025

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-051	2	4	82	Tbl. 4.2.1.	Guam EPA	Apra Harbor Construction. There is no mention of permanent removal of large areas of living corals and loss of a unique marine habitat area that exists no where else in US waters.	
	2	4	89	Tbl. 4.2.-2.	Guam EPA	Apra Harbor Construction. There is no mention of permanent removal of large areas of living corals and loss of a unique marine habitat area that exists no where else in US waters.	
J-001-052	2	4	94		Guam EPA	Stormwater infrastructure to be designed for a 100 year storm would provide a margin higher than normal but may be advisable for all construction on Guam to accommodate for unknown increases due to climate change. Will the DEIS contain recommendations that SCW for final designs should allow for estimates in climate change regarding more intense winds and rains and sea level rise?	
J-001-053	2	4	95	13	Guam EPA	What will be impacts on Groundwater from increased new DOD wells? Why isn't better information on the response of the NGLA to increased pumping at chosen new well locations and on the potential of GWUDI developed and used for planning water developments? Without such information shouldn't worst case scenarios be assessed in this DEIS?	
J-001-054	2	4	98	Tbl 4.2-3.	Guam EPA	Rte 15 Operations. Nearshore. What about impacts of ammunition entering the marine environment?	
J-001-055	2	16			Guam EPA	Were the data and information from the John Knox Social and Economic Impact Study contracted by the DOD incorporated in the DEIS? This appears to be at least partially done. This study should be referenced and appended.	

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from using dredged material for reuse projects will be conducted during the permitting phase.

J-001-026

Thank you for your comment. The proposed action does not include beach landings at Dadi or Tupalao beaches.

J-001-027

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). An estimated quantity for the berms is provided in Section 2.3.5 of Chapter 2, Volume 4. Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

J-001-028

Thank you for your comment. A Low Impact Development and Comprehensive Drainage Study has been completed for the preferred alternative of the proposed main cantonment since the Draft EIS was published in November 2009. Information from this study has been used to update the referred issue in Volume 2. Additionally, the full summary of the study is included in the appendix (Volume 9) of the Final EIS.

J-001-029

Thank you for your comment. Berms for upland placement of dredged

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-056	2	16	29	10 to 16	Guam EPA	Rewrite Guam Environmental Protection Agency section, adding the sixth Division of Energy, Sustainable Development and Outreach.	
J-001-057	2	16	33	17 to 28	Guam EPA	Quality of Life. More expanded details and discussion are needed including impacts on island-wide transportation, water, wastewater and power infrastructure.	
J-001-058	2	17			Guam EPA	Throughout the volumes of the DEIS, projected increases of toxic materials due to the expansion of DOD activities are noted and DRMO current general capacities are expressed to handle hazardous wastes, but needed specific additional facilities and resources to handle increases are not addressed. Simply stating that increased capacity may be needed is not sufficient. Plans must be made and facilities and resources put into place before the new actions covered by this DEIS begin.	
J-001-059	2	17	114 8	Tbl 17.2-14	Guam EPA	Two Hazardous Material Locations are mapped along Route 1 near Ysengsong Road intersection, but these are not labelled, named or described.	
J-001-060	2				Guam EPA	Why were existing small arm ranges on AAFB and naval station not considered as an alternative for the use of the use of the marines for their weapons qualification. DEIS reflects eight alternatives and none show the consideration of the use of these existing ranges.	
J-001-061	2	16	16-51	Table 16.2-14	Guam EPA	Who make up the US Pacific Islands? Many of the Micronesian Islands are politically not US Islands, clarify.	
J-001-062	2	16	18-53		Guam EPA	Standard of Living-Impacts-The salary increase is based on what study? If these figures are for construction workers, about the general public?	

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material will be created with existing soil at the site. Whenever possible, construction will re-use materials onsite to minimize impacts to resources.

J-001-030

Thank you for your comment. The wastewater flow from Finegayan base will be connected to NDWWTP using a new relief sewer as recommended in wastewater utility study and described in the FEIS. However during the construction phase, flow from Phase 1 facilities at Finegayan will be discharged to GWA sewer along Route 3. Andersen Air Force Base will contribute additional flows to sewer along Route 3 and this may impact the capacity of the sewer. A separate study to assess the capacity of Route 3 sewer is underway and details of the study are included in FEIS. DoD has committed to arrange 3rdparty funding via a special private entity to fund the necessary upgrades to NDWWTP but the details of the arrangements are preliminary. This conceptual funding arrangement is discussed in the FEIS.

J-001-031

Thank you for your comment. This long-term alternative has been retained in case the preferred basic alternative proves inadequate. The long-term alternatives are covered only programmatically in this DEIS and, if implementation is pursued, would need to be covered in future NEPA documents with full project level detail. Thus, the details you are requesting are not included in the DEIS.

J-001-032

Thank you for your comment. DoD is aware of the challenges in permitting an additional outfall, thus the preferred basic alternative is to upgrade the North District Waste Water Treatment Plant. The stand alone DoD wastewater treatment plant is a long-term alternative and only covered at a program level of detail. If this alternative is pursued, future

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-063	2	17		Guam EPA		This chapter did not include subject concerning the issue about pesticides in details. PL 29-26 require new requirements for importation, use, and disposal of pesticides. The issue about illegal importation from foreign companies is an ongoing problem on Guam. With the increase in civilian population, from especially Asia where 90% of illegal pesticides are from, there must be better explanation here or in the Socio/Economic Section (ch.16). How about the issue about, Chlordane in soils on FUDS military sites that will be disturbed during construction phase?	
J-001-064	2	16	16-86, 16-87	Guam EPA		It appears that crime discussions here concentrate on FAS residents and spent very little information on actual crimes that were actually committed on Okinawa and how Okinawan population view after the rapes of local women by US Marines.	
J-001-065	2	16	16.2.3	Guam EPA		Social impacts should include impacts resulting from the build up to the nearby FAS islands or CNMI. Currently there is discussions to bring in laborers during the construction phases. There will be labor shortages in these islands. Has there been any research on this?	
J-001-066	2	16	16.2.3.4	Guam EPA		Again, the issue about increase crime from FAS. If the current statistics shows increase crime from FAS are these crimes due to residents who are "loose" and not employed or by FAS residents who hold jobs? Most of the anticipated in-migrants will be skilled workers who are currently trained by Guam Contractor's training which now ongoing in the islands. To lump these group with first wave of in-migrants when the Compact of Free-Association was first ratified is unfair and discriminatory. This kind of discussion is discriminatory and must not be used.	

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NEPA documentation and review would be required. There are some alternatives to a new outfall that would be explored if this alternative is pursued, such as use of current outfall for the effluent with agreement with GWA.

J-001-033

Thank you for your comment. Information summarized and added to Line 7 LID, in Table 2.1-1.

J-001-034

Thank you for your comment. The FEIS includes an analysis of potential indirect impacts to nearby habitat from road construction. With implementation of construction BMPs, there should be minimal impacts. Furthermore, the Guam Stormwater Manual would be included in the planning, design, and construction of all roadways.

J-001-035

Thank you for your comment. The Final EIS has been updated to include a table and discussion of BMP effectiveness and provide guidance for selecting a BMP or combination of BMPs most appropriate for site-specific treatment needs based on screening steps suggested in the CNMI and Guam Stormwater Management Manual (2006). The Final EIS also states that the construction of new facilities will use Low Impact Development (LID) principles to the extent practical. LID is a design philosophy that seeks to reduce the impact to the environment from new construction projects through the reduction of impervious surfaces. LIDs principles incorporate the design of facilities with the use of native vegetation, pervious (porous) surfaces to reduce storm water runoff and encourage recharge of groundwater, and water conservation. DoD is currently conducting site-specific comprehensive drainage and LID studies that will identify specific types of alternative designs that can be incorporated into the construction of facilities associated with the buildup.

J-001- 067	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
	2		17		Guam EPA		In general, the discussion on hazardous waste or materials did not have any mention of the increase use of pesticides especially for maintenance, preconstruction treatments and postconstruction treatments using termiticides and fumigants. How about the increase need to fumigate imported food and construction materials such as gravels?	
J-001- 068	2				Guam EPA		The proposed relocation must have a single IPM (Integrated Pest Management Plan) to minimize the use of pesticides on Guam. The impacts will be tremendous. Therefore, a separate plan which will encompass all activities must be drafted as part of the 9 volumes. The current problems with use, importation and potential increase in invasive species must be reflected in this IPM plan for all DoD activities on Guam.	
J-001- 069	2	2	2-74	line 17	Guam EPA		The other facilities would tap into existing Andersen AFB utilities at 5th Avenue, except for wastewater. A <u>septic/leach field system</u> would be constructed for the VIF and ID offices. As mentioned in the Agency early scoping comments 2007, connection to the public sewer is needed.	
J-001- 070	4	4-3		last line	Guam EPA		Below are the category description from the GEPA (GEPA 2001), is this means GEPA Water Quality Standard (2001 Revision) ?	
J-001- 071	2	2	2-87	Table 2.5-2	Guam EPA		Are bilge oil waste treatment discharging into the WWTP? If so, how much approx. additional flow projection are expected to be discharge in the wastewater treatment plant? EIS must consider re-assessing the Apra Harbor WWTP capacity in order to ensure that additional loads could be accommodated for treatment. Projection of demand must consider using the average maximum flow.	

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These studies will identify the most effective BMPs and LID measures for each site and provide analysis of their effectiveness. Any activity-specific mitigation would be further developed/refined through the course of agency coordination and permitting.

J-001-036

Thank you for your comment. The definition of Nearshore Waters in Section 4.1.1.4 has been revised.

J-001-037

Thank you for your comment. Discussion regarding the definition of the Guam Groundwater Area has been revised to reflect this comment.

J-001-038

Thank you for your comment. Section 4.1.2.1 reflects this comment; all of Andersen AFB overlies the NGLA.

J-001-039

Thank you for your comment. DoD continues to comply with all regulatory requirements for the restoration areas. No source water wells are planned in areas of known contamination. Groundwater samples will be collected during test borings to confirm that source water wells meet drinking water standards.

J-001-040

Thank you for your comment. In the EIS, Figure 4.1-5, Guam Groundwater Resources, depicts the NGLA subbasin boundaries.

J-001-041

Thank you for your comment. Section 4.1.4.1, Nearshore Water Quality contains information reflecting this comment.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-072	2	2	2-89 line 6	Guam EPA		The entire cargo staging/vehicle wash area; what kind of pre-treatment are planned to install and what is the approx. discharge volume are projected to be added to the WWTP? EIS must consider quantifying the approx. volume of discharge to ensure that the WWTP are capable to handle the additional flow.	
J-001-073	2	2	2-95-97 line 8, 32	Guam EPA		Waterfront project: LCAC/AAV Laydown Area: A vehicle wash facility, as mentioned washrack design may include recycling and pre-treatment; is this a zero discharge or there is any discharge from the recycling? If there is any how much volume discharge are anticipated and where is the discharge point? The area is	
J-001-074	2	2	2-98 line 30	Guam EPA		Waterfront Project: USCG Berthing; Primary facilities and construction-Water and Wastewater -briefly specify if what are the extent of wastewater facilities are planned and are provation of bilge water treatment included in the plan?; If included, specify volume of discharge and must be quantified for WWTP capacity assessment.	
J-001-075	2	2	2-115 Table 2-5-8	Guam EPA		Alternative 1 was chosen for Medical/Dental facilities: as mentioned said site is potential for soil contamination, potential chlordane soil contamination and stormwater drainage concerns on the south end. EIS must briefly indicate the proper mitigation and process prior to start of any construction.	
J-001-076	2	6	6.1.2	Guam EPA		Action : Airlift operations, airdrops at landing zones and other operations.	

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J-001-042

Thank you for your comment. Change made to EIS to reflect your comment regarding surface flow in Apra Harbor.

J-001-043

Thank you for your comment. The text has been revised in the Final EIS.

J-001-044

Thank you for your comment. As shown on Figure 4.1-27 in the EIS, Apra Harbor Water Resources, these 4 rivers flow through Navy property on their way to Apra Harbor.

J-001-045

Thank you for your comment. The text in the DEIS reflects 7,050 acre feet/8,696,000 cubic meters, these are comparable volumes that are expressed in different units; both numbers are the correct capacity.

J-001-046

Thank you for your comment. The referenced text reflects an analysis of potential direct and indirect impacts during construction and operations. The FEIS includes a more robust analysis than was provided in the DEIS of both direct and indirect impacts during construction and operations.

J-001-047

Thank you for your comment. Section reflects an analysis that considers the role of the Karst geology.

J-001-048

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean

Vol	Ch	Pg	Line, Tbl, Fig	Org	Com ment er (last	Comment	Responder
J-001-077	2	6	6.1.2	Guam EPA		Impact: noise impacts at established airfields at AFB, NWF, GIA, and landing zones were well define with noise contours shown and discussed. However noise impacts along aircraft flight paths to and from established airfields and new landing zones for Marines training airlift and airdrop operations were not addressed, except in general terms. Noise impact to human and endangered species resulting from these operational flight paths were not addressed outside of the these airfields and LZ's to support the LSI or NI findings in the DEIS.	
J-001-078	2	18	18.2.2.1	Guam EPA		Aircraft operations safety of flight patterns over land between base aircraft operations and landing zones (and vice-versa or base to base) was not addressed. Discussions centered only around the airfields. Futher impact assessment of travel route to determine potential safety impacts, alternatives, and mitigation.	
J-001-079	4	2	22	Guam EPA		Better discussion on merits of mechanical versus hydraulic dredging needs to be added because of lack of information on potential impacts to coral reef areas deeper than 18 meters and ineffectiveness of silt curtains at Kilo wharf.	
J-001-080	4	2	24	Guam EPA		Guam Epa did not review and approve sediment monitoring and compositing plan. A new plan must be submitted to Guam EPA prior to dredging activities for approval. As there will be several site specific chemicals of concern that will be added to the list of analytes to be tested.	
J-001-081	4	2	25	Guam EPA		Upland disposal sites will need to be verified and inspected by Guam EPA. A dewatering plan must be submitted prior to Guam EPA permits will be required for all sites.	
J-001-082	4	2	25	Guam EPA		Dewatering of 2 million cubic yards of dredge material of seawater over a fresh water aquifer would cause salt water intrusion from the top, potentially contaminating the quifer. Propose to use lined areas and allow evaporation veruss draining.	

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disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). The agreement with the Port Authority of Guam continues to be valid. Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

The Navy acknowledges there is potential for their existing and future coastal facilities to be adversely affected by sea level rise, inundations from more extreme storm events and other consequences of climate change. However, predictive models on future sea level rise are subject to variability, due in part to unknown future greenhouse gas emissions. The variability increases with the period of time being assessed. Risk assessment methodologies and technologies are being developed to predict the potential impacts of climate change on existing Navy coastal facilities. As new design criteria relevant to climate change are adopted by the Navy, they will be incorporated into project design.

J-001-049

Thank you for your comment. Interim Sustainable Yield Assessment: DoD agrees that protection of the sole source NGLA is imperative. The FEIS discussed the two available estimates of the NGLA that have been published, one by the Northern Guam Lens Study (NGLS) (CDM 1982) and one by Barrett Consulting with John Mink (Barrett 1992). The CDM 1982 study estimated the sustainable yield of the NGLA as 57.5 MDd, and the Barrett 1992 study estimated the sustainable yield as 80.5 MGd.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-083	2	11	5	13 line	Guam EPA		Species of Concern - Authors should coordinate with GDAWR and Guam Fisherman's Coop to identify "local" species to include in the list of Species of Concern	
J-001-084	4	2	23	3rd issue	Guam EPA		A statement was made that indicated "minimal contamination" from recent dredging. What about historic dredging? What about the sediment at Bldg. 3009 outfall? Follow up testing needs to be done to proper characterize the dredge material.	
J-001-085	4	2	24	last paragraph	Guam EPA		Statement that there is no need for treatment or remediation of dredge spoils, this has not been fully determined for the Gabgab CDF.	
J-001-086	4	2	41	2.5.3.1	Guam EPA		Where would the construction debris be disposed? A solid waste and construction debris plan needs to be submitted to Guam EPA for review and approval.	
J-001-086	4	2	53	2.6.3.1	Guam EPA		Where would the construction debris be disposed? A solid waste and construction debris plan needs to be submitted to Guam EPA for review and approval.	
J-001-087	4	2	43	2.5.3.2	Guam EPA		Operational plans for the movement and unloading of barges must be submitted to GEPA for approval.	
J-001-088	4	2	43	2.5.3.2	Guam EPA		Prior to use of chisel to roughen up the surface prior to dredging along reef slopes, an underwater survey must be completed to ensure that chiseling does not shear of whol sections of reef.	
J-001-089	4	2	43	2.5.3.3	Guam EPA		All imported aggregates and other construction materials must follow all established local rules and regulations for the importation of these materials. Guidelines can be obtained from GEPA and Dept. of Ag	
J-001-090	4	2	46	2.6.1	Guam EPA		Ownership of SRF land needs to be addressed first then a new assessment must be conductd of actual footprint of lease land.	

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University of Guam (UoG) Water and Environmental Research Institute (WERI) provided an expert technical review for DoD of the two sustainable yield estimates for the NGLA in 2009. The study concluded that the approach and methodology used in Barrett 1992 to estimate the sustainable yield are still valid and are appropriate for initial planning; and the Barrett 1992 sustainable-yield estimates should be used instead of the earlier 1982 sustainable-yield estimates because the later values are based on an additional decade of field data. Additionally, this expert communicated that the additional data that had been gathered from the NGLA since the 1992 study would not likely change the sustainable yield estimate for purposes of the FEIS because the data collected was from sub-basins of the aquifer that are not located where DoD proposes to withdrawal water. Therefore, the FEIS uses the Barrett 1992 sustainable yield estimate of approximately 80 million gallons per day. However, it is important to note that the estimated total average daily demand from the aquifer for all sources (DoD and non-DoD) during the peak construction year of 2015 is 50.33 MGd, which is below both sustainable yield estimates. Volume 6, Chapter 2, Section 2.2.4.1 and Chapter 3, Section 3.2.3.1 discuss this in detail.

During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001	091	2	57	2.7	Guam EPA	Need to reevaluate "No alternative" in light of the amount of coral reef area to be dredge as presented by the federal resource agencies and proposed cost of mitigation.	
J-001	092	3	4	3.22.1	Guam EPA	Upland disposal sites will need a closure plan as DEIS states these are temporary (3-4 years).	
J-001	093	4	6	4.2.2.1	Guam EPA	Unlined upland disposal sites will cause contamination into underlying aquifer through leaching. GEPA requires a dewater plan be submitted and approved prior to placement of dredge.	
J-001	094	4	7	4.2.2.1	Guam EPA	Stormwater WILL be require to be captured and treated prior to discharge, per the new Guam Stormwater manual. See GEPA for guidelines.	
J-001	095	4	11	4.2.2.2	Guam EPA	Guam EPA will require that Turbidity be the water Quality indicator as the trigger for exceedances and not TSS. A water Quality monitoring plan must be submitted prior to action.	
J-001	096	4	13	4.2.2.2	Guam EPA	A sampling and analyses plan must be submitted prior to disposal. GEPA must approve plan.	
J-001	097	4	14	4.2.2.2	Guam EPA	Text mentions TBT as a chemical of concern, but in Table 4.2-2 there is no entry for the compound. GEPA requires that new testing be done to include TBT and other local chemicals of concern.	
J-001	098	4	15	4.2.2.2	Guam EPA	Testing of all dredge material will be BEFORE placement in upland disposal areas, not "within three years of the start of proposed dredging. As leaching could occur and upland disposal areas are temporary.	
J-001	099	4	16	4.2.2.2	Guam EPA	Resampling and verification of copper results needs to be done as concentration appears to be below the NOAA action levels, certain areas also appear to be areas of enrichment. Source identification must be conducted to verify if enrichment is occurring.	

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the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model, and It is also important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS. Long-term Comprehensive Aquifer Study: DoD has already committed funds to conduct the NGLA 3-D model. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource.

Vol	Ch	Pg	Line. Tbl. Fig	Org	Com ment er (last	Comment	Responder
J-001-099	4	4	20	4.2.3.2	Guam EPA	Resampling and verification of all chemical results needs to be done as concentration appears to be below the NOAA/EPA action levels, certain areas also appear to be areas of enrichment. Source identification must be conducted to verify if enrichment is occurring.	
J-001-100	4	4	38	230.44	GEPA	Not clear on which area DEIS is using for total area of coral. Is it the two or three dimensional view. GEPA recommends that all reference of two dimensional be removed and use only the 3-d calculations as the coral reef is in 3-d.	
J-001-101	4	4	39	230.44	GEPA	GEPA does not agree with the proposed mitigation of artificial reefs for the destruction of the coral reefs during the dredging. DOD must meet with the local and federal resource agencies to discuss.	
J-001-102	4	4	39	230.44	GEPA	GEPA requests that a final determination of the mitigation be made and approved by both the federal and local resource agencies prior to the ROD.	
J-001-103	4	11	4	11.1.1 i	GEPA	DEIS states Dollar, et al, was a preliminary evaluation of the composition of benthic community, but also was the primary source of information for the assessment. GEPA request that a more detailed assessment be conducted to fully address the impacts of the dredging to the coral community in the area to include corals deeper than 60 feet.	
J-001-104	4	11	5-18	11.1.1	GEPA	DEIS appears to present benthic data as all other areas other than live corals is "essential habitat". The total area to be dredged needs to be taken into account for all impacts.	
J-001-105	4	11	54		GEPA	Modeling was done based on TSS. Need to remodel based on Turbidity, as this will be the primary parameter for Water quality assessments and to determine violations.	
J-001-106	4	11	57		GEPA	Statement that low wave energy of area will not likely cause detached coral fragments from moving by be correct, but need to conduct impact of prop wash from all vessels traveling through area. Specifically tugs and larger vessels.	

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It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model. Aquifer Management Plan: In October 2009, fully comprehending the importance of protecting the sole source NGLA, DoD initiated an effort with GWA/CCU to co-manage the NGLA. In fact, co-management of the aquifer, and pursuit of a comprehensive 3-D model of the aquifer was a DoD recommendation, not one made by EPA, GWA or GEPA. This effort proposed that GWA and DoD, the two entities that rely on the NGLA as a major source of water would need to work as one to protect this critical resource. The proposal was to cooperatively assess the impacts of proposed developments, use the upcoming USGS study to guide efforts to manage the NGLA, and leverage DoD and GWA resources to cooperatively address potential impacts and propose alternatives to mitigate adverse impacts to the NGLA. Although this initiative to work together cooperatively has been advanced at subsequent meetings that created consensus on the way ahead, both GWA and EPA raised concerns with the DEIS knowing that many of the issues they raised are already being addressed. Additionally, EPA was invited to these meeting, but declined to attend unless DoD funded their participation. It is important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-107	4	11	67		GEPA	Statement that more non-native species exist on artificial structures, refutes notion of using artificial reefs as a mitigation for dredging impacts because know would be increasing substrate for non-native and not replacing native that was lost. Mitigation for dredging needs to be re addressed and approved by both local and federal resource agencies prior to ROD.	
J-001-108	6	3	15-20	3.1.3	GEPA	Whole section describes impacts to NDWWTP. Does not address impacts of additional 6 to 12mgd of treated wastewater to the environment. It appears that DOD will only be a "customer" of GWA, and let GWA handle all assessment of the increased load. GEPA recommends that DOD conduct an impact study on the environment of the increase wastewater load from its facilities through the GWA plant.	
J-001-109	6	3	56	3.2.4	GEPA	Table and information indicate that with the DOD load on the NDWWTP, GWA would be in violation of Guam water quality standards and its federal NPDES permit for two years. No mention of how DOD will comply /assist GWA in meeting standards and not be as action is the increased load from DOD and not the civilian community.	
J-001-110	6	3	57	3.2.4.1	GEPA	GEPA recommends that GWA and DOD not exceed the design specifications of the WWTP as their will be no reserve capacity for accidental breakdowns or schedule maintenance. This is also a violation of all permits.	
J-001-111	6	3	59	3.2.4.2	GEPA	GEPA requires the a separate EIS be conducted on the feasibility and impact of the creation of another WWTP with an ocean outfall within the same vicinity of the current GWA outfall, as the primary alternative. Study is needed to address if the marine environment in the area can handle the 6-12mgd of "treated" wastewater.	

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questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

J-001-050

Thank you for your comment. Volume 7 lists the BMPs and mitigation measures identified throughout the EIS. Discussion of BMPs and mitigation throughout the EIS has been expanded in response to public and agency comments on the DEIS. For purposes of efficiency (particularly to control document size), if the impact analysis is similar to previous analysis, the reader is referred to the more involved section for a detailed discussion of impacts. This approach helps to reduce repetition of analysis. The analysis includes a discussion of potential impacts from munitions entering the marine environment.

J-001-051

Thank you for your comment. Please see Chapter 11 of Volume 2, which discusses coral reef communities in Inner Apra Harbor. There will be no dredging of any coral or unique marine habitat area within Inner Apra Harbor.

J-001-052

Thank you for your comment. The 100-year storm event is the design storm. Engineers would design infrastructure that reflects anticipated conditions. The cumulative impacts analysis in Volume 7, Chapter 4 has been expanded to include discussion of the impacts of and adaptations to climate change.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-112	4	2	35 Tbl. 2.3-1	Guam EPA		Dredged material. Beneficial uses should be proposed and evaluated in the DEIS. The beneficial uses of dredged materials are being completely ignored, but should receive highest priority. This DEIS must make more of an effort to plan for and assess and prioritize beneficial uses for dredged material. Even fine sediments can be treated to use as well-performing building materials. This and other uses, such as landfill cover, construction fill, firing range berms, rehabilitation of quarries, etc. need to be seriously considered in this DEIS, and not just military project uses but beneficial uses on other Guam or regional projects. E.g., could the ships bringing in bulk aggregate or construction materials to Guam leave Guam carrying dredged material to Yap where the State Government needs fill for construction projects but lacks it? Or, is the Navy agreement with Port Authority of Guam to provide dredged material for dock construction still valid? Why isn't this seriously evaluated in the DEIS? Also, with projected sea level rise, shouldn't dredged material be incorporated into adaptation plans to raise land levels to avoid coastal flooding?	
J-001-113	4	2	49 14 & 15	Guam EPA		Beneficial uses of the dredged material should be addressed in the DEIS. Delay in doing this will force the use of ocean disposal, which can be prevented and is not preferred. Even fine silt material can be treated to provide good construction material. Why is this not discussed in the DEIS? This appears to be a serious failure in the DEIS process. Waiting for the permit process to start assessing beneficial uses will lead to delay in the CVN project permit approvals and delay in the project.	
J-001-114	2	56	17	Guam EPA		Would bicycle access be accommodated with the pedestrian and vehicle facilities? Of the thousands on board a CVN, there must be many wanting to use bicycles on Guam.	
J-001-115	2	57	12	Guam EPA		Besides designing for 100 year storms, will designs be done that incorporate adaptation to estimated climate change impacts?	
J-001-116	2	60		Guam EPA		Why is potable water much less than wastewater? Is seawater used for toilets on the CVN? Explain.	

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J-001-053

Thank you for your comment. Interim Sustainable Yield Assessment: DoD agrees that protection of the sole source NGLA is imperative. The FEIS discussed the two available estimates of the NGLA that have been published, one by the Northern Guam Lens Study (NGLS) (CDM 1982) and one by Barrett Consulting with John Mink (Barrett 1992). The CDM 1982 study estimated the sustainable yield of the NGLA as 57.5 MDd, and the Barrett 1992 study estimated the sustainable yield as 80.5 MGd. University of Guam (UoG) Water and Environmental Research Institute (WERI) provided an expert technical review for DoD of the two sustainable yield estimates for the NGLA in 2009. The study concluded that the approach and methodology used in Barrett 1992 to estimate the sustainable yield are still valid and are appropriate for initial planning; and the Barrett 1992 sustainable-yield estimates should be used instead of the earlier 1982 sustainable-yield estimates because the later values are based on an additional decade of field data. Additionally, this expert communicated that the additional data that had been gathered from the NGLA since the 1992 study would not likely change the sustainable yield estimate for purposes of the FEIS because the data collected was from sub-basins of the aquifer that are not located where DoD proposes to withdrawal water. Therefore, the FEIS uses the Barrett 1992 sustainable yield estimate of approximately 80 million gallons per day. However, it is important to note that the estimated total average daily demand from the aquifer for all sources (DoD and non-DoD) during the peak construction year of 2015 is 50.33 MGd, which is below both sustainable yield estimates. Volume 6, Chapter 2, Section 2.2.4.1 and Chapter 3, Section 3.2.3.1 discuss this in detail. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study

Vol	Ch	Pg	Line. Tbl. Fig	Org	Commenter (last)	Comment	Responder
J-001-117	2	60	24	Guam EPA		Would a redundant system of back-up pumps be necessary and would the CVN sewage have similar characteristics to those of residential sewage at the Navy base?	
J-001-118	4	2	61	Guam EPA		Planned stormwater management may not meet Guam requirements. Proposed discharges of stormwater would impact Sasa Bay Marine Preserve. What kinds and amounts of pollutants would occur in the discharges? Would the discharge always meet Guam water quality standards? Will the treatment system be able to protect marine waters from accidental spills in the drainage area?	
J-001-119	2	62	6 to 8	Guam EPA		What kinds and amounts of hazardous waste is expected to be generated ?	
J-001-120	4	2	62	Guam EPA		Is climate change and resulting sea level rise being considered in this and other coastal development plans by DOD?	
J-001-121	2.5	67	18 to 25	Guam EPA		Serious problems have arisen with recent Navy project's imported aggregate from Asia. What approximate amounts will be needed and what are the capacities for local production of aggregates?	
J-001-122	4	2.6	75	Guam EPA		Planned stormwater management may not meet Guam requirements. Proposed discharges of stormwater would impact nearby rich coral areas. What kinds and amounts of pollutants would occur in the discharges? Would the discharge always meet Guam water quality standards? Will the treatment system be able to protect marine waters from accidental spills in the drainage area?	
J-001-123	2.6	75	17 to 19	Guam EPA		What kinds and amounts of hazardous waste is expected to be generated ?	
J-001-124	3	83		Guam EPA		Replace "Public Utilities Agency" with "Coastal Management Program"	

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that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model. It is also important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS. Long-term Comprehensive Aquifer Study: DoD has already committed funds to conduct the NGLA 3-D model. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes,

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J-001	125	3	86	16	Guam EPA	While dredged spoil is stored at disposal sites, would calcareous material under the influence of rainfall fuse into concrete-like rock, such as beachrock is formed, and make it not suitable for planned beneficial uses?	
J-001	126	3	90	Tbl. 3.2-4	Guam EPA	Impacts of beneficial uses of dredged material should be included. Mitigation related to beneficial use also should be discussed.	
J-001	127	4	93	8 & 9	Guam EPA	"Nearshore" waters averaging 10 meters depth does not relate to Guam, where reef flats and steep reef slopes predominate.	
J-001	128	4	94	1 & 2	Guam EPA	Can't both direct and indirect impacts occur during construction and also both occur post-construction, during operations?	
J-001	129	4	98	13 & 14	Guam EPA	The designing of haul roads for military use, especially in the vicinity of Apra Harbor, does not appear to be following the CNMI and Guam Stormwater Manual, even though this is required by local law.	
J-001	130	4	98	42	Guam EPA	Dewatering sites on Orote Peninsula are over an aquifer, but not one that is a source of drinking water.	
J-001	131	4	99	25 & 26	Guam EPA	100% capture and treatment of stormwater is required throughout Guam, but has not been practiced on Military land. Recent Navy projects such as Bravo Wharf and Kilo Wharf do not include the stormwater management practices that should be applied to future project designs as proposed in this DEIS.	
J-001	132	4	94	1 & 2	Guam EPA	Can't both direct and indirect impacts occur during construction and also both occur post-construction, during operations?	
J-001	133	4	98	13 & 14	Guam EPA	The designing of haul roads for military use, especially in the vicinity of Apra Harbor, does not appear to be following the CNMI and Guam Stormwater Manual, even though this is required by local law.	
J-001	134	4	98	42	Guam EPA	Dewatering sites on Orote Peninsula are over an aquifer, but not one that is a source of drinking water.	

Comments

EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model. Aquifer Management Plan: In October 2009, fully comprehending the importance of protecting the sole source NGLA, DoD initiated an effort with GWA/CCU to co-manage the NGLA. In fact, co-management of the aquifer, and pursuit of a comprehensive 3-D model of the aquifer was a DoD recommendation, not one made by EPA, GWA or GEPA. This effort proposed that GWA and DoD, the two entities that rely on the NGLA as a major source of water would need to work as one to protect this critical resource. The proposal was to cooperatively assess the impacts of proposed developments, use the upcoming USGS study to guide efforts to manage the NGLA, and leverage DoD and GWA resources to cooperatively address potential impacts and propose alternatives to mitigate adverse impacts to the NGLA. Although this initiative to work together cooperatively has been advanced at subsequent meetings that created consensus on the way ahead, both

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-135	4	4	99	25 & 26	Guam EPA	100% capture and treatment of stormwater is required throughout Guam, but has not been practiced on Military land. Recent Navy projects such as Bravo Wharf and Kilo Wharf do not include the stormwater management practices that should be applied to future project designs as proposed in this DEIS.	
J-001-136	4	4	100	2 & 3	Guam EPA	Particularly unique and special mangrove and other wetland areas are near this site and could be impacted by access road construction and design and dredging operations for CVN facilities. Their fauna could be impacted by construction interfering with necessary movements for foraging or breeding or by operation disruptions such as noise affecting endangered moorhens.	
J-001-137	4	4	100	30 & 31	Guam EPA	This DEIS fails to address beneficial uses of the dredged material. Why are these not discussed in the DEIS? Delay in doing this will force the use of ocean disposal, which can be prevented and is not preferred. Even fine silt material can be treated to provide good construction material. This appears to be a serious failure in the DEIS process. Waiting for the permit process before starting assessing beneficial uses will lead to delay in the CVN project permit approvals and delay in the project.	
J-001-138	4	4	101	30 & 31	Guam EPA	Observations by regulatory agencies' staff in the proposed CVN turning basin and channel dredging areas recorded frequent presence of finer siltier sediments rather than coarse sediments. This will affect turbidity plumes and suspension times.	
J-001-139	4	4	102	9 & 10	Guam EPA	Recent dredging operations in Apra Harbor show that silt curtains can only be extended to 30 foot depths. The deeper depths of necessary CVN site dredging makes the curtains less effective. Other management practices, such as bubble curtains, will be necessary to better control the dredging impacts. If need for such management practices is not recognized in the DEIS and is not considered until permits are sought, the permitting process may cause serious delays in dredging projects.	

Comments

GWA and EPA raised concerns with the DEIS knowing that many of the issues they raised are already being addressed. Additionally, EPA was invited to these meeting, but declined to attend unless DoD funded their participation. It is important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

J-001-054

Thank you for your comment. Section 4.2.2.2/Non-DOD Lands/Operation/Nearshore Waters contains a discussion of potential impacts to nearshore waters from ammunition entering the marine environment.

J-001-055

Thank you for your comment. The draft of the Socioeconomic Impact Assessment Study (SIAS) was completed just prior to the DEIS and is the basis for the socioeconomic impact assessment in the DEIS. The study is available and included as Appendix F in Volume 9 of the DEIS.

J-001-056

Thank you for your comment. It has been noted and the changes have been reflected in the FEIS.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-140	4	111	13 & 14	Guam EPA		Dewatering sites on Orote Peninsula are over an aquifer, but not one that is a source of drinking water.	
J-001-141	4	112	Tbl 4.2-4	Guam EPA		Construction measures could include beneficial uses being planned for dredged material. Operation measures could include diligent maintenance of reef and channel markers to avoid ship contact with reefs bordering the channels.	
J-001-142	4	134	11 to 16	Guam EPA		By not considering possible beneficial uses for dredged material and assessing impacts of various uses, this DEIS fails to include the most desirable alternative and forces the choice of non-preferred uses of the material.	
J-001-143	4.2	142 to 144		Guam EPA		Loss of existing beach, picnic area, swimming, diving, fishing, boating and other current recreational uses that will be replaced by the physical presence of the CVN wharf should be listed among impacts.	
J-001-144	4	145	Tbl. 9.2-3	Guam EPA		Loss of existing beach, picnic area, swimming, diving, fishing, boating and other current recreational uses that will be replaced by the physical presence of the CVN wharf should be listed among impacts.	
J-001-144	10	128	21 to 24	Guam EPA		Clearing or impacting on limited mangroves and associated vegetation should be considered significant.	
J-001-145	4	154	20	Guam EPA		Should discuss that historically oil and toxic releases have been associated with accidents related to typhoons and the movement of surface waters at those times have not corresponded with directions that occur during tradewinds. Movements of spills would more likely be towards the mangroves then.	

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J-001-057

Thank you for your comment. Quality of life issues encompass a wide range of topics, given the individual's perception of what constitutes the "quality of life," what aspects are included, and how it is rated are subjective. The quality of life issues you have identified: water, transportation, wastewater, and power provide a basis to look at the existing baseline conditions and review the impacts to those baseline conditions (as is typically done in an EIS). This approach is used in the DEIS. Water, transportation, wastewater, and power are discussed in detail primarily in Volume 6 of the DEIS.

J-001-058

Thank you for your comment. Regarding whether there are enough resources on Guam to handle significant increase in the disposal of hazardous substances, a parallel Draft Joint Military Master Plan Document dated 28 January 2010 provides specific details several new facilities (e.g., operations and maintenance facilities, bilge and oily wastewater pump station, fuel storage areas, POL storage areas, warehousing facilities, munitions magazine storage facilities, hazardous waste storage facilities, waste storage facilities, Hazmat storage, etc.). These new facilities will be required to store, handle, and dispose of the estimated increases in hazardous substances that would occur from the potential DoD unit transfers to Guam. This Master Plan is currently not available for public distribution, but rather is currently for "official use only". However, at a later point in time, this Master Plan will be released for review and specific information regarding new facilities for the handling of hazardous substances will be available.

J-001-059

Thank you for your comment. The waste sites on the Figures will be labeled.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-146	4	159	1.1	Guam EPA		Lack of information makes it impossible to determine whether other special or unique or valuable species suspected to live in the area of direct dredging impacts will be significantly impacted. For example, two species of the whiptail fish, genus <i>Pentapodus</i> are only known to occur in the Marianas and Guam in the deeper turbid areas of Apra Harbor. This indicates that this is a unique environment that probably contains other species not found elsewhere. The CVN channel and turning basin dredging can significantly impact currently unknown marine life, especially unique benthic invertebrates and corals. But the DEIS does not address information for these species or allow for mitigation to protect them.	
J-001-147	4	162	3 to 8	Guam EPA		If construction and/or operations results in major significant impacts to fish populations and important fishery species, this DEIS' lack of quantitative data on fish in the impact area makes such losses unmeasurable. The DEIS should not just provide its simple brief notes on families of fishes seen, but needs a quantitative listing of the diversity and abundance of species in the areas to be impacted by dredging and operations. This should include observations at night, when many important fishery species are seen.	
J-001-148	4	162		Guam EPA		Construction and operation of CVN facilities, especially channel dredging, could seriously impact living resources that periodically migrate to and from the unique and valuable marine species nursery area of Sasa Bay Marine Preserve. But this DEIS fails to assess numbers and seasonal migration habits of fish species and mobile marine animals traversing the impacted area. Examples could be periodic <i>atulai</i> (scad) aggregations, seasonal or monthly dispersal of mangrove crab and other crab larvae, annual birthing of hammerhead sharks, etc. Limiting marine resources' functional assessments to coral cover and not quantifying fish resources is a failure of this DEIS.	

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J-001-060

Thank you for your comment. The DEIS describes the intensive selection process that the DoD went through to select alternatives for the location of the firing range on Guam in Section 2.3.1. Because of the size of the firing ranges and the need to include all safety zones as part of the acquired lands, or conflicts with existing land uses (housing, Won Pat International Airport), the firing range could not be placed on DoD lands, including Tarague and other DoD ranges. There would be a significant amount of excavation required to create the range topographic profile and to re-construct the steep access road to the range on Anderson AFB. In addition to the potential erosion control issues associated with the extensive grading, cultural and natural resource sites would be impacted. Discussion on the screening process associated with the firing ranges has been clarified in the FEIS.

J-001-061

Thank you for your comment. The U.S. affiliated Pacific islands/island groups include: Hawaii, Guam, Northern Marianas, Yap, Palau, Chuuk, Pohnpei, Marshall, Kosrae, and American Samoa.

J-001-062

Thank you for your comments. Relating to cost of living and the proposed military buildup, it is noted that the history of inflation and recession of Guam's economy from the 1970s to present was provided on page 3-47 of the SIAS. In subsection 4.3.1.4 (beginning page 4-10) of the SIAS, the subject of impact on the standard of living is addressed, stating: "Standard of living is a measure of purchasing power. If the standard of living increases for a person it means they can purchase more goods and services. If the standard of living declines for that person, he or she can purchase fewer goods and services. Changes in a person's standard of living are determined by their income and the prices of the goods and services they tend to purchase. A person's standard of living will increase if their income rises faster than the prices of goods

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-149	4	11	164	24 to 31	Guam EPA	The CVN channel, turning basin and berthing area are a unique and rare habitat, apparently found no where else in US waters of the North Pacific. This is a deep water, coral reef, sheltered lagoon habitat adjacent to mangroves and mudflats. As a second criterion for HAPC the site is going to be heavily stressed by development activities. Not enough studies have been done to show the significance of ecological functions or its sensitivity to human degradation.	
J-001-150	11	185	11 and 13	Guam EPA		Spell <i>Acanthophora spicifera</i>	
J-001-151	4	11	169	13 to 32	Guam EPA	The method used to estimate coral coverage and to interpret functional losses is questionable and not acceptable. The DEIS must include regulatory agencies' assessments and their comparison with the Navy's. The Navy shows much lesser functional values.	
J-001-152	4	11	176	14	Guam EPA	Unique communities containing dense coverage of "rare" corals, including <i>Pectinia</i> (cf. <i>P. paeonia</i>) and <i>Leptoseris</i> (cf. <i>L. gardenari</i>), making up healthy coral habitats apparently found no where else in the Marianas or any other US controlled waters, could be permanently lost under direct impact of the dredging for CVN channel and turning basin. Basing impact values and mitigation on simply live coral coverage does not recognize values of such special and unique coral communities.	
J-001-153	4	11	188	6 & 7	Guam EPA	Although most of the coral community to be destroyed by dredging is made up of the common species <i>Porites rus</i> , unique communities containing dense coverage of "rare" corals, including <i>Pectinia</i> (cf. <i>P. paeonia</i>) and <i>Leptoseris</i> (cf. <i>L. gardenari</i>), also were observed there by the resource regulators team. These make up healthy coral habitats apparently found no where else in the Marianas or any other US controlled waters. They could be permanently lost under direct impact of the dredging for CVN channel and turning basin. Basing impact values and mitigation on simply live coral coverage does not recognize values of such special and unique coral communities.	

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and services they tend to purchase. A person's standard of living will decline if the prices of goods and services they tend to purchase rise faster than the person's income. In both the construction and operational components, the average wage of workers would increase as a function of greater demand for labor. However, the price of goods and services purchased by individuals would rise as well. It cannot be definitively predicted whether wages or the price of goods and services would increase at a faster pace. If wages earned by a particular household rise more quickly than the price of goods and services, then the standard of living would increase. If the price of goods and services rises more quickly than wages, the standard of living would decrease. For households on fixed incomes, the result would be reduced purchasing power. Those with the ability to quickly renegotiate their wages will have a better chance at maintaining or increasing their standard of living." On page 4-11 of the SIAS, the discussion continues and discusses the income of military related construction and operational jobs that will, on the average, be higher than the present average wages on Guam. It concludes: "In terms of cost of living, from 2000 to 2008 Guam workers have seen their standard of living decline by 30% and there is no reason to expect the military buildup to reverse that trend – Guam workers will likely to continue to see the cost of goods and services rise faster than their incomes. While the proposed action may not represent a reversal of this trend, it will slow the rate of decline in the standard of living that has been prevalent since 2000."The expected increase in wage rates on Guam is based on the economic impact analysis which produced an expected higher proportion of jobs, that pay higher than the current average wage, than currently exists on Guam.

J-001-063

Thank you for your comment.

Volume 2, Chapter 17 has been modified as follows:

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-154	11	198	Tble 11.2-4	Guam EPA		Will greywater be discharged from CVN or support ships anywhere within Guam waters? If so, what would be impacts?	
J-001-155	4	11	211 27 & 28	Guam EPA		Unique communities containing dense coverage of "rare" corals, including <i>Pectinia</i> (cf. <i>P. paeonia</i>) and <i>Leptoseris</i> (cf. <i>L. gardenari</i>), making up healthy coral habitats apparently found nowhere else in the Marianas or any other US controlled waters, were observed by regulatory agency teams in the impact areas. These could be permanently lost under impact of the dredging for CVN channel and turning basin. Basing impact values and mitigation on simply live coral coverage does not recognize values of such special and unique coral communities.	
J-001-156	4	11	212 1 & 2	Guam EPA		Some areas in the CVN channel that are deeper than the depth to be dredged will receive major impacts of sedimentation from the dredging. But the diversity and abundances and age structure of corals living there have not been assessed. Rare and possibly unrecorded species may occur there, which could be killed by the dredging impacts.	
J-001-157	4	17		Guam EPA		Throughout the volumes of the DEIS, projected increases of toxic materials due to the expansion of DOD activities are noted and DRMO current general capacities are expressed to handle hazardous wastes, but needed specific additional facilities and resources to handle increases are not addressed. Simply stating that increased capacity may be needed is not sufficient. Plans must be made and facilities and resources put into place before the new actions covered by this DEIS begin.	
	5	17		Guam EPA		Throughout the volumes of the DEIS, projected increases of toxic materials due to the expansion of DOD activities are noted and DRMO current general capacities are expressed to handle hazardous wastes, but needed specific additional facilities and resources to handle increases are not addressed. Simply stating that increased capacity may be needed is not sufficient. Plans must be made and facilities and resources put into place before the new actions covered by this DEIS begin.	

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- To Table 17.2-3. Summary of BMPs and SOPs: "Ensure all DoD personnel and contractors are trained in accordance with the Guam public law (PL) 29-26 regarding the importation, handling, use, and application of pesticides (e.g., during maintenance, pre and post construction, and general operations activities). In addition, as part of the proposed relocation, DoD will develop and implement a comprehensive Integrated Pest Management Plan (IPMP). This IPMP will encompass all activities regarding the importation, handling, storage, use, and application of pesticides. In addition, the IPMP will address the prevention of potential invasive species issues related to the transportation of materials, supplies, equipment, and personnel to and from Guam."

- To Section 17.1.2.2 Guam Environmental Protection Agency Laws and Regulations: "In addition, Public Law (PL) 29-26 addresses the importation, handling, use, and application of pesticides on Guam."

- Throughout the document as appropriate the text has been modified to ensure that pesticides and herbicides are listed as likely hazardous waste related to: transportation, construction activities, firing range operations, and non-firing range operations.

J-001-064

Thank you for your comment. There are many reasons why the Marines (about half) are being moved from Okinawa. This discussion is provided in section 3.5.2 of the Socioeconomic Impact Assessment Study (SIAS) that is in Appendix F, Volume 9 of the Draft EIS. Serious crimes by military personnel in Okinawa are committed at a lower rate than the overall civilian population in Okinawa, despite reports to the contrary. Many serious crimes are based on singular incidents that are reported multiple times so that it appears to be multiple incidents.

The impacts of crimes on Guam are discussed in Volume 2 of the FEIS.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-158	6	4	4-87	Guam EPA		Traffic management plan was mentioned as one of the impact mitigation; how does such be implemented ? Implementation strategic techniques/management are not being discuss in the EIS.	
J-001-159	6	2	2-27 Sec. 2.2.2.1	GEPA		Purpose and Need: Determine Potable Water Demand	
J-001-160	6	2	2-27 Sec. 2.2.2.1	GEPA		Impact: The method and procedures in estimating the Water Demand did not consider the fire flow demand, industrial water needed for the construction activities (i.e. dust supression, concrete mixing, etc.).The 7,222 tansient customer at Apra Harbor on the Air Craft Carrier are customer of the US Navy base pursuant to Safe Drinking Water Act (SDWA) "serve at least 60 days a year". The 45 gpcd water demand for transient customers should be adjusted to comply with SDWA. Recommendation: Adjust water demand by considering the Fire Flow requirements and change the 45gpcd to 155 gpcd and include the 7,222 from the	
J-001-161	6	2	2-31 Table 2.2.2	GEPA		Impact - The required Maximum Daily demand of 27.72MGd did not include the water demand from the transient customers of the Air Craft Carrier. The estimated maximum water demand is 2.24 MGd. Recommendation: required maximum daily demand of 27.72 should be adjusted to 29.96 MGd.	

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As noted in the SIAS: "A critical distinction when analyzing crime impacts is between the total numbers of crimes ("volume of crime") and the actual crime rate (numbers divided by population). Population increases always bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely to commit crimes."

The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by a proportionate increase in crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct and enforce laws to protect the citizens of Guam and our military personnel.

J-001-065

Thank you for your comments. Please see Section 4.3.1.2 of the Socioeconomic Impact Assessment Study (SIAS) that is Appendix F of the DEIS for information on Probable Labor Supply Sources for the proposed action. Workers from the CNMI and FAS islands are discussed in that section.

J-001-066

Thank you for your comment. FAS crime statistics used were based upon 2006 statistics, and no information is available regarding the job status of offenders.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-162	6	2	2-34 Table 2.2-4	GEPA		<p>Impact: The number of construction workers at the height of the construction can be anticipated more than 18,374 due to the volume of works with limited time. The number of tourist induced during the same period of time is 23,000/daily making the population at peak on 2014 at 270,897.</p> <p>Recommendation: The induced tourist population should be included in the determination of water demand. And adjust the number of temporary construction worker to reflect a meaningful and accurate number corresponding to the estimated volume of work being anticipated.</p>	
J-001-163	6	2	2-35 Table 2.2-5	GEPA	Marquez	<p>Impact: Off-Base Water Demand - The estimated off-base water demand serve by Wells (North and Central) of 60MGd should be adjusted to meet the adjusted population as stated above.</p> <p>Recommendation: The projected water demand by year 2014 based on the adjusted population is 66MGd.</p>	
J-001-164	6	2	2-36 Table 2.2-6	GEPA		<p>Impact: Current and Future On-Base DoD Potable Water Supply and Demand: The existing US Air Force water source comprised of 8-wells (Andersen South) 1-tunnel at Tumon Maui, and 5-wells at the Andersen AFB and 1-BPM with a total daily production of 6.5 MGd compare to 4.7MGd mentioned on Table 2.2-6.</p> <p>Recommendation: USAF should rehabilitate all these production wells to minimize the number of new wells to be constructed.</p>	
J-001-165	6	2	2-35 Sec. 2.2.3.1	GEPA		<p>DoD Water Supply Source: Impact: The military will not meet the maximum daily demand of water by 2013. The military planned to reduce the pace of construction activity minimize the impact of the shortfall of water supply. Recommendation: It is recommended that construction of additional water source will commence earlier than expected to alleviate this shortfall of water supply.</p>	

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It is noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.

J-001-067

Thank you for your comment.

Volume 2, Chapter 17 has been modified as follows:

- To Table 17.2-3. Summary of BMPs and SOPs: "Ensure all DoD personnel and contractors are trained in accordance with the Guam public law (PL) 29-26 regarding the importation, handling, use, and application of pesticides (e.g., during maintenance, pre and post construction, and general operations activities). In addition, as part of the proposed relocation, DoD will develop and implement a comprehensive Integrated Pest Management Plan (IPMP). This IPMP will encompass all activities regarding the importation, handling, storage, use, and application of pesticides. In addition, the IPMP will address the prevention of potential invasive species issues related to the transportation of materials, supplies, equipment, and personnel to and from Guam."
- To Section 17.1.2.2 Guam Environmental Protection Agency Laws and Regulations: "In addition, Public Law (PL) 29-26 addresses the importation, handling, use, and application of pesticides on Guam."
- Throughout the document, the text has been modified as appropriate to ensure that pesticides and herbicides are listed as likely

Vol	Ch	Pg	Line, Tbl, Fig	Org	Com ment er (last	Comment	Responder
J-001-166	6	2	2-37 Sec. 2.2.3.2	GEPA		<p>Non-DoD Water Supply Sources: Impact: The GWA estimated 41.8 MGd current projection rate is more than the actual GWA well production (37.6MGd) based on 2009 GWA Report. The discrepancy was due to secured wells. However, there are 19 wells that are consistently exceeding the Chloride level of 250 ppm that generates an average production of 5.3MGd. The water demand at the peak of construction on 2014 is 80 MGd (table 2.2-5) not to include the water demand induce by tourists (3.0MGd). The required water demand of 63 MGd.</p> <p>Recommendation:The 19 wells wells exceding chloride level of 250 ppm should ceased from production to protect the water lens from salt intrusion. GWA will have to provide 30.7 MGd to meet the water demand if the 19 wells is shutdown. The NGL allows GWA to pump up to 60 MGd but part of these available water is at military based. The available yield accessible to GWA is 18 MGd but part of this are inside the military fence.</p>	
J-001-167	6	2	2-38 Sec.2.2.3.3	GEPA		<p>Development of Alternatives to Increase DoD Water Supply Sources: Option 4: Dredge sediments from the Navy Reservoir to increase storage capacity. Option 8: Perform deslination Option 9: Develop a new surface water source (e.g. Lost River). These three long term option should be elevated to the preffewred short term option to alleviate shortage of water supply and to protect the Ground Water Lens from permanent collapse due to salt intrusion.</p>	

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hazardous waste related to: transportation, construction activities, firing range operations, and non-firing range operations.

J-001-068

Thank you for your comment. Please see response to J-001-067.

J-001-069

Thank you for your comment. Subsequent to issuing the DEIS, DoD developed sewer plans to connect future facilities to existing sewer syetm and subsequently to GWA sewer.

J-001-070

Thank you for your comment. Yes, this reference is to the GEPA Water Quality Standard.

J-001-071

Thank you for your comment. Bilge water will be pretreated then discharged into the WWTP. The biggest additional bilge oil water flow coming from CVN that has a maximum flow of 82,000 gpd, and this has been used in the assessment of the capacity of the WWTP. Based on the analysis, the Apra Harbor has enough capacity to accommodate the additional flows.

J-001-072

Thank you for your comment. As per the information contained on the referenced page of the Draft EIS, the wash water would be pre-treated before discharge. Additionally, this pre-treated volume of wash water has been included in the flow estimates to the wastewater treatment plant.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-168	6			Guam EPA		EIS is considering to use the Northern District Wastewater Treatment Plant in full capacity and demand projection are based on average flows. EIS must consider using the maximum flow for demand projection in order to incorporate flows caused by I/I and also must consider adding more capacity to the treatment plant to ensure that all flow must be accommodated in the treatment plant and sewer overflows impact must be avoided. Based on the 2009 GWA SSO report most of the overflows happened during heavy rains, meaning some of the existing collection systems and pump stations are not capable of handling additional loads; like existing pump design capacity, presence of inflow/infiltration, collection system pipeline sizes (undersized) and existing generator capacity.	
J-001-169	7	2	2-2 to 2-17 Table 2-1-1	Guam EPA		BMP's are being identified in this table but it seems that the most important part; on how this be implemented or the implementation policy/methods of all the BMP's are not being discussed in the draft EIS. In the construction part, EIS must provide scheduling of all projects in order for the reviewer to fully assess or identify the impact considering that the time frame for the construction period is too constraint. Project planned during the same timeframe must allow the ecosystem to recover from change.	
J-001-170	7	2	2-20	Guam EPA		Gray water use-evaluate options for use of grey water for irrigation. Identify source and if grey water shall be pre-treated prior to use? Guam Water Quality Standards Section 5104 G explains land disposal of treated wastewater.	
J-001-171	7	4	4-33	Guam EPA		Roadway projects- As mentioned, means for pre-treatment is the detention basins. Pre-treatment system designs must consider other inovative systems that are capable to treat other contaminants to ensure that water quality standard are not exceeded, considering that proximity of most of the roadways are near the body of waters.	

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J-001-073

Thank you for your comment. The referenced wash water would be pre-treated before discharge to the wastewater treatment plant and the estimated flow would be accommodated in the plant should the proposed military relocation program be implemented.

J-001-074

Thank you for your comment. Apra Harbor WWTP is addressed in Volume 6, Chapters 2 and 3 and takes into account all future wastewater flows into the system due to the proposed waterfront projects, including the USCG facilities. The assessment included the flows from the transient aircraft carrier that is present for only a portion of the year, which overshadows the 20 person per day USCG administrative personnel contribution to the system. There is existing wastewater infrastructure at the USCG site but it is in poor condition and would be upgraded or replaced, as necessary. The BOWTS is a pretreatment system and would be sized to meet the anticipated volume.

J-001-075

Thank you for your comment. Best management practices associated with management of any contaminated soils during the construction phase of the proposed military relocation program are included in the Hazardous Materials and Waste section (Chapter 17) of various volumes of the Final EIS.

J-001-076

Thank you for your comment. Please see response to J-001-008.

J-001-077

Thank you for your comment. Please see response to J-001-008.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-172	7	3	231	Guam EPA		Hagatna WWTP has been shown to have adequate capacity to this estimated increased demand. - DoD must also consider assessing the existing collection system including pump station; as per GWA SSO reports overflow problems arises during heavy rains. Additional flows from the military build up might worsen the overflow problems in the area especially during the rainy season. Projection of demand flows must consider the maximum flows.	
J-001-173	7	3	3-59 Item 3.2.4.3	Guam EPA		Summary of impacts- near-term water quality impact-less significant. Disagree.. Increase wastewater flows has a significant impact to down line sewer collection system and pump stations (P/S) causing overflows that has the potential to reach any body of waters and public health issues.. Currently based on GWA SSO reports, problems of overflows during rainy seasons is happening. It should be re-assessed for system upgrade.	
J-001-174	7	2	2-27 Table 2.2.1	Guam EPA		UI/WW-3- The construction workforce housing could be located where a different WWTP would support the wastewater treatment needs. These potential mitigation measure is in conflict with the BMP of roadways on page 4-40 line 6 of Volume 6 stating that off island construction personnel associated with military actions are housed in community housing close to the construction sites.- Most of the construction activity are within the northern area; how this mitigation works? If construction workforce be housed considering other wastewater treatment plant, EIS must consider assessing which treatment plant could handle additional loads, current records shows that all GWA WWTP are not in compliance with NPDES permit.	
J-001-175	9	D-3	Appendix D	Guam EPA		A rivers and Harbors Act, Section 10 (33 USC 403), CWA, Section 404 and marine protection Research and Sanctuaries Act permit application would be submitted to USACE for approval and would be reviewed by other regulatory agencies. What specific agencies? The local permitting agencies must also be included.	

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J-001-078

Thank you for your comment. Volume 2, Section 7.0 defines airspace and potential impacts as a result of military operations on Guam. Airways are established routes used by military aircraft, commercial aircraft, and general aviation aircraft. They are the flight paths on which aircraft travel through airspace similar to land highways. Air traffic refers to movements of aircraft through airspace. Safety and security factors dictate that use of airspace and control of air traffic be closely regulated. Accordingly, regulations applicable to all aircraft are promulgated by the FAA to define permissible uses of designated airspace. The FAA also controls the use of airspace. These regulations are intended to accommodate the various categories of aviation, whether military, commercial, or private aviation enthusiasts. The regulatory context for airspace and air traffic varies from highly controlled to uncontrolled within Guam and the CMNI. Less controlled situations include flights under Visual Flight Rules (VFR) or flights outside of U.S. controlled airspace. Examples of highly controlled air traffic situations are flights in the vicinity of airports where aircraft are in critical phases of flight (either take-off or landing) and flights under Instrument Flight Rules (IFR), particularly flights on high or low altitude airways. Special Use Airspace (SUA) is specially designated airspace that is used for a specific purpose and is controlled by the military unit or other organization whose activity established the requirement for the SUA. SUA in and surrounding Guam includes Restricted Areas (RAs) and Warning Areas (WAs). Under the proposed action, existing air traffic control procedures would continue. Some flight activities would be accomplished under VFR conditions and along random routes that would not impact commercial or general aviation flying. Military pilots avoid flying over populated areas as much as possible in order to minimize overflight complaints.

J-001-079

Thank you for your comment. Additional text has been added to Section 2.3.5, Volume 4.

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001	175		D-3 Appendix D	Guam EPA		A rivers and Harbors Act, Section 10 (33 USC 403), CWA, Section 404 and marine protection Research and Sanctuaries Act permit application would be submitted to USACE for approval and would be reviewed by other regulatory agencies. What specific agencies? The local permitting agencies must also be included.	
J-001	176	6/9		GEPA		The DEIS did not address the potential health impacts relating to the increased usage of peaking generators located next to densely populated areas. What type of operating scenarios can the DEIS utilize to reduce the usage of peaking generators in densely populated areas?	
J-001	177	6/9				The DEIS did mention that the Federal Exemption granted to Guam for sulfur in diesel may be lifted because of the dramatic increase in mobile and stationary sources utilizing high sulfur diesel fuel. The DEIS must conduct a feasibility study on Ultra low sulfur diesel as a alternative to reducing air pollution. The build-up may jeopardize the Federal Exemption because it did not take into consideration the military growth.	
J-001	178	6/9				The DEIS did not mention an energy plan to assist in the reduction of air pollutants as it relates to power demands. The DEIS must mention the development of an energy plan to assist in the reduction of power demand which would benefit the public by a reduction of air pollutants relating to power generation	
J-001	179					The DEIS did not take into account the scenarios where peaking generators are utilized during times of high traffic volume in densely populated areas. The DEIS should evaluate high risk areas for exceedence of the National and Guam Ambient Air Quality Standards.	

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The differences between the environmental effects of mechanical and hydraulic dredging are discussed in Chapter 2, Volume 4 and Appendix D of the EIS. Mechanical dredging involves use of a clamshell or fixed bucket that excavates the dredge sediment from the harbor floor and then carries the sediment in the full bucket through the water column before lifting the bucket out of the water and placing the dredged sediment in a nearby barge or scrow. During this movement, a small fraction of the collected sediment will escape from the bucket and create suspended sediment in the lower and higher levels of the water column. On the other hand, a hydraulic dredge works solely on the harbor floor and any suspended sediment will emanate only in the lower portion of water column. As a result, the plume of suspended sediment is generally greater with use of conventional clam shell bucket as compared with a hydraulic dredge. However, use of hydraulic dredging is generally limited to soft bottom sediment on relatively flat surfaces. Mechanical dredging, which has historically been used in Apra Harbor, was chosen as the dredging method for evaluating environmental impacts as it presents the most adverse impact scenario.

A sediment plume is an inevitable effect of in-water construction activities. The Navy proposes to minimize sedimentation by using best management practices such as silt curtains and operational controls of dredging equipment. Final mitigation measures for all dredging activities will be determined and agreed upon during the permit phase of the projects.

The Kilo Wharf project and this proposed action occur in very different areas of Apra Harbor. The setting of Kilo Wharf is much more exposed to wind and wave action. The proposed action area is anticipated to be less challenging with regard to the Navy's ability to minimize environmental impacts. Chapter 11 of Volume 4 contains a detailed

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-180	5	8	8-8 tbl 8.2-3	GEPA		Summary of Weapons Impact Table should be followed by a narrative paragraph describing the impact criteria used for Less than Significant Impact "LSI" and Significant Impact Mitigable to less than Significant "SI-M". More details must be provided to include impacts to existing and proposed activities and surroundings, human population and natural resources; not just discuss impacts to recreational activities. Impact reference criteria should be cited for the Weapons Impact Table.	
J-001-181	6	13	630 18 to 22	Guam EPA		Major haul road resurfacing, strengthening and rebuilding will be done without increasing existing impervious areas. But the roads stormwater runoff will pollute and degrade adjacent surface waters during operation after construction. This will indirectly impact living aquatic resources. The existing roads (especially Marine Corps Drive from Navy Orote facilities and from the Port of Guam) were built without installation of best management practices to treat road pollutants before discharging them in stormwater to the surface waters. Even if impervious areas are not expanded, the pollutants from the rebuilt roads need to be controlled and treated and this must be accomplished in designing pollution controls with the road design and constructing and maintaining them. The haul road plans currently appear to fail to include designs and budgets for this pollution control. The impacts on aquatic and marine biological resources of this lack of pollution control should be assessed in the DEIS.	
J-001-182	6	13	636 12 to 18	Guam EPA		What are impacts to marine life from discharge of heated cooling water from a new Piti Power Plant? What mitigation is proposed?	
J-001-183	6	13	638 Tbl 13.2-2	Guam EPA		Add indirect impacts from heated water discharge, if planned.	

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analysis of the anticipated impacts and proposed mitigation for coral resources.

J-001-080

Thank you for your comment. The sampling and analysis of sediment in Apra Harbor to support the EIS was designed to generally characterize the sediments that would be dredged. Although the study was not intended to be a comprehensive analysis to support permit applications, tests for over 200 chemicals of concern were conducted. The study was suitable for EIS level of impact assessment.

Since ocean disposal is one of the dredged material management options, the sediment sampling and analysis will be conducted in accordance with 40 CFR Parts 225 and 227. The sampling and analysis plan will be reviewed and approved by USEPA and US Army Corps of Engineers. These regulatory agencies control the review process and may consult with Guam EPA. The Navy does not have input on the permit application review process.

No specific chemicals of concern were mentioned in your comment, and DoD is not able to respond on whether the analysis was conducted in historical sampling or is proposed in future sampling.

J-001-081

Thank you for your comment. A dredged material management plan will be prepared and implemented as in recent Navy dredging projects, including the Alpha-Bravo Wharf Improvements project (Milcon P-431), the Kilo Wharf Extension (Milcon P-502), and Inner Apra Harbor maintenance dredging.

J-001-082

Thank you for your comment. The dredged material upland placement

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-184	6	13	13-53 29 & 30	Guam EPA		Constructing 22 new production wells without having adequate knowledge of impacts on the GNLA could lead to impacts on Guam's sole source aquifer and the public that depend on it. Before finalizing preference on alternatives, GWA and Guam EPA hydrogeologists must be consulted.	
J-001-185	13	648	30 to 32	Guam EPA		Additional treatment for bacteria and ammonia or a deeper outfall must be planned to conform to Guam water Quality Standards.	
J-001-186	13	64		Guam EPA		BMP's should include stoppage of dredging and related activities that stress corals in the marine environment when and where a coral bleaching event happens.	
J-001-187	13	67	9	Guam EPA		Alt. 3 cannot be assessed for impacts unless more information on living resources at the discharge area is provided.	
J-001-188	6	13	77 Tbl 13.2-7	Guam EPA		Major haul road resurfacing, strengthening and rebuilding will be done without increasing existing impervious areas. But the roads stormwater runoff will pollute and degrade adjacent surface waters during operation after construction. This will indirectly impact living aquatic resources. The existing roads (especially Marine Corps Drive from Navy Orote facilities and from the Port of Guam) were built without installation of best management practices to treat road pollutants before discharging them in stormwater to the surface waters. Even if impervious areas are not expanded, the pollutants from the rebuilt roads need to be controlled and treated and this must be accomplished in designing pollution controls with the road design and constructing and maintaining them. The haul road plans currently appear to fail to include designs and budgets for this pollution control. The impacts on aquatic and marine biological resources of this lack of pollution control should be assessed in the DEIS.	

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sites would be located over aquifers not used for supplying drinking water; thus, any effluent that might percolate into the aquifer would not affect regional groundwater drinking quality or quantities. A leachate pathway analysis was conducted for dredged material placement at the Field 5 upland placement site as part of the Environmental Assessment (EA) for Alpha and Bravo Wharves. No contaminants of concern were discovered in the leachate that would exceed the Guam Environmental Protection Agency (GEPA) Water Quality Standards for groundwater, and no engineering controls at the upland placement site were required. A dewatering plan will be submitted to the GEPA prior to placing dredged material in an upland site.

J-001-083

Thank you for your comment. The species of concern listing by NMFS is a formal designation that includes species that NMFS has some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the ESA. Guam-listed species include "local" species, which have been identified by the legislative authority in the Territory of Guam as special status, even though they are not listed under the ESA. Volume 9, Marine Species Profiles, includes the marine species identified by GDAWR as Species of Greatest Conservation Need.

J-001-084

Thank you for your comment. Sediment samples within the proposed dredging areas were analyzed according to U.S. Environmental Protection Agency and U.S. Army Corps of Engineers testing criteria. As discussed in the EIS (Chapters 2 and 4 of Volumes 2 and 4), preliminary sampling results indicate that all contaminant parameters that were tested with the exception of nickel were below the Effects Range Low (ER-L) level. Nickel is a substance that is naturally occurring in the environment. The study results suggest that the materials to be dredged would not require special handling and would be suitable for upland

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-189	7	2	* line 31-32	GEPA		Central: "Proposed construction activities in northern Guam, Apra Harbor, and southern Guam while likely concurrent, are too far from central Guam to contribute to collective impacts." Has this analysis taken to account construction material supply to the civilian sector development such as the Bay View 5 Hotel in Tumon and other civilian projects island-wide that may be on-going? Is there going to be enough construction supplies and materials to meet the demand? How would this supply shortage be mitigated?	
J-001-190	3	5	Table 3.1.1	Guam EPA		Under Guam Law new extraction or use of Guam Water (e.g., wells, river withdrawals) needs written approval from Guam Waterworks Authority.	
J-001-191	3	21	1 to 5	Guam EPA		Add note on Federal Consistency requirements and their application on Federal property.	
J-001-192	3	9	35 to 38	Guam EPA		Add requirements of Environmental Protection Plan approval by GEPA.	
J-001-193	4	25	30 to 35	Guam EPA		More specific information on locations of and quantities/acres of resources to be permanently lost must be included. What wetlands are to be permanently lost?	
J-001-194	9	1	D-2 line 23	Guam EPA		Mechanical dredging methodology should be re-assessed due to prior siltation plume problems using this dredging methodology at the Kilo Wharf project. Best Management Practices, changes in operational procedures, engineering control measures with the proposed mechanical dredging should be modified or changed to control and minimize siltation.	
J-001-195	9	app endi ces	D-18 fig. D-4	Guam EPA		Upland Placement Site Locations: Shows dewatering site Commercial Port (East & West). The DEIS notes that this area is not covered in the DEIS because it is on non-DOD land. It is important to note that according to Parson's Port Plan Expansions this site is also identified to be used as part of the stormwater disposal area. What is the cumulative impact to ground water infiltration if dewatering and stormwater facilities are constructed at this location?	

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placement for beneficial reuse or ocean disposal (although the ocean disposal permitting process would require separate analysis and toxicity testing). Additional testing will occur during the permitting process and a dredged material management plan will be developed.

J-001-085

Thank you for your comment. All dredged material would be tested according to USACE and USEPA criteria prior to disposal and potential reuse. Text has been clarified in the document.

J-001-086

Thank you for your comment. The Navy has prepared a Construction and Demolition (C&D) Debris Reuse and Diversion Study for DOD Bases, Guam that addresses waste characterization, processing, recycling and disposal of construction debris. Information from this study has been used to update the FEIS.

The study considers the following alternatives: 1) Contractors would continue to process all C&D debris, and DoD would construct a composting facility to process green waste and 2) DoD would construct a C&D debris central processing facility and a composting facility to process green waste.

Through project specific contractual requirements, DoD contractors would be required to process and divert 50% of C&D debris that is generated on each project. Another alternative would be for the DoD to construct a central processing facility that would be used to recover and reuse or recycle scrap metal, concrete (without lead-based paint), asphalt concrete, and untreated wood. Contractors would be required to haul C&D to this facility. Based on the C&D debris composition assumed in the study, the Navy will be able to achieve a C&D debris waste diversion goal of greater than 50% by the end of fiscal year 2015. A site for the central processing facility is currently being evaluated but would

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last)	Comment	Responder
J-001-196		5		Guam EPA		Losses of and impacts to Wetland Resources must be added to this chapter.	
J-001-197	9	E		Guam EPA		Appendix E (HEA). Major concerns remain to be addressed. Regulatory agencies question use of coral cover as the only basis to estimate functional losses due to dredging; use of artificial reefs as proxy mitigation; lost reef cost estimates; recovery projections; use of valuation studies that do not apply to the Apra Harbor impact area; etc. The major inconsistencies in marine ecosystem function assessments and failures of the Navy contractors' approach are evident from results of the parallel study by regulatory agencies. Agencies require revision to this draft EIS, as discussed in the CVN Working Group correspondence. DOD response to these comments continues to be unacceptable.	
J-001-198	9	H		Guam EPA		Appendix H appears to only address impacts of actions outside federal lands and ignores the requirement of addressing impacts on concurrent jurisdictions of regulatory agencies that are part of the Federal Consistency process and possible impacts of actions on federal lands that affect the coastal zone and its resources.	

most likely be located in northern Guam. Disposal of C&D debris that is not divertible or recyclable will be disposed at the Navy Hardfill at Apra Harbor. The study also evaluates the construction of a composting facility to handle green waste generated by land clearing activities required for new development.

J-001-087

Thank you for your comment. When the plans for the dredging required to support the berthing of the aircraft carrier and the location for the disposal of the dredged material have been finalized, they will be coordinated with the Guam EPA.

J-001-088

Thank you for your comment.

J-001-089

Thank you for your comment. All imported aggregates will comply with the established local rules and regulations for importing. The FEIS has been updated to include this language in the geology and soil resources chapter of Volume 2.

J-001-090

Thank you for your comment. The Former SRF area is owned by the Navy and is not in dispute. The lease with GEDA would be renegotiated to mutually acceptable terms and a smaller footprint even if Former SRF was not being considered as an aircraft carrier berthing alternative. A new assessment of aircraft carrier impacts at Former SRF is not required after the lease renegotiation.

J-001-091

Thank you for your comment. Chapter 1 of Volume 4 outlines the reasons why the proposed action includes a transient aircraft carrier

berth on Guam. Because of the reasons described in the purpose and need, the No Action Alternative is not considered a feasible alternative. The EIS acknowledges there would be impacts associated with the proposed construction of a new deep-draft wharf in Apra Harbor to accommodate a transient nuclear powered aircraft carrier. Dredging is required to provide the minimum depth requirements to safely navigate the aircraft carrier. The DoD undertook several measures to avoid environmental impacts, including choosing a channel alignment that avoided dredging of coral shoals, reducing the aircraft carrier turning basin radius, and choosing a parallel to shore wharf alignment with a reduced clearance for the aircraft carrier. Best management practices, such as the use of silt curtains and operational dredging controls, and proposed mitigation measures, as described in Chapter 11 of Volume 4, would reduce and mitigate impacts from dredging.

J-001-092

Thank you for your comment.

The upland disposal sites will remain active for future military projects, thus no closure plan is proposed to be drafted.

J-001-093

Thank you for your comment. The dredged material upland placement sites would be located over aquifers not used for supplying drinking water; thus, any effluent that might percolate into the aquifer would not affect regional groundwater drinking quality or quantities. A leachate pathway analysis was conducted for dredged material placement at the Field 5 upland placement site as part of the Environmental Assessment (EA) for Alpha and Bravo Wharves. No contaminants of concern were discovered in the leachate that would exceed the Guam Environmental Protection Agency (GEPA) Water Quality Standards for groundwater, and no engineering controls at the upland placement site were required.

A dewatering plan will be submitted to the GEPA prior to placing dredged material in an upland site.

J-001-094

Thank you for your comment. DoD and regulatory agencies are equally concerned about preventing contamination of surface waters and groundwater (particularly drinking water aquifers). The EIS describes numerous programs and actions that will be taken to protect surface waters and groundwater from stormwater runoff. Construction of new facilities will use Low Impact Development (LID) principles to the extent practical. LID is a design philosophy that seeks to reduce the impact to the environment from new construction projects through the reduction of impervious surfaces. LID's principles incorporate the design of facilities with the use of native vegetation, pervious (porous) surfaces to reduce storm water runoff and encourage recharge of groundwater, and water conservation. DoD is currently conducting a LID study that will identify specific types of alternative designs that can be incorporated into the construction of facilities associated with the buildup. DoD is also preparing a stormwater pollution prevention plan (SWPPP) and will apply for permits that regulate stormwater discharges during construction. The permit and plan is focused on reducing the amount of earth and soil that is exposed to stormwater during earth-disturbing activities (such as land clearing and grading), providing stabilization of soils during construction through the use of ground covers, and sediment ponds and traps/screens to reduce pollutants getting into storm runoff and from percolating into the ground. These plans also have specific requirements for containment of potential pollutants at construction sites (such as storage areas for equipment fuel). Lastly, DoD is developing a construction and demolition (C&D) waste management plan in consort with the stormwater construction plan that calls for the use of mulch on exposed soils, mulch that will be generated during the clearing of trees and low growth during land clearing activities. Once construction is complete, a SWPPP will be developed to control stormwater runoff and

infiltration from base operations. This is being done on a regional DoD Guam-wide scale, and has the involvement of Guam EPA.

J-001-095

Thank you for your comment. EIS changed to reflect turbidity as the water quality indicator for exceedances, and that a water quality plan would be submitted to the GEPA.

J-001-096

Thank you for your comment. Information was added to the EIS to reflect that prior to disposal of dredge materials, a sampling and analysis plan would be submitted to the GEPA.

J-001-097

Thank you for your comment. Table 4.2-2 has been updated to include sampling results for TBT (trinbutylin).

J-001-098

Thank you for your comment. Sentence in question has been deleted as the preceeding sentence in the EIS states testing would occur prior to dredging.

J-001-099

Thank you for your comment. As described in this section, testing of material would occur before dredging. Copper is one of the analytes that will be tested. If testing indicates the potential for enrichment, source identification could occur.

J-001-100

Thank you for your comment.

To address the concern of USFWS and USEPA that coral cover as a single metric is inadequate, the revised HEA model is based on percent coral cover plus rugosity (horizontal: vertical measurements) to capture the 3-D complexity of the reef. The DEIS includes both 2-D and 3-D information, which provides value to the DEIS. In general the 2-D data is used for the Affected Environment section, while the 3-D data is used in the Environmental Consequences, HEA model, Section 11.2.2.5.

J-001-101

Thank you for your comment. The Navy is considering a suite of potential options for compensatory mitigation for the loss of coral in Outer Apra Harbor as identified in Volume 4, Section 11.2.2.7. Agencies have not been able to provide data to support alternative mitigation projects. The artificial reefs were supported by Army Corps in a Hawaii project and elsewhere. This will continue to be a point of contention that will be addressed in negotiations outside of the EIS document.

As stated by the Department of the Army (17 Feb 2010 response to DEIS): “the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions, as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available. Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer

Research and Development center (ERDC) to provided an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily, ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks.”

The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-102

Thank you for your comment. Commitments to mitigation will be included within the ROD. The Navy will continue to work with the USACE on project specific mitigation in regards to Section 10/404 permit requirements.

J-001-103

Thank you for your comment. Dollar et. al., 2009 was the most recent reference of many for the Affected Environment Section. The Environmental Consequences Section had several key recent sources, including MRC 2009, SEI 2009, DEI 2009, Navy 2009a, Navy 2009, and Dollar et. al 2009.

In regards to survey depth, the Navy has already overestimated the impacts to the dredged area in depth and laterally. See DEIS Section 11.2.2.5, Page 11-76. The Navy does not plan to survey deeper than 60 feet. The indirect impacts are addressed in the EIS and HEA in detail. There is supporting text and tables assessing indirect impacts, including Figure 11.2-3, which depicts the estimated limits of sediment accumulation exceeding 6 mm for the duration of the dredging project

within the Aircraft Carrier Fairway and Berthing Area.

As stated by the Department of the Army (17 Feb 2010 response to DEIS): “the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions, as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available. Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer Research and Development center (ERDC) to provided an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily, ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks.”

The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-104

Thank you for your comment.

Volume 2, Chapter 11, Affected Environment provides a description of marine biological resources (i.e. marine flora, invertebrates, and

associated EFH; Essential Fish Habitat; Special-status Species; and Non-native Species) in Apra Harbor potentially affected by the proposed action. Volume 4, Chapter 11, evaluates the same resources; however, with greater emphasis on providing background on the coral reef ecosystems as part of the EFH (see 11.1.2). The impact analysis, Volume 4, Environmental Consequences, included all marine biological resources within the total dredge impact area (i.e. direct footprint and indirect sediment resuspension footprint).

J-001-105

Thank you for your comment. The Final EIS analysis reflects turbidity, not TSS.

J-001-106

Thank you for your comment. Impact analysis was conducted for direct and indirect effects associated with increased in-water traffic, including propeller wash. See Section 11.2.2.2, pp. 11-67, 11-69, 11-96, and Table 11.2-13, pp. 102-103. Although vessel traffic will be increasing with the proposed action, considering the depth of the channel will be increased, it is anticipated that less resuspension of materials will be seen from “prop wash” in the long-term.

J-001-107

Thank you for your comment. Understandably, artificial reefs are not an ideal choice; however, given the lack of other historical examples that would lead an action agency to determine success criteria, mitigation options are limited. Erosion rates have been studied and established; however, none of these studies tie a level of sediment reduction to a predicted area of coral restoration. Unfortunately, there is very little mitigation information outside of artificial reefs that could be used to design a compensatory mitigation project. In future collaborations it would be helpful if those agencies could provide science-backed

recommendations for viable, success criteria driven mitigation projects.

That being said, to compensate for the loss in ecological service provided by coral reef ecosystem, upland reforestation (to improve nearshore water quality), artificial reefs (to provide increased fish habitat) or a combination of these and other compensatory mitigation alternatives will be considered by the Navy to comply with federal laws that protect coral resources.

The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

As stated by the Department of the Army (17 Feb 2010 response to DEIS): “the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions, as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available. Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer Research and Development center (ERDC) to provided an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily, ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory

mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks.”

J-001-108

Thank you for your comment. Volume 6, Chapter 13 of the FEIS includes a detailed discussion of impacts to marine waters from the increased wastewater discharge flows resulting from the proposed use of NDWWTP to treat DoD-generated wastewater from the new Marine Corps base..

J-001-109

Thank you for your comment. During the construction phase the additional flows over the design capacity can be treated by adding chemical coagulants or increasing surface overflow rate. A separate study was performed to identify the process improvement requirements for NDWWTP to meet water quality standards. The study was completed in January 2010 after the DEIS was published. The study findings are included in the FEIS. DoD has committed to arrange 3rd party funding via a special private entity to fund the necessary upgrades to NDWWTP but the details of the arrangements are preliminary are discussed in FEIS.

J-001-110

Thank you for your comment. The NDWWTP evaluation study recommended to implement chemically enhanced primary treatment (CEPT) to meet interim flows that exceed the plant capacity. With CEPT, the existing plant will operate with higher flows and meet effluent requirements. The permit needs to be updated, and DoD is working with GWA and EPA Region IX to address this permit modification need. It is expected that requirements related to interim flows to the NDWWTP until repairs and upgrades are completed at the plant will be addressed in an enforcement order to be issued by EPA Region IX to GWA.

As per USEPA reliability classification, NDWWTP is a Class III facility and requires at least two primary clarifiers. Also per EPA reliability classification there shall be sufficient number of units of size such that the capacity of 50% of the total design flow will be maintained with the largest unit out of service. The NDWWTP meets the requirements of the permit.

J-001-111

Thank you for your comment. DoD agrees with your comment. The stand alone DoD WWTP alternative is only a potential long-term alternative and only covered programmatically within this DEIS. If this alternative is pursued, future NEPA reviews would be required at the project-specific level and would address the issues raised in your comment.

J-001-112

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

The Navy acknowledges potential for their existing and future coastal

facilities to be adversely affected by sea level rise, inundations from more extreme storm events and other consequences of climate change.

Risk assessment methodologies and technologies are being developed to assess the potential impacts on existing facilities. The adaptation plans you refer to have not been developed.

J-001-113

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

J-001-114

Thank you for your comment. Bicycle access is allowed on all roadways which connect any pedestrian and vehicle facilities. The new Marine Base has planned for pedestrian and bicycle access.

J-001-115

Thank you for your comment. The Navy acknowledges there is potential for their existing and future coastal facilities to be adversely affected by sea level rise, inundations from more extreme storm events and other consequences of climate change. However, predictive models on future

sea level rise are subject to variability, due in part to unknown future greenhouse gas emissions. The variability increases with the period of time being assessed. Risk assessment methodologies and technologies are being developed to predict the potential impacts of climate change on existing Navy coastal facilities. As new design criteria relevant to climate change are adopted by the Navy, they will be incorporated into project design.

J-001-116

Thank you for your comment. Potable water from shore is needed for consumption, laundries, food preparation, and some other shipboard activities such as cooling water for shipboard systems. Sea water is used for toilet flushing, deck washing, and various shipboard industrial activities. Therefore, potable water versus wastewater demand on a ship is not equal. Additionally, estimates for water and wastewater demand, whether from a ship or ashore, use different factors as assumptions for water use per person versus wastewater generation per person.

J-001-117

Thank you for your comment. The CVN has backup pumps for pumping wastewater. The characteristics of the wastewater from the CVN and other transient ships is similar to domestic sewage from the Navy base, but since sea water is used for toilet flushing and some industrial operations/systems onboard military ships, the wastewater is more saline than typical domestic wastewater. Additionally, because ships use piping made of high percentages of copper and nickel because these materials are more resistant to corrosion from sea water than other types of piping, there are higher concentrations of copper and nickel in ship sewage. Ships also use brass fittings and pumps, and sacrificial zinc anodes in wastewater tanks for corrosion resistance, so these materials also contribute higher concentrations of copper, nickel and zinc to ship wastewater than found in typical domestic sewage. Bilge water

generated by ships is also comprised of salt water, and bilge systems also use copper/nickel piping, brass pumps and fittings, and zinc anodes. Bilge water contains oil, and is pretreated ashore before being pumped to the Navy sewage treatment plant for further treatment. Although salt water and metals are expected in higher concentrations from ship wastewater, due to the transient nature of ship visits and percentage it would make in the overall flows to the Navy Apra Harbor wastewater treatment plant, is not expected to impact treatment plant capacity or capabilities at the plant. This is discussed in Volume 6, Chapters 3 and 13.

J-001-118

Thank you for your comment. Please see the response to J-001-094.

J-001-119

Thank you for your comment. Volume 2, Chapter 17 estimates the quantities of hazardous waste that may be used by the proposed DoD military expansion on Guam. In addition, with each proposed activity (construction, training, etc.) the types of hazardous substances anticipated for use with that activity are also discussed. Volume 3, Chapter 17 presents similar information for the CNMI.

J-001-120

Thank you for your comment. The Navy acknowledges there is potential for their existing and future coastal facilities to be adversely affected by sea level rise, inundations from more extreme storm events and other consequences of climate change. However, predictive models on future sea level rise are subject to variability, due in part to unknown future greenhouse gas emissions. The variability increases with the period of time being assessed. Risk assessment methodologies and technologies are being developed to predict the potential impacts of climate change on existing Navy coastal facilities. As new design criteria relevant to

climate change are adopted by the Navy, they will be incorporated into project design.

J-001-121

Thank you for your comment. Aggregate materials would be imported only for use on roadways. Approximately 140,000 tons of aggregate material would be imported from Japan. Fill for other projects would be generated on-site, whenever possible, or would come from cut soil at near-by projects. Likewise, cut soil would be re-used at the same site or at near-by projects.

The EIS has been updated to reflect this information.

J-001-122

Thank you for your comment. Please see the response to J-001-094.

J-001-123

Thank you for your comment. Volume 2 and 3, Chapters 17 estimate the types and volumes of hazardous waste expected to be generated by the potential DoD military expansion on Guam and CNMI respectively.

J-001-124

Thank you for your comment. No mention of "Public Utilities Agency" in the geology and soil chapter (3) can be found. There is no page 83, as the Chapter is only 28 pages long. As a result, no change to the EIS was made.

J-001-125

Thank you for your comment. The makeup of the dredged material is such that it will not fuse into concrete-like rock when rained on.

J-001-126

Thank you for your comment. In the FEIS, Volume 2, Chapter 3, Section 3.2.2.3 was edited to include the beneficial impact of the re-use of dredged material.

J-001-127

Thank you for your comment. Definition of nearshore waters revised in Section 4.1.1.4.

J-001-128

Thank you for your comment. This section includes an analysis of potential direct and indirect impacts during construction and from operations.

J-001-129

Thank you for your comment. The Guam Stormwater Management Manual would be included in the planning, design, and construction of all roadways.

J-001-130

Thank you for your comment. Text reflects the proposed dewatering site on Orote Peninsula would be over an aquifer that is not used for drinking water production.

J-001-131

Thank you for your comment. Please see the response to J-001-094.

J-001-132

Thank you for your comment. This section includes an analysis of potential direct and indirect impacts during construction and operation.

J-001-133

Thank you for your comment. The Guam Stormwater Management Manual would be included in the planning, design, and construction of all roadways.

J-001-134

Thank you for your comment. The text has been revised to state that the dewatering site on Orote Peninsular would be over an aquifer that is not used for groundwater production.

J-001-135

Thank you for your comment. Please see the response to J-001-094.

J-001-136

Thank you for your comment. However, the area being referred to in your comment is unclear. Your page number reference does not correspond to pages in the DEIS.

J-001-137

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts

from using dredged material for reuse projects will be conducted during the permitting phase.

J-001-138

Thank you for your comment. A sediment plume is an inevitable effect of construction activities. The Navy proposes to minimize sediment plumes using best management practices of silt curtains and operational controls of dredging equipment. Mitigation measures will be determined and agreed upon during project permitting. Potential BMPs and mitigation are presented in Volume 7, Tables 2.1-1 and 2.2-1, respectively.

J-001-139

Thank you for your comment. A sediment plume is an inevitable effect of construction activities. The Navy proposes to minimize sediment plumes using best management practices of silt curtains and operational controls of dredging equipment. Mitigation measures will be determined and agreed upon during project permitting. Potential BMPs and mitigation measures are presented in Volume 7, Tables 2.1-1 and 2.2-1, respectively. Of note, the Kilo wharf project and this proposed action occur in very different areas and the environmental challenges with dealing with the two areas are anticipated to be different with the proposed action areas being less challenging.

J-001-140

Thank you for your comment. Text has been revised to discuss the presence of an aquifer that is not used for drinking water production beneath the dewatering site on Orote Peninsula.

J-001-141

Thank you for your comment. Additional text has been added regarding the priority to utilize dredged material (DM) for beneficial purpose. Beneficial reuse is preferred and would be examined on a case-by-case

basis. Receiver of DM would need to be responsible for disposal or reuse of DM. An upland placement study examined several opportunities for beneficial reuse of DM to include use of DM as landfill cover and to support Port Authority of Guam projects.

J-001-142

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses. The EIS specifically mentions shoreline stabilization for the proposed aircraft carrier wharf, fill of berms and for military firing ranges, and fill for the expansion of fast land to support new commercial port cargo handling at the Port Authority of Guam, as discussed in Sec.2.3.5.1, Chapter 2, Volume 4. Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

J-001-143

Thank you for your comment. Volume 4, Section 9.2.2 and Table 9.2-3 will be expanded to mention the loss of the existing recreational resources at the proposed wharf location at Polaris Point.

J-001-144

Thank you for your comment. Mangroves will not be impacted in the proposed action and all impacts to Waters of the U.S. will be under a

permit from the Corps of Engineers that requires a complete evaluation of impacts and mitigation.

J-001-145

Thank you for your comment. On pages 10-9 and 10-10 of Volume 4 it is noted that during typhoons surface water movements may be towards mangroves.

J-001-146

Thank you for your comment.

This was a PDEIS comment and the initial response has not changed. The data from the quantitative fish and coral surveys performed in 2009 for Apra Harbor were incorporated and evaluated in the DEIS. The agencies still have not provided data to support this statement and documentation of the examples given have not been identified within the project area. NEPA is based on the best scientific information currently available, not unsubstantiated assumptions.

The 2009 survey's covered areas beyond the impact area, so even if these special or unique fish and coral species were present, which has not been justified by any data, it is not clear that they occur in the dredge footprint and would be affected by the dredging. As pointed out in the discussion of all reports discussing indirect effects, it is clear that the study area is routinely subjected to high levels of sediment stress, and hence all inhabitants must be pre-adapted to such conditions. Thus, if these "special or unique" species occur outside of the direct impact zone, it is not likely that they would be significantly impacted. Additionally, unless these species have been identified as a legally recognized special-status species, they are afforded no additional level of protection or consideration than other coral (or invertebrate) or fish species in that area. Dredging activities in the Apra Harbor Channel will be permitted by the USACE and will include mitigation measures and BMPs that will

require maximum protection practicable during this operation.

As stated by the USACE (17 Feb 2010, No. 8 Methodology, comment on DEIS), the Navy employed survey methodology to assess coral reef resources has been an extremely contentious subject as the functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. The USACE will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment. The USACE has requested independent technical review of the adequacy of the employed methodology to date and provide recommendations for improvements, if necessary.

The Navy will continue to work with the USACE and EPA/GEPA, and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-147

Thank you for your comment.

This is a PDEIS comment that was addressed and has not changed. Qualitative and quantitative assessment of reef fish and coral communities have been completed for Apra Harbor. This information (including diversity and abundance) was incorporated into the DEIS and evaluated. No nocturnal surveys are planned by the Navy.

See response to comment J-001-146.

J-001-148

Thank you for your comment.

This is an ERDEIS and PDEIS comment that was addressed

appropriately and has not changed. The species identified by the commenter were mentioned throughout the PDEIS and the ERDEIS. Please read Volume 2, Chapter 11.1.7, Chapter 11.2.2.3, Table 11.2-6, Volume 4 (page 11-31 to 11-44), and Tables 11.2-2, 11.2-3, and 11.2-4, which address these specific concerns. This information was carried over into the DEIS. Information on sea turtle densities and migratory patterns to foraging areas within Sasa Bay is lacking; however, high concentrations were assumed based on available data and evaluated in the DEIS. Mitigation measures and BMPs will be required by USACE permits that will offer the maximum protection practicable during this operation.

Fish and invertebrate surveys were completed and included in the DEIS. Hammerhead sharks, and their rare spawning occurrences were also addressed in the ERDEIS, PDEIS and DEIS. See response to comment J-001-146.

J-001-149

Thank you for your comment. Apra Harbor was previously a dredged, working, commercial and DoD Harbor where policies, procedures, mitigation measures and BMPs employed by the Navy and commercial uses have minimized impacts and helped the ecosystem thrive for 60-years. Jade Shoals may meet all four criteria of a HAPC site . Two of the criteria identify the habitat as being sensitive to human-induced environmental degradation and potentially stressed by development activities. The data collected is sufficient for NEPA decision making.

The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-150

Thank you for your comment. This comment was addressed during

the PDEIS response session.

J-001-151

Thank you for your comment.

As stated by the Department of the Army (17 Feb 2010 response to DEIS): “the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions, as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available. Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer Research and Development center (ERDC) to provided an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily, ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks.”

The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-152

Thank you for your comment. This is a PDEIS comment that was previously addressed.

See response to J-001-146.

J-001-153

Thank you for your comment.

The spring surveys, and comparative surveys, covered areas beyond the impact area so even if these species were present, which has not been justified by any data, it is not clear that they occur in the dredge footprint and would be affected by the dredging. As pointed out in the discussion of all reports discussing indirect effects, it is clear that the study area is routinely subjected to high levels of sediment stress, and hence all inhabitants must be pre-adapted to such conditions. Thus, if these “rare” species occur outside of the direct impact zone, it is not likely that they would be permanently eliminated from the area. Hence, without further work to elucidate the actual presence and exact location of the undocumented rare species, these comments are not relevant. Additionally, unless these coral (or other invertebrate) species have been identified as a legally recognized special status species, they are afforded no additional level of protection or consideration than other coral (or invertebrate) species in that area.

As stated by the USACE (17 Feb 2010, No. 8 Methodology, comment on DEIS), the Navy employed survey methodology to assess coral reef resources has been an extremely contentious subject as the functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. The USACE will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment. The USACE has requested

independent technical review of the adequacy of the employed methodology to date and provide recommendations for improvements, if necessary.

The Navy will continue to work with the USACE and EPA/GEPA, and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-154

Thank you for your comment. This is a PDEIS comment that was previously addressed.

There is no discharge permitted in Guam waters. Please see Navy Policy and Ballast Water Management, Volume 2, Page 11-29

J-001-155

Thank you for your comment. The spring surveys, and comparative surveys, covered areas beyond the impact area, so even if these species were present, which has not been justified by any data, it is not clear that they occur in the dredge footprint and would be affected by the dredging. As pointed out in the discussion of all reports discussing indirect effects, it is clear that the study area is routinely subjected to high levels of sediment stress, and hence all inhabitants must be pre-adapted to such conditions. Thus, if these “rare” species occur outside of the direct impact zone, it is not likely that they would be permanently eliminated from the area. Hence, without further work to elucidate the actual presence and exact location of the undocumented rare species, these comments are not relevant. Additionally, unless these coral (or other invertebrate) species have been identified as a legally recognized special status species, they are afforded no additional level of protection or consideration than other coral (or invertebrate) species in that area. As stated by the USACE (17 Feb 2010, No. 8 Methodology, comment on DEIS), the Navy employed survey methodology to assess coral reef

resources has been an extremely contentious subject as the functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. The USACE will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment. The USACE has requested independent technical review of the adequacy of the employed methodology to date and provide recommendations for improvements, if necessary. The Navy will continue to work with the USACE and EPA/GEPA, and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-156

Thank you for your comment. The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

As stated by the Department of the Army (17 Feb 2010 response to DEIS): “the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions, as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available. Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer Research and Development center (ERDC) to provide an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily,

ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks."

J-001-157

Thank you for your comment. Regarding whether there are enough resources on Guam to handle significant increase in the disposal of hazardous substances, a parallel Draft Joint Military Master Plan Document dated 28 January 2010 provides specific details of several new facilities (e.g., operations and maintenance facilities, bilge and oily wastewater pump station, fuel storage areas, POL storage areas, warehousing facilities, munitions magazine storage facilities, hazardous waste storage facilities, waste storage facilities, Hazmat storage, etc.). These new facilities will be required to store, handle, and dispose of the estimated increases in hazardous substances that would occur from the potential DoD unit transfers to Guam. This Master Plan is currently not available for public distribution, but rather is currently for "official use only." However, at a later point in time, this Master Plan will be released for review and specific information regarding new facilities for the handling of hazardous substances will be available.

J-001-158

Thank you for your comment. Two examples of addressing traffic impacts with a traffic management plan is the use of busses for transporting workers from workforce housing to the development site and establishing work hours that do not coincide with normal peak travel times. Specifications for military contracts can be written such that workers will be housed in community work force housing, and driven to the development sites in busses, during non-peak hours.

J-001-159

Thank you for your comment, however, the comment is not clear, but appears to ask that the EIS identify the on-base water demand. The on-base water demand is estimated in Vol 6 Chapter 2 Section 2.2.2.1 and the off-base water demand is estimated in Section 2.2.2.2.

J-001-160

Thank you for your comment. Fire flow demand is included in the industrial demand calculation. Water demand for the 7,222 transients housed on board ships is addressed through the 0.14 MGd water demand supplied to the CVN. It is assumed that 0.05 MGd is required for construction. The water demand for construction has been included in the FEIS estimates.

J-001-161

Thank you for your comment. Water demand for the 7,222 transients housed on board ships is addressed through the 0.14 MGd water demand supplied to the CVN. No adjustment to the total DoD water demand is required for this population.

J-001-162

Thank you for your comment. The GWA water demand calculation was revised in the Final EIS to incorporate the current production estimate from GWA and add future demand anticipated from baseline growth and water demands from populations related to the USMC relocation (induced, civilian workers on the new bases and construction workers). Water demand from the tourist population is included in the current production estimates from GWA. For the EIS, it is assumed that the tourist population will not increase over baseline levels.

J-001-163

Thank you for your comment. The GWA water demand calculation was

revised in the Final EIS to incorporate the current production estimate from GWA and add future demand anticipated from baseline growth and water demands from populations related to the USMC relocation (induced, civilian workers on the new bases and construction workers). Water demand from the tourist population is included in the current production estimates from GWA. For the EIS, it is assumed that the tourist population will not increase over baseline levels.

J-001-164

Thank you for your comment. In Volume 6, Chapter 2 of the FEIS, DoD considered rehabilitation of Tumon Maui and Marbo #2 wells as an option, but was not carried forward for additional analysis to support DoD water needs for several reasons. Successful rehabilitation or replacement of the inactive wells would result in approximately an additional 4 MGd if adequate yield in the aquifers were available. However, rehabilitation of the Airforce's Tumon Maui and Marbo #2 wells was eliminated because the Yigo subbasin does not have sufficient available yield to meet both GWA and DoD needs. The DoD will support, however, efforts to consider rehabilitating these wells to support off base GWA water demands related to the Marine Corps relocation depending on need, regulatory approval, and aquifer yield. Preliminary review indicates that there is adequate available yield in the subbasins to support some level of withdrawal that could assist GWA. Coordination with GWA would be needed to avoid negative effects caused by over pumping.

J-001-165

Thank you for your comment. Up to 22 new water supply wells are proposed to provide additional capacity for the DoD water system. These wells would be installed in Northern Guam and extract potable water from the northern Guam lens aquifer. Operations at Fena Reservoir would not be modified at this time. The estimated sustainable yield from the northern Guam lens aquifer is estimated at approximately 80 million

gallons per day. Aquifer sustainable yield is the amount of water that can continuously be withdrawn from groundwater sources without degrading water quality or viable production water. The estimated total average daily water demand from this aquifer is 63 million gallons per day at the peak of construction of the proposed DoD buildup. Thus, there will be an adequate supply of potable water. DoD and Guam Waterworks Authority plan to jointly manage the production of water. Also DoD is an advocate for grants and low cost loans to Guam Waterworks Authority so they can improve their distribution system and reduce water loss due to leaks. The Guam Water Authority (GWA) and DoD are cooperatively working together to plan for the expected increase in population on Guam. DoD has agreed to drill the 22 new DoD water supply wells early, and provide this water to GWA, along with excess water from DoD's Fena Reservoir, to meet the near-term increase in water demand that is expected to occur off-base during the construction phase of the buildup. During this time, GWA will make improvements to their system to meet the long-term water needs of off-base communities. The net positive affect of this strategy is that DOD shoulders the cost to supply early buildup water demand, especially the demand associated with the temporary construction workforce.

J-001-166

Thank you for your comment. The FEIS has been updated to address the possible closure of the 19 wells with elevated chloride levels.

J-001-167

Thank you for your comment. Since the planned wells are located in undeveloped portions of the NGLA and daily withdrawal from the sub-basins is below 1991 sustainable yield estimates, no significant negative impacts are anticipated with the implementation of the Marine Corps water supply. Long-term options will be considered if freshwater supplies are not adequate to safely meet DoD water demands in northern Guam.

J-001-168

Thank you for your comment. Though the DEIS discussed average flows to the treatment plant, the facility was sized to handle peak flows determined based on peak factor provided in GWA's master plan. The peak factor includes I&I flows.

GWA is aware of overflow issues and upgrading their system as soon as the funding is available through moratorium projects.

J-001-169

Thank you for your comment. The construction-related BMPs listed in the Volume 7, Chapter would be implemented project by project. Each construction contract would require implementation of the project-specific BMPs. The contract would not necessarily dictate how the contractor proposes to meet the requirements of each BMP. This information is not available for the EIS. Additional conditions and mitigations would be placed on the contract based on regulatory permit conditions and decision to implement mitigation measures as documented in the Record of Decision (ROD) for the proposed action.

Adaptive management is identified in Volume 7, Chapter 2 to mitigate impacts by potentially slowing construction tempo. The description of this mitigation measure has been revised in the FEIS.

J-001-170

Thank you for your comment. Volume 6, Chapter 3 and Volume 8 of the FEIS discusses various sustainable measures to minimize water use, including limiting landscape irrigation and use of native vegetation. Grey water is a potential water source that could be reused as a water conservation measures. If this is ultimately selected as a viable measure, it will be treated to meet the end use requirements and all applicable regulatory requirements.

J-001-171

Thank you for your comment. Stormwater design for roadway projects will consider other inovative systems besides detention basins to develop site-specific applicable measures to reduce the potential for exceeding water quality standards.

J-001-172

Thank you for your comment. The FEIS addressed central Guam sewer system. Increased wastewater flow may exacerbate the sewer overflows that currently occur in the collection system at central Guam if the on-going GWA development moratorium project will not be carried out on schedule as planned. The DoD would install collection system improvements for the areas of new military buildup development, but cannot fix other current deficiencies in the GWA sewer collection system due to legal constraints. To minimize adverse impacts associated with increased wastewater flow from construction workforce and induced civilian growth on the central Guam collection system, DoD would assist GWA to identify where the impacts related to induced population and workforce housing are and work with GWA to prioritize the improvement projects. DoD is also leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam. The sewer system should be designed to accommodate maximum hourly flows.

J-001-173

Thank you for your comment. The water quality assessment in this part of Volume 6 was meant to be for the water going through the outfall of the wastewater treatment plant. Chapter 6 addresses the impacts to general water quality and Chapter 13 to marine environment.

The final EIS has been revised to show indirect impacts on utilities from induced civilian and construction workforce populations. That impact to the sewer collection system serving the civilian population is rated

significant. The table and impact you cite has been clarified in the final EIS.

J-001-174

Thank you for your comment. Your observation is that one potential mitigation for wastewater treatment potentially conflicts with the BMP for roadways. However, realize that there are numerous locations for construction of the proposed DoD relocation, including Apra Harbor, Finegayan, Andersen South, and Andersen AFB. That does provide the opportunity to locate construction housing in areas served by wastewater treatment plants besides NDWWTP, such as Hagatna WWTP, which has excess treatment capacity.

Your observation that virtually all of the existing WWTPs on Guam are currently not meeting their permit requirements is correct. Upgrades to operations are needed with or without the proposed DoD relocation. DoD is working with GWA to assist as much as possible in their efforts to fix their systems. The proposed upgrades to the NDWWTP would go a long way in fixing the largest WWTP on Guam.

J-001-175

Thank you for your comment. Table 3.1-1 of Volume 8 was updated to include more specific permitting information, including permitting agencies (e.g., GEPA).

J-001-176

Thank you for your comment. The DEIS assumes that the affected CTs operating under peaking conditions would be in compliance with health-based standards because of their Title V permit status, and would therefore not be anticipated to result in significant health problems for the local population. As the Preferred Alternative (Basic Alternative 1) would be in compliance with health-based standards, no alternative operating

scenarios were developed. With updates to the current power demand from GPA and estimated demand from the proposed DoD buildup, which has gone down, Preferred Alternative 1 was retained in the FEIS and Interim Alternatives 2 and 3, and Long-Term Alternatives 1, 2, and 3 were deemed unnecessary and deleted.

J-001-177

Thank you for your comment. The DEIS discusses some general improvements, which could be considered to be best management practices for reducing SO2 emissions. These practices could include the use of low sulfur fuel, if the federal exemption on fuel sulfur content is lifted. DoD is working with relevant stakeholders to determine an appropriate strategy to for implementing an island wide switch to low sulfur fuel. Therefore, the predicted air quality impacts are considered conservative as potential impacts do not consider the use of cleaner fuel options in the future.

J-001-178

Thank you for your comment. DoD is considering the pros/cons of creating an energy plan only for DoD as that would not be inclusive of all GPAs customers.

DoD would pursue LEED Silver for the proposed new Marine base at Finegayan. This would include many aspects of energy conservation, resulting in reduced power demands. This LEED planning is currently underway and expected to be included in the final EIS.

J-001-179

Thank you for your comment. The DEIS analyzes the worst-case impacts from traffic conditions and at power facilities separately because the worst-case conditions for neighborhoods are relatively far

apart for each source group. The worst-case traffic impact locations were chosen according to congested intersections located along the major routes. The worst-case power facility impacts would occur around the power facility perimeter, and are therefore analyzed from this location. Peaking generators, affected by the proposed action, would operate within their permitted capacity and presumably in compliance with the NAAQS. Furthermore, the cumulative effects analysis considers specific worst-case receptor locations from these two source categories and anticipates impacts to be minimal. With updates to the current power demand from GPA and estimated demand from the proposed DoD buildup, which has gone down, Basic Alternative 1 (Preferred Alternative) was retained in the FEIS and Alternatives 2 and 3 were deemed unnecessary and removed from consideration.

J-001-180

Thank you for your comment. The analysis in this chapter is for land use. Impacts to recreation, natural resources, and human populations are addressed in different chapters of Volume 5. Methodology for the impact analysis is presented in Section 8.2.1.

J-001-181

Thank you for your comment. The Guam Stormwater Manual would be included in the planning, design, and construction of all roadways.

J-001-182

Thank you for your comment. Either of the long-term programmatic alternatives for new power plants (LT alts 1 & 2) would be closed loop cooling systems with no hot water outfall. LT Alt 3 would be up to the discretion of GPA. In all cases, subsequent NEPA review with project specific detail would be required.

J-001-183

Thank you for your comment. Increased operation of GPA base load generating facilities would remain within current permitted limits, thus marine effects from increased discharge of cooling water would be negligible and within allowable limits as originally determined from the permitting process considered. Table 13.2-2 will be revised to state this for the FEIS.

J-001-184

Thank you for your comment. Interim Sustainable Yield Assessment: DoD agrees that protection of the sole source NGLA is imperative. The FEIS discussed the two available estimates of the NGLA that have been published, one by the Northern Guam Lens Study (NGLS) (CDM 1982) and one by Barrett Consulting with John Mink (Barrett 1992). The CDM 1982 study estimated the sustainable yield of the NGLA as 57.5 MDD, and the Barrett 1992 study estimated the sustainable yield as 80.5 MGd. University of Guam (UoG) Water and Environmental Research Institute (WERI) provided an expert technical review for DoD of the two sustainable yield estimates for the NGLA in 2009. The study concluded that the approach and methodology used in Barrett 1992 to estimate the sustainable yield are still valid and are appropriate for initial planning; and the Barrett 1992 sustainable-yield estimates should be used instead of the earlier 1982 sustainable-yield estimates because the later values are based on an additional decade of field data. Additionally, this expert communicated that the additional data that had been gathered from the NGLA since the 1992 study would not likely change the sustainable yield estimate for purposes of the FEIS because the data collected was from sub-basins of the aquifer that are not located where DoD proposes to withdraw water. Therefore, the FEIS uses the Barrett 1992 sustainable

yield estimate of approximately 80 million gallons per day. However, it is important to note that the estimated total average daily demand from the aquifer for all sources (DoD and non-DoD) during the peak construction year of 2015 is 50.33 MGd, which is below both sustainable yield estimates. Volume 6, Chapter 2, Section 2.2.4.1 and Chapter 3, Section 3.2.3.1 discuss this in detail. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model, and will help guide decision-making during well installation. It is also important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's

confirmation that the 1991 report “Groundwater in Northern Guam, Sustainable Yield and Groundwater Development” supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS. Long-term Comprehensive Aquifer Study: DoD has already committed funds to conduct the NGLA 3-D model. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model. Aquifer Management Plan: In October 2009, fully comprehending the

importance of protecting the sole source NGLA, DoD initiated an effort with GWA/CCU to co-manage the NGLA. In fact, co-management of the aquifer, and pursuit of a comprehensive 3-D model of the aquifer was a DoD recommendation, not one made by EPA, GWA or GEPA. This effort proposed that GWA and DoD, the two entities that rely on the NGLA as a major source of water would need to work as one to protect this critical resource. The proposal was to cooperatively assess the impacts of proposed developments, use the upcoming USGS study to guide efforts to manage the NGLA, and leverage DoD and GWA resources to cooperatively address potential impacts and propose alternatives to mitigate adverse impacts to the NGLA. Although this initiative to work together cooperatively has been advanced at subsequent meetings that created consensus on the way ahead, both GWA and EPA raised concerns with the DEIS knowing that many of the issues they raised are already being addressed. Additionally, EPA was invited to these meeting, but declined to attend unless DoD funded their participation. It is important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

J-001-185

Thank you for your comment. DoD conducted a study of the NDWWTP outfall which included assessing the current outfall, a modified outfall, and a new outfall. This study found that the proposed secondary treatment will reduce bacteria levels. This is discussed in the FEIS in Volume 6

Chapter 13. The ammonia levels, after initial treatment as identified in Table 13.2-4, are lower than current ambient conditions (i.e. no action alternative) found in coast waters associated with the NDWWTP. And as identified above, with DoDs assistance with future upgrades to secondary treatment, water quality values will be lower than Guam water quality standards.

J-001-186

Thank you for your comment. The USACE may include this, in addition to coral spawning months, as part of the special conditions associated with the Section 10/404 permitting process.

J-001-187

Thank you for your comment. Explanation for Alternative 3 can be found at 13.2.6.3, Pg. 13-2. No discharge is expected, therefore receptors in the nearshore environment are not impacted.

J-001-188

Thank you for your comment. The Guam Stormwater Manual would be included in the planning, design, and construction of all roadways.

J-001-189

Thank you for your comment. Construction material supply was not included in the cumulative impact analysis. No information is readily available on the construction materials required for each project in the cumulative project list. Contractors awarded construction contracts would be responsible for quantifying and obtaining construction materials. Materials that are not in sufficient supply on island would be imported. DoD is committed to a minimum 40% demolition waste diversion from landfills which would likely entail recycling or reusing demolition materials. In addition, the proposed dredging in Inner and Outer Apra Harbor would generate material that may be suitable for

reuse as construction aggregate. These actions could lessen the need for other local construction materials.

J-001-190

Thank you for your comment. DoD is aware of this requirement and is obtaining appropriate approvals from GWA and permits from GEPA for any test wells currently in planning/execution and would also comply with this requirement for any future wells.

J-001-191

Thank you for your comment. The distinguishing element is "federal actions," so no change was made.

J-001-192

Thank you for your comment. This change was made in Chapter 3.

J-001-193

Thank you for your comment. The FEIS has been modified to reflect that, through design, wetland impacts will be avoided on Tinian. All wetlands information has been updated in the FEIS.

J-001-194

Thank you for your comment. The differences between the environmental effects of mechanical and hydraulic dredging are discussed in Chapter 2, Volume 4 and Appendix D of the EIS. Mechanical dredging involves use of a clamshell or fixed bucket that excavates the dredge sediment from the harbor floor and then carries the sediment in the full bucket through the water column before lifting the bucket out of the water and placing the dredged sediment in a nearby barge or scrow. During this movement, a small fraction of the collected sediment will escape from the bucket and create suspended sediment in the lower and higher levels of the water column. On the other hand, a

hydraulic dredge works solely on the harbor floor and any suspended sediment will emanate only in the lower portion of water column. As a result, the plume of suspended sediment is generally greater with use of conventional clam shell bucket as compared with a hydraulic dredge. However, use of hydraulic dredging is generally limited to soft bottom sediment on relatively flat surfaces. Mechanical dredging, which has historically been used in Apra Harbor, was chosen as the dredging method for evaluating environmental impacts as it presents the most adverse impact scenario.

A sediment plume is an inevitable effect of in-water construction activities. The Navy proposes to minimize sedimentation by using best management practices such as silt curtains and operational controls of dredging equipment. Final mitigation measures for all dredging activities will be determined and agreed upon during the permit phase of the projects.

J-001-195

Thank you for your comment. Although the study of potential upland placement sites included Port Authority of Guam property, the Navy is only considering upland placement within federal lands. The impact analysis of the upland sites includes only the sites on federal lands. There are legal constraints associated with maintaining an upland placement site on non-federal property. There would be no conflict with Port Authority of Guam master plan proposal for stormwater management.

J-001-196

Thank you for your comment. Information has been added to the FEIS.

J-001-197

Thank you for your comment. As stated by the Department of the Army

(17 Feb 2010 response to DEIS): “the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions, as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available. Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer Research and Development center (ERDC) to provided an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily, ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks.”

The Navy will continue to work with the USACE, EPA/GEPA, and local agencies to do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-001-198

Thank you for your comment. Appendix H was not available for inclusion in the Draft EIS. The Coastal Zone Consistency Determination correspondence will be included in the Final EIS. The analysis includes the indirect impacts of proposed actions that are located within federal land on Guam's coastal zone. In addition, the

analysis addresses potential direct impacts of actions located within Guam's coastal zone.



ROBERT J. TORRES
CHIEF JUSTICE

Judiciary of Guam

ADMINISTRATIVE OFFICE OF THE COURTS
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PERRY C. TAITANO
ADMINISTRATOR OF THE COURTS

February 15, 2010

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258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96860-3134
Attention: GPMO

Major General David Bice, USMC (Ret)
Executive Director
Joint Guam Program Office (JGPO)
PSC 455 Box 152
FPO AP 96540-1000

RE: Judiciary of Guam's Comments on the Draft Environmental Impact Statement (DEIS) due February 17, 2010

Dear Sir/Madam:

The Judiciary of Guam hereby submits comments for your review, inclusion and consideration into the Final Environmental Impact Statement.

Specifically, in reference to Volume 2: Marine Corps, Chapter 16: Socioeconomics and General Services of the Draft Environmental Impact Statement (DEIS), the Judiciary of Guam (JOG) would like to address specific issues which are contrary, both operationally and from expert consultant analysis and conclusions (i.e., *Albert H. Tsutsui, A.I.A., Inc. Design Partners Incorporated for the: Judiciary of Guam Master Plan, National Center for State Courts: Project Director Chang-Ming Yeh for the: Judiciary of Guam Facilities Master Plan, and Dr. Catherine Lutz for the: Draft Assessment of Methodology and Results of "Judiciary of Guam Facilities Master Plan).*

J-002-001

For record purposes, we need to correct, validate and update the DEIS statements with accurate, current and complete information, including a reasoned counter-perspective on DEIS' finding that the military operational component would have little impact on overall crime rates.

J-002-001

Thank you for your comment. There are many reasons why the Marines (about half) are being moved from Okinawa. This discussion is provided in section 3.5.2 of the Socioeconomic Impact Assessment Study (SIAS) that is in Appendix F, Volume 9 of the Draft EIS. Serious crimes by military personnel in Okinawa are committed at a lower rate than the overall civilian population in Okinawa, despite reports to the contrary. Many serious crimes are based on singular incidents that are reported multiple times so that it appears to be multiple incidents.

The impacts of crimes on Guam are discussed in Volume 2 of the FEIS. As noted in the SIAS: "A critical distinction when analyzing crime impacts is between the total numbers of crimes ("volume of crime") and the actual crime rate (numbers divided by population). Population increases always bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely to commit crimes."

The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by a proportionate increase in crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct and enforce laws to protect the citizens of Guam and our military personnel.

J-002-002

Under Volume 2, Chapter 16.29:

Agencies affected by *Development* on Guam. Within the *Development* section, the Judiciary of Guam was not listed in this section as being affected.

We respectfully disagree with this omission and request that this section be amended to include the Judiciary of Guam (JOG) as an agency that will be affected by the Development Phase on Guam.

The Judiciary recommends that the comments for the DEIS should reflect the following language:

Due to impending expenditures totaling \$15 Billion in military capital improvement projects for the buildup on Guam, there will be an increased amount of civil cases involving construction development, which would invariably bring with it increased civil cases from large dollar amount business transactions and contractual disputes (i.e., subcontractors not being paid by General Contractors, bid and proposal protests, mechanics liens, seizure of performance bonds, and other disputes, which may also include corresponding increases in small claims cases involving landlord and tenant disputes, judgment debtor cases for non-payment for goods and services and/or commercial or private loan defaults, etc.).

Under Volume 2, Chapter 16.81:

Tables 16.2-47 and 49, Table 47 states: that the current JOG Judge Service Population Ratio is 1: 29,313. (175,878 / 6). With a peak projected population of 255,569 (Table 16.2-1), using the current service population ratio, provides a Judge count of 8.72 at year 2014.

Table 49 states there are currently 6 judges and that for peak year 2014, an additional 2 judges are required.

We respectfully disagree with comments associated with Tables 16 and 49, and request that this section be corrected to reflect the Judiciary of Guam's current Judicial Officers, as of February 15, 2010.

To date, the Judiciary of Guam has 8 judges, including one Administrative Hearings Officer, bringing the total number of Judicial Officers to nine (9). Based on the National Center for State Courts (NCSC) study of January 2010, by the year 2014, it is projected that 11.8 Judicial Officers will be needed (high projection). This essentially means for all practical purposes that a total of four (4) additional full- time Judicial Officers will be needed by 2014, which would bring the total number to thirteen (13) to fully service the 80,000 population increase as mentioned in the DEIS.

J-002-002

Thank you for your comment. Please note that the population of about 80,000 represents the unconstrained (maximal) condition. The FEIS has been revised to reflect the comments and information you have provided.

J-002-003

Thank you for your comment. The FEIS has been revised to include the information and views identified by your agency.

J-002-003

We respectfully request that this table reflect the following projection, as outlined in Table 13 of NCSC's report of January 2010:

**Table 13
NCSC Judicial Need Projection, 2008-2030**

NCSC Projections* Based on 1129 cases per judge (2008 caseload)						
Year	Median Estimate Total Case Filings	Percent Change (From 2007)	Judicial Officers Need	High Estimate Total Case Filings	Percent Change (From 2007)	Judicial Officers Need
2006	10,125		9.0	10,125		9
2007	9,261		8.2	9,261		8.2
2008	9,036	-2.43%	8.0	9,036	-2.43%	8
2009	10,768	16.27%	9.5	12,407	33.97%	10.7
2010	11,557	24.79%	10.2	13,196	42.49%	11.4
2011	11,678	26.10%	10.3	13,317	43.80%	11.5
2012	11,799	27.41%	10.5	13,438	45.10%	11.6
2013	11,921	28.72%	10.6	13,560	46.42%	11.7
2014	12,042	30.03%	10.7	13,681	47.73%	11.8
2015	14,277	54.16%	12.6	15,916	71.86%	13.7
2016	14,398	55.47%	12.8	16,037	73.17%	13.9
2017	14,519	56.78%	12.9	16,158	74.47%	14.0
2018	14,640	58.08%	13.0	16,279	75.78%	14.1
2019	14,761	59.39%	13.1	16,400	77.09%	14.2
2020	14,883	60.71%	13.2	16,522	78.40%	14.3
2021	15,004	62.01%	13.3	16,643	79.71%	14.4
2022	15,125	63.32%	13.4	16,764	81.02%	14.5
2023	15,246	64.63%	13.5	16,885	82.32%	14.6
2024	15,367	65.93%	13.6	17,006	83.63%	14.7
2025	15,489	67.25%	13.7	17,128	84.95%	14.8
2026	15,555	67.96%	13.8	17,194	85.66%	14.9
2027	15,622	68.69%	13.8	17,261	86.38%	14.9
2028	15,689	69.41%	13.9	17,328	87.11%	15.0
2029	15,756	70.13%	14.0	17,395	87.83%	15.0
2030	15,823	70.86%	14.0	17,462	88.55%	15.1

Factually, the Superior Court Judges within the Judiciary of Guam have handled an average of 1,235 non-traffic cases each. Historically, between 2001 and 2008, the caseload ranged from 1,129 and 1,331.

The increased in-bound migration anticipated to handle service and professional jobs that may be required was considered as potentially producing calculable increases in judicial needs.

Given that number of jobs is not calculable, however by applying the same logic as above, **for each 23,890 individuals, 1 new judge would be needed, as indicated in the NCSC's Judiciary of Guam Final Master Plan – Final Report January 2010.** Therefore, the ratio would now officially read: **1:23,890.**

It was recommended by NCSC that the Judiciary adopt the projection of 13.7 judges and 15 judges as their master planning goals for year 2015 and year 2030, respectively.

Provisions for support staffing (i.e., 124 support personnel for the proposed Northern Court Facility, to support the four (4) additional full-time Judges), and facilities should also be included in future expansion plans.

Additionally, the NCSC Judicial Need Projection presented in Table 13 above, continues to show a steady increase in caseload and therefore Judicial Officers after the 2014 peak period while the DEIS shows a steep population drop after the Construction Phase ends in 2015, and Operations Phase starts.

The steep population drop on the DEIS graph assumes that the entire construction labor force leaves the island. Based on the NCSC report findings, caseload projections reflect on only permanent residents coming to Guam, along with normal population increases, and does not take into consideration the temporary construction worker group that will contribute to the 2014 peak period.

Since the permanent population will continue to grow almost linearly, the NCSC projections also increase. The DEIS acknowledges that there is no way to predict how many stay-behind construction workers will remain on island, and how the stay-behind population may affect future in-migration after 2014 (i.e. relatives of stay-behind workers migrating to Guam).

If a large percentage of the construction work force remains, then the permanent population increase after 2014 may be greater. This would correspond with a larger caseload increase. Therefore, the request for the four (4) additional Judicial Officers is in line with referenced studies as contained in the NCSC's Judiciary of Guam Facilities Master Plan – Final Report January 2010.

J-002-004

Thank you for your comment. The FEIS has been revised to note the comments and information provided by your agency.

Under Volume 2, Chapter 16, page 95:

The DEIS states that Parks and Recreation, Libraries and the Judiciary would require a combined 46 key professionals in 2014, falling to 22 after the construction period. This figure only reflects two (2) additional Judges.

We respectfully disagree with this statement concerning additional Judges of 2 and request that this section be amended to reflect the following comments, including the number of current Judicial Officers:

The Judiciary of Guam's current Judicial Officers in accordance with the Judiciary of Guam's NCSC's Facilities Master Plan of January 2010 comprises seven (7) Judges and one (1) Administrative Hearings Officer. Additionally, the court has one (1) full-time Magistrate at the Northern Court Satellite, bringing the total number of judicial officers in the Superior Court to nine (9), as specifically indicated in the NCSC's Judiciary of Guam Facilities Master Plan – Final Report January 2010.

Finally, in relation to military operational component's impacting the overall crime rates, both the Socioeconomic Impact Assessment Study and Volume 2: Marine Corps – Guam, indicated "...It appears that the military operational component would have little impact on overall crime rates."

Quantitative data on crime rates specific to military personnel and dependants is simply not available either within the military's various branches nor in civilian crime and adjudicatory reporting statistics.

The question of whether the military population increase will increase crime rates is a reasonable one given the demographics of the military strongly resembles the key demographics of the criminal population; that is, the military is much younger, more often male. Men make up 86 percent of the active duty military, and median age across the services is 28. For the Marines, those numbers are 94 percent male and an average age of 25.

Some analysts have argued that the military has a general crime-reducing effect on its members and that this is for three reasons. First, it is a highly monitored institution, with crime less likely to go undetected and therefore undeterred. Second, everyday life in the military is highly structured, which reduces the opportunity individuals have to commit crime (Sun, Sung, and Chu 2007). Third, the military is a full-employment organization, with relatively small numbers of individuals at the lowest ranks who experience economic difficulties, and it can provide the context for reshaping life directions (Elder 1986).

Other analysts argue, conversely, that at least some kinds of crime are more likely in military than civilian populations because, first, military training brings with it an emphasis on the use of violence to solve problems, and an emphasis on forms of hypermasculinity that generates attempts to exert power and control over others,

J-002-005

Thank you for your comment. The FEIS will reflect the information provided from your agency's perspective.

J-002-006

sometimes in criminal ways (Burke 2004, Rosen et al.2003). Second, it is known that combat generates PTSD, which then produces additionally higher rates of violent perpetrators (Sun, Sung and Chr 2007:600; Byrne and Riggs 1996). Combat also "directly increases violent and unlawful (anti-social) behavior and stress" (Gimbel and Booth 1994:702), which affects post-combat social adjustment relevant to crime as well as family dysfunction.

Criminological studies indicate that rates of certain types of crime are much higher in military populations, and particularly among those military personnel with PTSD. Those crime include domestic and partner violence (Byrne and Riggs 1996), Gerlock 2004, Heymen and Neidig 1999, Marshall, Panuzio, and Taft 2005) and sexual assault (Morris 1996). While the Pentagon notes that 80 percent of rapes within the military are not reported, research conducted among female veterans indicates that 30 percent report having been sexually assaulted or raped by their colleagues in service (Sadler 2003; see also Murdoch 2004).

Absent quantitative data, there are supporting studies that indicate that military operational component would, contrary to DEIS, have definite impact on overall crime rates on Guam. And eventually, because the Guam Judiciary has concurrent jurisdiction, such cases will be adjudicated within the courts of Guam.

It is in the Judiciary Court of Guam's best interests to update the DEIS with the most up to date information in order to address those comments which are contrary and do not accurately represent the impact to the Judiciary.

Please be advised that upon the approval of the Guam Judiciary's Master Plan from the Judicial Council of Guam and the 30th Guam Legislature, these materials and expert studies (as italicized on page 1) will be available for your examination.

We sincerely hope that our corrective comments for recommended revisions and discussion on overall crime rates impact, be considered for inclusion in the upcoming: Final Environmental Impact Statement.

Your attention is appreciated.

Sincerely,



Perry C. Taitano
Administrator of the Courts

J-002-006

Thank you for your comment. The information you provided will be reviewed and included in the FEIS as appropriate.

cc: Chief Justice Robert J. Torres, Judiciary of Guam
Senator Frank B. Aguon, Jr., Committee on Economic Development, Health &
Human Services, and Judiciary
Senator Judith P. Guthertz, Chairperson, Committee on the Guam Military
Buildup and Homeland Security
Col. Dennis Santo Tomas (Ret), Chairman Public Safety Sub-Committee
Nora Camacho, Deputy Director, Guam Buildup Office (Governor's Office)



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor



Director
Lawrence P. Perez
Deputy Director
Andrew S. León Guerrero

February 17, 2010

General David F. Bice, Executive Director
Joint Guam Program Office
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Arlington, VA 22202

JGPO
c/o NAVFAC Pacific
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Pearl Harbor, HI 96860-3134
Attn: GPMO

Subject: DoD Funding for Off-base Roadway Projects

Dear General Bice:

Buenas yan Hafu A'dai!

J-003-001

The Guam Department of Public Works (DPW) has been advised of the draft list of off-base roadway projects proposed to be funded by the Department of Defense (DoD). After reviewing the draft list, DPW is concerned that the projects proposed for funding do not sufficiently address the impact on traffic that the anticipated Military Relocation will certainly have.

Specifically, DPW finds it troubling that the draft list identifies only those roadways adjacent to the proposed NCTS Finegayan Main Cantonment Area or at military access points for funding. The need to maintain a functional transportation system for all Guam residents, including the military and their dependents has not been adequately addressed. The apparent lack of funding is directly contrary to the representations made in the written Executive Summary document that was distributed at the recent Navy/JGPO public hearings:

Mitigation measures for the selected alternative will be identified in the Record of Decision. These measures will be funded, and efforts to ensure their successful completion or implementation will be treated as compliance requirements and tracked annually.

Originally, DoD and DPW identified and prepared a comprehensive list of off-base roadway projects that would directly address the traffic impacts that will result from the relocation of the military and their dependents to Guam. All of the roadway projects on the original comprehensive list are "mitigation measures" within the scope of the Executive Summary document. As was represented in the Executive Summary and at the Navy/JGPO public hearings, it is therefore respectfully requested that all of the off-base road projects

J-003-001

Thank you for your comment. The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to assist the Government of Guam in seeking funds for projects that are not eligible for the DAR program.

J-003-001 originally identified by DPW and DoD in the comprehensive list be adequately funded and annually tracked as compliance requirements of the Environmental Impact Statement (EIS) process.

In addition to the above, DPW also requests that the Joint Guam Program Office consider the following concerns and suggestions:

J-003-002 **1. Use of the Defense Access Road (DAR) Criteria as a Benchmark for DoD Funding.**

The criterion of "sudden and unforeseen impact" clearly applies to the tremendous impacts upon local traffic that are expected to occur with the Military Relocation. These impacts are expected to occur and grow over a period of four short years, and there is no possible means for DPW to fund the improvements necessary to address them.

DoD is responsible for the off-base roadway projects required to alleviate the impacts of the additional traffic surely associated with the Military Relocation – regardless of the benchmark or source of the funding.

J-003-003 **2. DPW has Worked Cooperatively with DoD to Develop an Off-base Roadway Project List.**

Beginning with the Notice of Intent, and at meetings held in Washington, DPW has worked cooperatively with DoD to identify the traffic impacts and project requirements of the Military Relocation. Throughout this entire collaboration, DPW was led to understand that a reasonable funding plan would be developed for all identified off-base roadway projects.

As proposed, however, the current funding plan for off-base roadway projects falls far short of the "reasonable" standard as it does not address the full impact of the relocation. DPW expects that a revised funding plan will soon be forthcoming and that the revised plan will address all of the off-base roadway projects that DPW and DoD identified and developed together in good faith.

J-003-004 **3. The Off-base Roadway Projects List Addresses the Worst of the Traffic Impacts.**

The original off-base roadway project list prepared by DPW and DoD included only those projects that were absolutely necessary. For example, roadway widening projects were only recommended in cases with severe traffic congestion. Intersection improvements were recommended only where the improvements were reasonable and implementable.

Guam is not asking DoD to address all existing or future traffic problems on Guam, but rather only to mitigate the traffic impacts that will result from the Military Relocation. If the off-

J-003-002

Thank you for your comment. The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to assist the Government of Guam in seeking funds for projects that are not eligible for the DAR program.

J-003-003

Thank you for your comment. The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

J-003-004 base roadway projects are not funded and implemented, there is no doubt that the levels of congestion for all motorists on Guam would be intolerable.

As it is, even if all of the roadway projects were funded and completed, the resulting level-of-service (LOS) would likely remain poor despite the improvements because the project list is very basic and does not contain or represent all of the roadwork that needs to be done. DPW recognized, however, that although additional projects could have been pursued to improve the LOS to more acceptable levels, higher funding requirements, more right-of-way impacts and additional environmental impacts would have resulted.

J-003-005 **4. DPW has the Authority to Control the Development of Roadway Projects and to Require Necessary Improvements to Protect Public Infrastructure.**

Any development plans for military facilities and the use of Guam's highways and rights-of-way for the placement of utilities or other off-base development must be processed and approved by the appropriate Government of Guam land use and permit agencies.

In particular, DPW is the government agency responsible for overseeing the entirety of the highway and rights-of-way. [TITLE 5 GUAM CODE ANNOTATED CHAPT. 54]. Under Guam law, no structures, utility poles, pipelines, towers or other encroachments can be constructed or permitted to exist within the boundaries of the highway or rights-of-way unless a written permit approving the development or utility is first obtained from DPW. [5 G.C.A. § 53102]. Moreover, when issuing the permit, DPW is broadly authorized to set whatever conditions it finds necessary in order to protect the highway, including conditions addressing the location of the development or utility, and the manner of any work to be done. [5 G.C.A. § 53103]. At the permittee's expense, DPW may supervise the work, and may require the permittee to pay the entire expense of replacing the highway in as good condition as before. [[5 G.C.A. §§ 53103, 53104].

Thus, before construction on any off-base roadways can begin, DoD must first obtain the required written permits from DPW. In turn, before issuing the permits, DPW is authorized to impose any reasonable conditions that in its discretion are necessary to protect the highway and the safety of the public. Depending on the project, the conditions imposed can include a restriction on certain types or locations for development. The conditions can also require infrastructure improvements or upgrades.

Moreover, to the extent that events and actions related to the Military Relocation or the DoD causes an adverse impact on off-base highways or communities, then pursuant to the Governor's EXECUTIVE ORDER NO. 96-26, the DoD is required to go before the Guam Land Use Commission (GLUC) and its Application Review Committee (ARC). The DoD must further comply with all of GLUC and ARC guidelines, requirements and conditions. When reviewing a proposed development, the GLUC and ARC are authorized to impose conditions prior to

The DoD, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to assist the Government of Guam in seeking funds for projects that are not eligible for the DAR program.

J-003-004

Thank you for your comment.

J-003-005

Thank you for your comment. The DoD will continue to work together with Guam DPW and FHWA to identify projects eligible for DAR funding. The DoD will also help Guam DPW and FHWA identify funding for the projects in the FEIS.

J-003-005

approval of the development. These conditions can include the requirement that DoD mitigate at its expense the adverse impacts caused by it to the highways and communities.

The original off-base roadway project list developed by DoD and DPW represents a carefully coordinated and cohesive plan to address traffic impacts directly resulting from the Military Relocation. When the list was developed, the location of each project and the requirement of possible infrastructure improvements was foreseen and built into the anticipated scope of work. However, if funding is provided for only a few military access projects rather than for the entire project list and the systemic plan that it represents, the adverse impact on traffic will become dire upon the relocation of the military as there will be little to no relief provided to accommodate the increase in population.

Inadequate highways and an inefficient surface transportation network are not in the best interest of either DoD or Guam. The highways serve both the military and local communities, and it is DPW's obligation to ensure that all highway development is done in a manner that promotes the efficient and safe movement of traffic for all citizens. In furtherance of this public obligation, DPW will not hesitate to impose any conditions reasonably necessary to ensure that the highways and the public are safely protected.

In summary, for over four years now, DPW and the Department of Defense have worked together to jointly and responsibly plan the surface transportation system in Guam so as to accommodate the Military Relocation. In furtherance of this partnership, DPW respectfully urges that a "reasonable" funding plan for the necessary off-base roadway projects, together with a realistically attainable implementation schedule, be developed and incorporated in the Final Environmental Impact Statement and the Record of Decision.

Un Dankulu na Si Yu'us Ma'ase.

Sincerely,



LAWRENCE P. PEREZ
Director

cc: The Honorable Felix P. Camacho, Governor of Guam



GUAM POWER AUTHORITY

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February 12, 2010

Joint Guam Program Office
c/o NAVFAC Engineering Command, Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96860

Attention: Guam Program Management Office

Subject: Comments on Draft EIS/OEIS - Guam and CNMI Military Relocation
Relocating Marines from Okinawa, Visiting Aircraft Carrier Berthing, and Army Air
and Missile Defense Task Force

J-004-001 The Guam Power Authority has completed review of the Draft EIS published in November 2009. The proposed military relocation on Guam related to this Draft EIS/OEIS (DEIS) will have a significant impact on GPA's ability to meet the island's power demand. In light of this, GPA continues to work closely with the Department of Defense (DOD) which includes JGPO and NAVFAC Marianas to address the needs of the military in a timely manner. While military growth is important to GPA as the Department of Defense is a valuable customer, the Authority must align the needs of the military with the more than 40,000 additional customers we serve.

In typical utility cost allocations, if the requirements of a large customer change, all customers will bear a portion of the cost to serve the increased requirements. However, GPA is committed to the principle that civilian ratepayers should be shielded from cost impacts resulting from the military buildup.

DEIS Basis of Study

The DEIS projects load requirements for the military relocation from Okinawa and for other DOD upgrades at 80 MW and also plans for transmission and substation upgrades as necessary. The DEIS also investigates capacity requirements to meet reliability criteria and load demand as well as provides alternatives to address additional load and capacity requirements which includes options for new Generation, upgrades to existing GPA and DOD generation plants, and implementation of demand side management and renewable programs.

The DEIS provides proposed interim solutions during the construction phase of the build up which include three options of reconditioning the GPA combustion turbines (CTs), reconditioning the CTs and increasing operating hours, and reconditioning the CTs and upgrading the Navy's Orote Plant. Furthermore, the DEIS provides for three proposed long term solutions which include a new power plant at Cabras/Piti around 80 MW, a new plant at Potts Junction, and having GPA determine and implement a generation solution.

J-004-001

Thank you for your comment. DoD concurs with this comment and fully expects to pay their fair share of the costs incurred for GPA to provide power to the DoD for this buildup. The rates for DoD would be established by a revised and renewed customer service agreement.

The DEIS addresses transmission and substation upgrades through a list of projects necessary to meet load growth. This project list was provided by GPA as a result of a system analysis study of the impacts of the new load on the GPA system. As this load data has evolved, new analysis results have been provided to DOD.

Subsequent to the DEIS report, GPA has had ongoing discussions with the Department of Defense to firm up DOD load projections, as well as discuss preferred power alternative solutions, system reliability concerns, plant assessment, and local and federal renewable portfolio standards and mandates.

Following are updates as a result of these recent discussions.

Generation

Currently, the energy demand related to the military buildup is lower than previously projected. The military now anticipates 25 MW of firm load and 15 MW of transient/intermittent load (Carrier/Amphibious Vessels). GPA believes these new load projections are more consistent with GPA's 2008 Integrated Resource Plan, anticipating a system peak, inclusive of civilian growth, at 331 MW, up from the current peak of 272 MW. GPA's current generation capacity is 552 MW.

Based on this information and the analyses GPA presented to DOD, GPA & DOD agree sufficient installed generation capacity exists to support the build up. GPA & Navy have consensus on the need to refurbish GPA CTs located at Dededo & Yigo. DOD & GPA agree that this 60 MW sufficiently supports the construction phase. DOD will tentatively fund the estimated cost of \$30 million. Navy has already initiated an approximately \$600,000 assessment for the refurbishment of all five GPA CTs including the ones at Macheche and Marbo.

J-004-002 The effect of the military buildup extends beyond the installation of the marines by bringing in the need for a new baseload unit from 2022 to 2017. DOD should mitigate this cost impact of accelerating the commissioning for this new baseload plant.

GPA and DOD continue to work collaboratively towards exploring renewable energy options and fuel diversification. These collaborative discussions include exploring fuel diversification strategies and considerations of shared costs for Liquefied Natural Gas supply options and Geothermal exploratory investigations.

Transmission & Substation

DOD remaining a GPA transmission level customer is the preferred and least costly alternative. Given recent projected DOD load data, GPA has revised the transmission and substation project list.

The Power system requires minimal transmission system upgrades over the next 5 years under normal growth. Without the impact of the military relocation, GPA anticipates an investment of approximately \$3.5 million in the transmission system to address additional loading (LIST A). This investment is minimal in comparison to the estimated \$77 million in projects required to address military growth of approximately 108 MVA (LIST B).

J-004-002

Thank you for your comment. DoD and Guam Power Authority have been discussing the power alternatives in detail. The customer service agreement between GPA and DoD would be revised and updated to reflect the costs incurred by GPA to meet the new demands of the proposed buildup. GPA seems OK with the approach that this agreement would cover the costs incurred and not allow the costs to meet DoD demand impact the rates for other power users.

Comments on DEIS

J-004-003 Executive Summary

GPA has created an econometric forecast for projections of population, employment, load, energy sales, and energy requirements for both the civilian and DoD sectors. GPA uses several scenario forecasts on permutations of low and high tourism and infrastructure scenarios. These forecasts include projections of growth with and without the DoD proposed buildup (GPA 2008). GPA used this forecast in its Integrated Resource Planning process wherein GPA solicited information from DoD, the commercial sector, the federal and local government, and other local, national, and international economic forecasters. The IRP and thus, the forecasts were accepted and approved by the Guam PUC and its consultants after a rigorous public vetting and stakeholder process. The Authority believes that its medium growth forecast is very close to current information and expectations now under discussion between the all the parties involved. GPA has planned accordingly with respect to the generation question of supporting future loads.

GPA's Integrated Resource Plan is a public document posted at http://gpagwa.com/gpa_authority/strategicplanning/gpa_strategicplanning_GPAIRP.php.

In 2009, GPA prepared a technical analysis regarding generation system reliability for DoD. This analysis was a comprehensive study on how improvements in GPA's CT and diesel plants reliability would eliminate the need to add generation for the interim buildup period.

Volume 1

J-004-004 GPA Integrated Resource Plan analysis supports the recommendation for the commissioning of a new 60 MW plant is required to meet civilian and DoD loads by 2017. This would be five years earlier than if there were no military buildup. This is consistent with the Authority's baseline forecast. This plant will use RFO or LNG. GPA is proceeding on evaluating the technical and economic feasibility for the supply of natural gas to Guam. GPA believes that an integrated system approach to generation expansion and transmission & distribution is the least costly and ultimately the most reliable and operationally sound.

Volume 6, Chapter 3

J-004-005 The statement: "GPA's demand forecast has indicated that the reserve capacity (or excess capacity to ensure reliability) would be exceeded in 2017, based on GPA's load projections for the IWPS without the DoD proposed buildup (GPA 2008)." found in section 3.1-1 is erroneous. This is because the Draft EIS/OEIS confuses Base Case Forecast with Baseline Forecast discussed in a document provided by GPA in 2007 and reproduced by the EIS in Volume 9, Appendix C.

This 2007 document defines the Base Case Forecast as projecting load growth without the Military Buildup. On the other hand, it defines the Baseline Forecast as including the effects of the Military Buildup on the civilian and military sectors.

However, GPA updates its forecasts regularly. For the IRP work, the Baseline Forecast had a slightly reduced projection of peaks and sales. This was due to input garnered during the stakeholder process about the potential timing and funding of DoD projects. The IRP Baseline Forecast (2008) with the

J-004-003

Thank you for your comment. DoD concurs that GPA has been very up front with their planning and needs. The two agencies have been sharing information and planning the proposed alternatives in a cooperative fashion. DoD looks forward to continuing this relationship. The long-term alternative of allowing GPA to decide how best to meet Guam's total power demands would be the preferred, however for long-term alternatives, there are no categories for the preferred alternative as these are programmatic.

J-004-004

Thank you for your comment. DoD concurs.

J-004-005

Thank you for your comment. It is noted that there are inconsistencies between the current IRP (2008) and information in the EIS. The FEIS has been revised to reflect the revised information to better match current planning by GPA and system components as listed in the EIS comments.

J-004-005

Military Buildup projects a peak of 348 MW in 2017 instead of the earlier projection of 366 MW in the whitepaper reproduced in Append C (2007). GPA's IRP is posted at http://www.gpagwa.com/gpa_authority/strategicplanning/gpa_strategicplanning_GPAIRP.php

The Draft EIS/OEIS values for GPA generation capacity in Table 3.1-1 are erroneous. The document should amend the values for GPA Generation capacity in Table 3.1-1 as follows:

- Cabras #3 & #4 have a nameplate rating of 39.3 MW each
- MEC #8 & #9 have a nameplate rating of 44.2 MW each
- Dededo CT #2 has a nameplate rating of 22 MW
- Talofoto has a nameplate rating of 8.8 MW
- Manenggon has a nameplate rating of 10.6MW.

The Draft EIS/OEIS should replace its Table 3.1-1 with the replacement Table 3.1-1 in the Appendix. Cabras #1 & #2 and Tanguisson #1 & #2 power plants are steam units. Cabras #3 & #4 and Piti #8 & #9 are slow speed diesel plants not steam units. The Cabras, Piti, and Tanguisson plants primarily use heavy oil, residual fuel oil (RFO) #6. Therefore, "GPA RFO-Fired Generation" is better description for these plants. Enron is defunct. Marianas Energy Company (MEC) now owns and operates the Piti #8 & #9 plant. Therefore, "MEC IPP Piti #8 & #9" is more accurate. GPA employs two types of diesel-fired generation: combustion turbines and medium speed diesels. They use diesel fuel oil. Therefore "GPA Diesel-Fired Generation" is a more appropriate heading for those units.

J-004-006

The Draft EIS/OEIS summary of Navy service outages for all DoD facilities currently on Guam from October 2005 to July 2006 indicates that GPA system failures accounted for 18.2% or 39 of the 214 outages experienced by its facilities. GPA has since made operational changes to improve and significantly decrease the number of GPA-related Navy service outages. The number of GPA-related Navy service outages has decreased so significantly that Navy has told GPA that it is satisfied with the reliability of GPA supplied electric power. However, GPA has conveyed to DoD that GPA supporting DoD future loads will require the re-conditioning of GPA CTs.

Table 3.1.2 of the Draft EIS/OEIS presents a table of thermal efficiencies of GPA power plants. However, it does not provide a context of how efficient these GPA units among other thermal generation technologies. Additionally, there is no indication as to the period or output that these efficiencies were computed. Furthermore, these calculations are sensitive to the assumptions and the definitions used in their calculation. There are several methodologies for the calculation of efficiency. None are provided.

Typical thermal efficiencies for thermal power plants range from 30% to less than 50%. The Cabras #3 & #4 and MEC IPP Piti #8 & #9 are slow speed diesels. They are considered very high efficiency generation units. Cabras #1 & #2 are efficient steam powered units. Additionally, thermal efficiencies will change depending on how far into maintenance cycles a unit is and at what output the unit is dispatched or used. For example, slow speed diesels are at their most efficient at about 80% of their output rating.

DoD Diesel plants are not part of the regular dispatch to provide electrical energy. They are strictly DoD backup generators.

J-004-006

Thank you for your comment. It is noted that GPA has improved the service and reduced outages experienced by DoD facilities in Guam.

It is also noted that the efficiencies for generation units vary depending on what point the unit is in the operational cycle (near the maintenance point or just having been serviced). Additional information will be added in the FDEIS to clarify the context that the efficiencies are presented in the EIS. The main intent is to show that there are notable differences in efficiencies of technologies for operating units in the GPA system.

J-004-007

Section 3.1.1.1 states: "No power generation is available at Andersen AFB." This is erroneous. There is an underground transmission line between the AFB and the Dededo CT plant. This can support islanding of AFB during typhoons providing storm ride-through capability. Thus, the Dededo CT plants can provide 45 MW of power to directly serve the AFB under emergency conditions. Under normal operations when synchronized to the grid the electric power produced by the CTs is fungible and serves the entire grid. However, there is no formal agreement between GPA and DoD on how to execute this capability.

Section 3.1.1.2 states: "GPA facilities at Marbo and Yigo provide generation capacity in the Andersen south. Please note that this statement needs clarification. Power produced by generators connected to the grid is fungible.

Section 3.1.1.2 states: "Dededo CT #2 was recently reconditioned by GPA and is now available to generate power." It was two other units that were reconditioned not the Dededo CT #2.

In Section 3.1.1.2, the Draft EIS/OEIS does not mention the Tanguisson Power plant located in Central Guam. This plant is rated for 53 MW of capacity. It currently does not operate much because it is a low efficiency unit and GPA can reliably meet its demand with other more cost effective units.

Table 3.1-3 should conform to the information in the suggested replacement Table 3.1-1.

Section 3.1.1.3 states: "These units [Tenjo] are permitted for up to 50% operation ..." This is erroneous. Tenjo Vista plant 2009 operating permits do not restrict operations at Tenjo. GPA uses a 0.3% sulfur diesel fuel at this plant to meet US EPA requirements so that the plant can operate without restriction in the number of running hours. This fuel is lower sulfur than the diesel used at other plants.

J-004-008 Review of Volume 6, Chapter 4

In general, any road construction must be coordinated with GPA to take advantage of opportunities for reduced incremental costs for underground construction of power and other infrastructure. For example, DoD and GPA should consider the placement of transmission and distribution circuits underground and the installation of power system control and telemetry infrastructure whenever technical and economic feasibility show that it makes good business sense.

Review of Volume 6, Chapter 21

GPA has engaged and is continuing to engage with DoD, Guam Environmental Protection Agency, and U.S. Environmental Protection Agency (Region IX) on environmental issues. GPA will engage in a stakeholder process to clearly define the environmental issues including the reconditioning of its combustion turbine and medium speed diesel generation, preparation for the siting of the new baseload by 2017, and fuel diversification using renewable energy, natural gas and nuclear sources.

GPA supports DoD on the need and responsibility for strong environmental stewardship and preservation of Guam's cultural heritage.

J-004-007

Thank you for your comment. Paragraph 3.1.1.1 indicates there is no power generation at Andersen AFB refers to the lack of onsite prime power generation, not a Guam Power Authority (GPA) interconnect between the AFB to a GPA owned combustion turbine (CT) unit offsite with a direct interconnect to the AFB.

Paragraph 3.1.1.2 makes a statement regarding Marbo and Yigo generation capacity providing power to Anderson South. The statement will be revised in the FEIS to more accurately indicate that while the units are in the area of Anderson South that power distribution is fungible and can be made available to other areas or provided from other areas within the system capacity.

The comment regarding paragraph 3.1.1.2 indicates that Tanguisson is not mentioned and that the facility has a capacity of 53MW. Table 3.1-2 does list Tanguisson and provides a snapshot image of the capacity provided by the facility. The FEIS will be revised to better include the Tanguisson facility and its' position within the island wide power system.

The FEIS will be revised to more clearly indicate the permitted capacity/hours for each of the Talafofo and Tenjo sites. The 50 percent number was intended to apply to Talafofo in that the permit information provided by GPA indicated that one unit can run for up to 4640 hours or 2320 hours on each of two units per year. There is no stated number of hours the Tenjo units are limited to provided the sulfur content and other emission limits are met based on permit information provided for the installation.

J-004-008

Thank you for comment. DoD and its contractors will coordinate with GPA and other utilities during the construction of infrastructure projects that are components of the proposed actions.

Review of Volume 7
Section 3.3.14.1 states:

“A review of one year of GPA’s actual generation capacity indicates an average daily generation capacity of 490 MW, or nearly 15% less than its stated capacity. This appears to be largely related to units out of service for extended periods of time and units simply not available to be scheduled into the generation capacity for the daily report. The daily-capacity report is a document produced by GPA that was evaluated over a one-year period to determine what GPA’s typical unavailable capacity is on a regular basis. In this report, the existing combustion turbines (CTs) had been out of service with no specific return-to-service date identified. Thus to maintain reliability targets for the power system performance, GPA would be faced with increasing their generation capacity by 2016 even without the DoD buildup.”

J-004-009 Utilities must keep additional generation in reserve above their need to serve peak load because of the physical fact that machines may breakdown or become unavailable to serve load. Thus, it is expected that the average daily generation capacity available for unit commitment is less than the installed capacity. Furthermore, GPA has had such good baseload availabilities such that it could hold back on large investments into its CTs.

GPA sets its generation reserve margins based on a loss of load expectation (LOLE) of one day in four and a half years. GPA derived its planning and operational criteria for generation system reliability from a standard that Hawaiian Electric Company used several years ago. In GPA’s conversations with DoD consultants, we have agreed that a one day in four and half loss of load expectation may be a much more prudent standard that does not unduly burden customers with the cost of putting in additional reserve to meet the higher standard for interconnected utilities.

GPA calculated and presented its generation system reliability performance for past years for the DoD. GPA met or bettered a one day in ten years loss of load expectation. This performance matches mainland planning standards for generation system reliability.

However, this standard is planned for and met within the context of a large interconnected grid where a utility can expect support from generation outside its operating area. GPA needs to stand on its own. There are no tie-ins for external sources of electric power outside of Guam. This standard requires a certain level of reserve. The higher the standard, the more reserve capacity is needed to support it.

GPA’s experiment with Performance Management Contracts (PMC) privatizing the outsourcing and management of its baseload power plants has resulted in over \$100 million in fuel savings for customers by increasing the availability of these units. Therefore, GPA produces only two percent or less of its power from diesel-fired generation. Prior to implementing PMCs, GPA generated 17% of power from CTs and other diesel-fired units.

Therefore, considering achieving a high standard of base load generation availability and the diminished requirement for producing energy from CTs, GPA management made the prudent choice of not investing in reconditioning GPA CTs and spending on higher priority concerns. If there were no impending growth due to the military build up, GPA may have considered retiring a portion of its CTs.

J-004-009

Thank you for your comment. The information related to CT capacity and long term outage for certain generation units is not intended to question the decision of GPA and the CCU regarding delaying investment in the CTs due to adequate power generation capacity. The intent is to point out that the published GPA system capacity is 552 MW and includes those assets that would be marginally included as current capacity due to the unit status. The DoD understands that the capacity exists and that the capacity can be made available.

GPA's success in outsourcing contracts for independent power producers is also noted and continued success in that approach.

J-004-009 However, GPA will need to recondition these CTs to support the interim military buildup as GPA presented to DoD in February 2009.

GPA's IRP supports the need for a 60 MW baseload in 2017 due to load growth from both the civilian and DoD sectors. However, GPA has shown in past presentations and discussions with DoD, that costs for other than an integrated, single system solution for their power supply would be exorbitantly high.

Review of Volume 8
Section 5.13.1.1 states:

J-004-010 "The proposed facilities for military relocation would require putting into service a Guam Power Authority (GPA) Combustion Turbine (CT), reconditioning four other existing GPA CTs, and upgrades to the existing transmission and distribution system on Guam. Establishing the power demand system for Navy requirements is not anticipated to affect the short-term productivity of the environment since there would be excess power supply of 4.91 megawatts in the peak buildup year of 2014. ... Provided all planned reconditioning of generating facilities and transmission and distribution improvements occur in a timely fashion, there would be no power shortfall."

GPA supports these statements.

Conclusion

J-004-011 GPA views the projected military build up load requirements for generation, transmission, and substation as achievable. GPA is pleased DOD will remain a GPA customer for all its power needs. This will require an extension and possible renegotiation of the GPA/Navy Customer Services Agreement (CSA). GPA is committed to shielding existing ratepayers from the negative impacts of the build up and will insist that DOD pay for its impact, both direct and indirect.

As this draft EIS/OEIS is finalized, the Department of Defense must firm up final decisions for power infrastructure requirements so the work can begin without further delays. Thank you for the opportunity to provide written comments. GPA remains committed to working with the Department of Defense to meet the needs of the military relocation.

Sincerely,



J.C. FLORES, P.E.
General Manager
jflores@gpagwa.com

Appendix

J-004-010

Thank you for your comment. DoD concurs.

J-004-011

Thank you for your comment. Volume 6, Chapter 20 discusses how the proposed action may impact power rates on Guam. DoD believes that this work will not result in significant, if any, increases in power rates. Rather, by including more DoD sources as GPA customers, it will increase the customer base that may hold costs down for all users. Additionally, by reconditioning combustion turbines, and upgrading transmission and distribution lines, as proposed in the FEIS combustion turbines, and transmission and distribution lines, supports the "One Guam" approach by improving the IWPS reliability for all users. Since the funding to support the construction of the utility infrastructure for the Marine relocation is in the form of loans, these costs must be repaid in utility rates and/or other utility charges levied by the utility service providers and/or private entities contracted to effect the improvements. The current funding strategy has 100% of the financing provided by either the Government of Japan to cover all development costs including but not limited to design, construction, financing and capitalized interest. However, GPA has also expressed an interest in financing this work.

Appendix

LIST A

Transmission & Distribution Projects without Military Relocation

Project	Estimated Cost \$
1 Pulantat Substation Capacitor Bank	100,000
2 Dededo Substation Capacitor Bank	100,000
3 Orote/Cold Storage/SRF Substations (Navy)	140,000
4 Andersen Substation Capacitor Banks (2-6 MVARs)	300,000
5 Harmon X82 to Yigo X160 Overhead Line	1,400,000
6 Agana to San Vitores 34.5 kV Overhead Line	1,500,000
<i>TOTAL ESTIMATE</i>	<i>3,540,000</i>

LIST B

Transmission & Distribution Projects Related to Military Relocation Load

Projects	Estimated Cost \$
1 Harmon to Andersen 115 kV Overhead Line	21,788,000
2 Andersen Substation 112 MVA Transformer and Substation	4,830,000
3 Andersen Substation Capacitor Banks – 2-6 MVAR	315,000
4 North Finegayan Substation Capacitor Banks – 2-6 MVAR	315,000
5 North Ramp Substation Capacitor Banks – 2-3 MVAR	158,000
6 Harmon - North Finegayan - Underground Line	9,818,000
7 North Finegayan - Potts Junction - Andersen - Underground Line	15,593,000
8 Harmon - North Finegayan Overhead Line Upgrade	945,000
9 North Finegayan - Potts Junction - Andersen - Overhead Line Upgrade	1,523,000
10 Harmon Substation Reconstruction 115 kV and 34.5 kV	7,508,000
11 Piti to Orote 115 kV Overhead Line	8,505,000
12 Orote Substation 112 MVA Transformer and Substation	4,830,000
13 Orote Substation Capacitor Banks – 2-6 MVAR	315,000
14 Polaris Point Capacitor Banks – 2-3 MVAR	315,000
15 Piti X20 to Orote X35 Overhead Line Upgrade	945,000
<i>TOTAL ESTIMATE</i>	<i>77,703,000</i>

Replacement Table 3.1-1

Plant	Rated Capacity	Derated Capacity	Capacity Used	Unit Type
<i>GPA RFO-Fired Generation</i>				
Cabras #1	66	66	52	Base load
Cabras #2	66	66	47	Base load
Cabras #3	39.3	39	37	Base load
Cabras #4	39.3	39	37	Base load
Tanguisson #1	26.5	26.5	15	Base load
Tanguisson #2	26.5	26.5	15	Base load
MEC IPP Piti #8	44.2	-	-	Base load
MEC IPP Piti #9	44.2	44	42	Base load
GPA RFO-fired Generation Total	352.0	307.0	245.0	
<i>GPA Diesel #2-Fired Generation</i>				
Manengon Diesel	10.6	8.8	-	Peaking, Reserve
Dededo CT #1	23	21	-	Peaking, Reserve
Dededo CT #2	22	-	-	Peaking, Reserve
Dededo Diesel	10	5	-	Peaking, Reserve
Macheche CT	22	20	-	Peaking, Reserve
Temes (Piti) CT	40	40	-	Peaking, Reserve
Yigo CT	22	-	-	Peaking, Reserve
Talafofo Diesel	8.8	4	-	Peaking, Reserve
Tenjo Vista Diesels	26.4	24	-	Peaking, Reserve
Marbo CT	16	-	-	Peaking, Reserve
GPA Diesel #2-Fired Generation Total	200.8	122.8	-	
GPA Total	552.8	429.8	245.0	
<i>DoD Diesels</i>				
NCTS Finegayan	7.5	7.5	-	Backup, Dedicated
Radio Barrigada	4	4	-	Backup, Dedicated
Orote	19.8	19.8	-	Backup, Dedicated
Naval Hospital	2	2	-	Backup, Dedicated
DoD Total	33.3	33.3	-	
System Total	586.1	463.1	-	
Peak Load Total			245.0	

Legend: CT = combustion turbine; GPA = Guam Power Authority; NCTS = Naval Computer and Telecommunications Station.

Notes: All units in megawatts.

J-005-001

Thank you for your comment.



February 12, 2010

JGPO
c/o NAVFAC Pacific
258 Makalapa Dr., Suite 100
Pearl Harbor, HI 96860-3134

Buenas yan saluda,

Guam Waterworks Authority (GWA) appreciates the opportunity to review the Draft *“Environmental Impact Statement/Overseas Environmental Impact Statement for Marine Relocation, Transient Nuclear Aircraft Carrier (CVN) Berthing, and Army Ballistic Missile Defense (BMD) Task Force”* (DEIS).

J-005-001 | Because GWA is a water and wastewater utility, GWA’s review focused on identifying environmental issues related to GWA’s commitment in providing superior water and wastewater services to the residents of Guam and on GWA’s regulatory role in meeting other commitments.

The comments in the attached review document present GWA’s assessment of the content of the Draft EIS. GWA also has a number of recommendations within the document which GWA believes would help both the Department of Defense (DoD) and the people of Guam work together to bring the relocation project smoothly to successful completion within the time desired by DoD.

Un dangkulo na si yu’os ma’ase,

Leonard J. Olive, Sc. D., P. E.
General Manager.

LJO/pjk



GUAM WATERWORKS AUTHORITY

578 N Marine Corps Drive
Tamuning, GU 96913-4111

Good Water Always

February 12, 2010

JGPO

c/o NAVFAC Pacific

258 Makalapa Dr., Suite 100

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RE: GWA Review Comments on:

The "Environmental Impact Statement/Overseas Environmental Impact Statement for Marine Relocation, Transient Nuclear Aircraft Carrier (CVN) Berthing, and Army Ballistic Missile Defense (BMD) Task Force".

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I. GWA REVIEW EXECUTIVE SUMMARY.

Subject: Executive Summary for Guam Waterworks Authority's comments on: *"The 'Environmental Impact Statement/Overseas Environmental Impact Statement for Marine Relocation, Transient Nuclear Aircraft Carrier (CVN) Berthing, and Army Ballistic Missile Defense (BMD) Task Force'".*

Guam Waterworks Authority (GWA) appreciates the opportunity to review the Draft Environmental Impact Statement (DEIS). Because GWA is a water and wastewater utility, GWA's review focused on identifying environmental issues related to GWA's commitment in providing superior water and wastewater services to the residents of Guam and on GWA's regulatory role in meeting other commitments.

J-005-002 GWA acknowledges the challenges associated with the 2014 target date the Department of Defense (DoD) has for the Marine relocation, but the challenges GWA will face because of the military build-up must also be addressed by DoD. One overarching issue is fairness; where fairness means Guam residents do not bear more than its share of the environmental, social and economical impacts. For this reason GWA strongly agrees with DoD's stated objective to avoid the creation of "two Guam's." Guam already has a disparity between the military community and the civilian community with respect to standards of living and access to services compared to other U.S. communities. Given the existing conditions of disparity on Guam, GWA's has concerns with respect to environmental justice. Specifically GWA's existing customers must not bear the negative impacts of this massive military build-up.

Despite the significant lack of information regarding collection system impacts, DoD appears to be keeping the "one Guam" goal in mind only when addressing wastewater issues. However, the failure to address impacts to water infrastructure outside of the base gates and to put the burden of construction and ancillary growth water needs fully onto GWA is clearly counter to the "one-Guam" concept. The failure to seriously discuss integrating water infrastructure into one single robust and redundant system to provide reliability for all of Guam's residents is unrealistic.

Incomplete information made it difficult to accurately identify the impacts that DoD's proposed actions will have on Guam's citizens and environmental resources. Baseline data is often absent, affecting the analysis and impacting conclusions. An example would be the site-specific assessment for groundwater which did not contain the baseline data.

GWA's review was focused on the water resource, water utility, wastewater utility and environmental justice of sections of **Volumes 1, 2, 4, 5, 6 and 7** of the DEIS.

Overarching Issues:

J-005-003 While GWA agrees major impacts will occur in the north, GWA disagrees with DoD's subjective population distribution assumptions that the only major impacts will occur in the north. (**Volume 6-Sections 2.2 and 2.3**) The population growth due to the military build-up will affect the water supply and wastewater treatment capacity island-wide. GWA disagrees with DoD's assertion that the military's responsibility ends at the fence line, or that there will not be any wastewater impacts on Central or Southern Guam.

J-005-002

Thank you for your comment. DoD is legally limited to spending its budget on what is needed for its operation and personnel. Spending DoD funds to repair civilian utility systems is not currently allowed by federal law. DoD is an advocate for Guam to obtain grants and low-cost loans from other U. S. Federal agencies, and for Guam to collect development fees that would be paid by DoD when the development is being conducted by a DoD contractor. Additional sources of income typically enhances the borrowing capacity of business entities if they are properly managed. DoD cannot fix GWA. Gov Guam must do that. However, GWA and DoD are cooperatively working together to plan for the expected increase in population on Guam. DoD has agreed to drill the 22 new DoD water supply wells early, and provide this water to GWA, along with excess water from DoD's Fena Reservoir, to meet the near-term increase in water demand that is expected to occur off-base during the construction phase of the buildup. During this time, GWA would make improvements to their system to meet the long-term water needs of off-base communities. Concrete plans to resolve the projected shortfalls in the GWA water system must be in place prior to commencement of the DoD buildup. DoD and GWA are working on these solutions and the FEIS will include the most recent information on these efforts.

Wastewater is a totally different scenario as DoD is totally dependent upon GWA for wastewater services in northern Guam and comparison of the solutions to these two different systems is not valid. DoD would not and could not agree to fund any upgrades to the Hagatna wastewater treatment plant, yet there may be impacts to that facility or its collection system from induced civilian growth. Similarly, collection system improvements may be needed in the north, and DoD would not and could not agree to fund those either. Improvements of the North District Wastewater Treatment Plant are required for the proposed buildup and partial improvements are not viable; it essentially needs to be restored to

J-005-004: Volume 6-Sections 3.1 and 3.2 contain conflicting discussions of funding sources for off-base infrastructure improvements, and puts the entire burden of these improvements onto GWA and the Government of Guam (Gov Guam). GWA does not have the resources to prepare for the build-up growth without assistance. The suggestion by DoD that a System Development Charge funding source would allow GWA to expand to meet customer needs during the construction phase is incorrect and shows a lack of understanding of such charges. Reliance thereon would certainly result in DoD being unable to meet its planned schedules because of the time it would take to accrue adequate funding by this means.

Recommendation 01: The EIS must address how these impacts will be mitigated as DoD's responsibility for mitigating such impacts.

Source Water:

J-005-005: GWA has identified significant concerns related to Guam's federally designated sole source aquifer (SSA), as well as cause or contributions to violations of water quality standards. Additionally, the DEIS does not address how to resolve the level of uncertainty regarding the aquifer sustainable yield. The DEIS does not define sustainable yield in terms of the future cost to manage the aquifer as it approaches safe yield. For verifiable evaluation, a 3-dimensional model of the aquifer will be needed. Use of a 3-D subsurface aquifer model would help determine the effect on the aquifer of the addition water demands required by DoD for both the construction and military population growth.

Recommendation 02: Sustainable yield confirmation studies should occur so that additional information can be included in the EIS. The USGS study which is discussed in the DEIS, which will take 3 years to complete, is neither sufficient nor acceptable as described. Taking advantage of the body of information held by WERI and supporting its further development would provide more timely information from which good management decisions could be made in a timely manner.

Recommendation 03: The EIS must include a water supply and demand analysis for Guam. The water sources on Guam include groundwater and surface water. Evaluation must proceed per sub-basin for quantity and quality of water at current and future pumping rate.

Recommendation 04: EIS must incorporate a 3-D subsurface water model to determine the baseline condition of the aquifer. This needs to be done in collaboration with the Water Environment and Research Institute (WERI) of the University of Guam where substantial progress in this area has already been made. This may require that DoD and other federal agencies provide funding to ensure that WERI can fully and expeditiously complete and calibrate the model.

Recommendation 05: From the 3-D subsurface modeling data; create a financial management plan for the cost of developing the aquifer as a function of the percent of safe yield. Use this financial management model to do an environmental justice determination. The 3-D subsurface model must be maintained as the tool in the management of the aquifer.

Recommendation 06: The EIS must quantify the uncertainty in supply including drought condition, water quality, rainfall infiltration and construction impacts on

original design basis.

Disparities between the standards of living between the military and civilian populations of Guam cannot and should not be fixed by DoD. This is merely a result of the fact that, other than the military and tourism, there is very little viable industry on Guam.

J-005-003

Thank you for your comment. DoD had to make some assumptions regarding where additional people would settle. The FEIS has been modified to include a qualitative assessment of indirect impacts to GWA wastewater treatment plants and their associated collection systems other than the NDWWTP from wastewater generated by the construction workforce and induced populations that are anticipated as a result of the military relocation. Assumptions were made about where the construction workforce would most likely reside on Guam by reviewing zoning and building applications submitted to the Government of Guam planning department by prospective contractors. This showed the construction workforce is expected to be resident two-thirds in northern Guam and one-third in central Guam. A socioeconomic analysis was conducted for the EIS using data from GovGuam and found that the induced civilian population growth is likely to be 38% in northern, 43% in central and 19% in south Guam. This information, coupled with limited available information from GWA and EPA on the condition of the GWA wastewater collection and treatment systems, was used to qualitatively assess impacts. Impacts to ecological resources and to human health were assessed for both the construction phase and the operational phase of the proposed military relocation, and can be found in the various resource chapters of Volume 6.

Funding for needed upgrades to the GWA wastewater treatment plants and island-wide sewage collection system (other than that which is directly related to upgrades and repairs the NDWWTP) is not identified in

recharge.

J-005-006 In addition, where areas within the Mangilao sub-basin that are proposed for *eminent domain* acquisition for military use also contain GWA water production resources (wells) some provision for protection of these GWA resources must be made.

Recommendation 07: Planning to support and protect all existing GWA infrastructure must be included in the EIS.

Drinking Water:

J-005-007 The buildup will result in an island-wide shortfall of produced water supply projected for 2013-2015 (construction phase of the buildup). This significantly impacts performance of GWA's public water system. Because the project construction workforce would reside within the GWA public water system service area, DoD assumes that GWA will make the necessary upgrades. However, GWA and Gov Guam agencies have serious financial and other resource constraints. The DEIS does not consider the potential impacts to public health and safety should the GWA water and wastewater system expansions not occur at the level sufficient to support the increased construction-phase population. The System Development Charge, which becomes effective as of March 01, 2010 will only begin accrual at that time. The proposed reliance by DoD that this funding source would allow GWA to expand to meet customer needs during the construction phase within the DoD planned time scope, is entirely incorrect. Were DoD to rely solely on this funding source as a means to support the construction phase, it would result in DoD being unable to meet its planned schedules.

Recommendation 08: DoD should assist in financing the development of the wells and supplemental water distribution infrastructure in order for GWA to provide water related to the construction work force in a timely manner. The long lead time to negotiate with the work force housing developer and the time to develop the wells will have a significant impact on the construction timing. If DoD intends to pay for the cost of well development via a developer reimbursement, the process above will not accrue any addition cost to DoD.

Recommendation 09: DoD should transfer any and all viable unused wells to GWA including the real property associated with the well sites. DoD must still provide the funding to clean up wells that are not meeting water quality standards. Specific examples are the Tumon-Maui Well, MW Series Wells, and new AAFB wells.

Water Infrastructure:

J-005-008 GWA has identified significant concerns related to Guam's already stressed drinking water distribution infrastructure. In addition, there is uncertainty as to whether the Northern Guam Lens Aquifer (NGLA) federally designated as a Sole Source Aquifer (SSA) under the Safe Drinking Water Act, has the sustainable yield needed where desired. Contamination threats to the aquifer from point and non-point sources are also a concern, but were not analyzed in the DEIS.

Recommendation 10: To address source water protection, long term water quality concerns, of the SSA (NGLA); include in the mitigation plan the transfer of waste water sources currently on a septic system to sewer systems.

the FEIS beyond what has already been identified in the GWA's Capital Improvements Program (CIP), and in a recent EPA Region IX assessment of GWA's CIP and companion conceptual cost estimate for 5-year and 25-year capital and operational needs. The FEIS provides information on GWA and GovGuam's ability to fund upgrades, including information on GovGuam's debit rating and history of funding shortfalls. DoD acknowledges the existing sub-standard conditions of the GWA wastewater system on Guam and the desire by many for DoD to fund improvements to these systems and services. DoD's ability to fund projects that are not within direct DoD ownership or control is limited by Federal law. However, DoD recognizes the need to identify and integrate solutions for both on-base and off-base utility infrastructure on Guam, and desires to minimize adverse impacts associated with the proposed military relocation program. To this end, DoD is serving as the lead federal agency on a multi-agency group charged with identify Federal programs and funding sources to make the necessary repairs and upgrades to Guam's utility infrastructure systems. Concurrently, DoD, EPA Region IX, GEPA, GWA and the CCU are working together to identify and integrate solutions for both on-base and off-base wastewater needs which meet environment requirements, provide reliable and uninterrupted service, and are affordable for all users.

J-005-004

Thank you for your comment. The FEIS has been substantially modified to assess potential impacts from the off-base indirect workforce and induced populations. This assessment is largely qualitative because DoD does not own the off-base utilities, control where construction workforce housing and induce populations will ultimately be, and because there is limited information on existing conditions of water and wastewater systems from GWA, GEPA and EPA Region IX reports. The FEIS looks at breakpoint years where water demand could exceed available supply, and commits to providing excess water to meet off-base demands during the construction phase of the military relocation by

J-005-009

Recommendation 11: DoD should provide water at a agreed cost for any transfer of water during the construction phase. DoD should provide rate relief for the water currently (4 MGD) provided by DoD since under GWA's present rate structure as controlled by the Guam Public Utilities Commission causes GWA to sell Navy water to some customers below the cost of the water and there is no way to separate Navy water customers from other customers.

Recommendation 12: DoD needs to move forward with planning to integrate all water systems on Guam to provide efficient source control and provide economical, robust, reliable and redundant water supply to all water users on the island. The precedent/model to follow would be of the same type of procedure that allowed DoD to become a full power customer of GPA. This would allow DoD to discontinue its attempts to economically operate utilities.

J-005-010 Wastewater Infrastructure:

GWA has identified significant concerns related to Guam's already stressed wastewater infrastructure. GWA does concur however with DoD's plan to upgrade the Northern District Wastewater Treatment Plant.

Recommendation 13: The ongoing Northern District Wastewater Treatment Plant study will identify and address impacts expected to occur during the time frame. This information should be incorporated into the final EIS for an improved project-level analysis. The EIS should also include the funding requirements needed to implement the long-term wastewater alternatives and associated actions needed to ensure long-term compliance with federal environmental laws.

Recommendation 14: The EIS must address impacts to the wastewater collection system, including the already stressed Central Guam collection system. Identification of impacts should include both anticipated military growth areas and ancillary impacts.

Recommendation 15: The EIS must address the potential for ancillary or construction growth to occur in Central and Southern Guam and the potential impacts to the Hagåtña and Southern Wastewater Treatment Plants, including at what level additional upgrades or expansion would be required to maintain environmental compliance.

Secondary Impacts:

A Population distribution model should be complete to determine the impacts. Ancillary growth along the Marine Corps Drive corridor in Upper Tumon is extremely likely. This area contributes to the Hagåtña Wastewater Treatment Plant and the collection for this area is already at a stressed maximum capacity.

Recommendations 16: The EIS must acknowledge the potential for impacts to this system; to the Hagåtña WWTP and other locations throughout Guam. DoD should work with GWA to define solutions and funding sources for those solutions to prevent, in wet weather, sanitary sewer overflows, combined sewer overflows and improperly treated wastewater.

installing DoD wells early, and finding other sources of excess water from existing DoD systems. For wastewater, the FEIS commits to upgrading the NDWWTP that is expected to receive two-thirds of the wastewater flows from the construction workforce housing areas. The FEIS also identifies off-base impacts that will be significant in the event that GovGuam and GWA do not complete needed repairs and upgrades to the water and wastewater systems as currently required under a 2003 Stipulate Order and the GWA Capital Improvements Program (CIP). The FEIS does not provide details of what projects are required off-base beyond what has already been identified in the GWA CIP and in follow-on assessment reports prepared by EPA Region IX which assessed the validity of the CIP. DoD acknowledges the existing sub-standard conditions of key public infrastructure systems including the potable water and wastewater systems on Guam and the interest to have DoD fund improvements to these systems. The DoD cannot take full responsibility to repair GWA's off base water and wastewater systems to remedy these serious existing conditions because DoD's ability to fund infrastructure improvements is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, the DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam. DoD has identified mitigation measures within DoD control and outside DoD control, including measures that GWA and GovGuam could implement to address the shortfalls provided funding sources could be found. Because it is doubtful that GWA could fund and implement required upgrades in time for the start of the proposed DoD relocation, it is anticipated that public health and safety impacts from increased demand on potable water would be significant until the necessary off-base infrastructure improvements could be completed.

J-005-005

Thank you for your comment.

J-005-011 Cumulative Impacts:

The cumulative impacts of the projects are vastly underestimated. With the exception of the Northern District Waste Water Treatment Plan, the cumulative effect of this project on wastewater infrastructure and the effects on the NGLA are not present in the DEIS.

Recommendations 17: The EIS must assess and quantify impacts to water transmission, storage and distribution systems; to wastewater collection systems including pump stations and to the Hagåtña and Agat-Santa Rita Wastewater Treatment Plants. Mitigation and funding issues to address these impacts must be resolved.

The fact that sustainable yield will be impacted by addition of impervious surfaces (roofing, paving, etc.) has not been addressed. There are two serious concerns raised by this lack in that (1.) directing storm water directly to the ocean reduces the natural groundwater recharge, and (2.) excess freshwater runoff directly into the ocean has an immediate impact on the marine environments and no discussion of Coastal Zone Management Act (CZMA) certification of mitigated impacts has been discussed.

Recommendations 18: Mitigation for stormwater management needs to be addressed in terms of pretreatment and direction to recharge basins rather than diversion to the ocean. This would address both concerns by also preventing damaging uncontrolled fresh water runoff into the marine environment.

J-005-012 Environmental Justice:

The environmental justice with respect to wastewater and water service is extremely understated. One overarching issue is fairness; where fairness means Guam residents do not bear more than their share of the environmental, social and economical impacts. Guam already has a disparity between the military community and the civilian community with respect to standards of living and access to services compared to other U.S. communities. Given the existing conditions of disparity on Guam, GWA has concerns with respect to environmental justice, specifically recognizing that GWA's existing customers must not bear the excess cost impacts of this massive military build-up. One clear example of environmental justice is the increase cost in water production due to DoD's Build-up. The DEIS does not include a financial management model for the cost of developing the aquifer as a function of the percent of safe yield. The DEIS does not include the increased cost of water to the residents of Guam after the groundwater is maximized and other sources of water such as surface water must be utilized. Additionally much of cost of infrastructure due to the DoD build-up as expressed in the DEIS would fall on the current GWA rate payers. DoD did not include a financial model to determine the cost of upgrading the current system including water distribution, water production, wastewater collection, or wastewater treatment.

Recommendation 19: DoD must include in the EIS a financial model to determine the cost impact of upgrading the current system on the current residents of Guam. The financial model must include water distribution, water production, wastewater collection, and wastewater treatment. A detailed financial management model must be developed on sources water including the financial management model for the cost of developing the aquifer as a function of the percent of safe yield. Using data from the model, do an environmental justice determination to ensure the existing rate payers do not bear any negative impacts of this massive military build-up

Recommendation 02: In October 2009, fully comprehending the importance of protecting the sole source NGLA, DoD initiated an effort with GWA/CCU to co-manage the NGLA. This effort proposed that GWA and DoD, the two entities that rely on the NGLA as a major source of water would need to work as one to protect this critical resource. The proposal was to cooperatively assess the impacts of proposed developments, use the upcoming USGS study to guide efforts to manage the NGLA, and leverage DoD and GWA resources to cooperatively address potential impacts and propose alternatives to mitigate adverse impacts to the NGLA. Although this initiative to work together cooperatively was advanced at subsequent meeting in November 2009 and January 2010 that created consensus on the way ahead, both GWA and EPA raised concerns with the DEIS knowing that many of the issues they raised are already being addressed. It is further noted that EPA was invited to these meeting, but declined to attend unless DoD funded their participation.

During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group, which includes EPA, GEPA, GWA, DoD, UoG-WERI, and USGS, also met (less EPA) in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer

J-005-012

Recommendation 20: DoD, the Joint Guam Program Office and Naval Facilities Engineering Command Pacific needs work with Guam personnel to address these issues before the Final EIS is publicly public released.

to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the stakeholder meetings and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS.

Recommendation 03: The EIS evaluated current and projected water demand for all of Guam, including civilian growth and needs for the anticipated imported work force. Numerous options for additional water sources were evaluated and presented in Volume 6 chapter 2. Also information from GWA was utilized in this evaluation.

Recommendation 04: Please see response to recommendation 02 above. Such 3 dimensional model cannot be completed in time for the final EIS but DoD is committed to properly model and manage the aquifer. In addition, DoD had a recent review of the 1991/2 sustainable yield report assumptions performed by WERI, and their conclusion was that the assumptions used in this report remain valid today.

Recommendation 05: DoD suggests that this recommendation be discussed during one of the DoD/GWA monthly meetings on the goals and objectives of the USGS aquifer modeling.

Recommendation 06: Please see response to Recommendation 02. In addition, DoD is pursuing efforts to incorporate sustainability into all of the projects related to the military buildup. Each project is targeted to meet LEED Silver and efforts are underway to evaluate infrastructure from the standpoint of good, better or best wherein good meets LEED Silver and better and best exceed that standard and provide the opportunity to determine the affordability of exceeding the minimum. This effort is being accomplished using a trademark system "SSIM". With respect to water usage the SSIM process evaluates: low impact

II. GWA Comments on Utilities/Infrastructure

II. A. General

J-005-013 Off-Base Impacts to Wet Utility Infrastructure

According to the DEIS **Volume 6**-Section 3.1.2.1, capital improvements to the wet utility systems to meet the induced and construction worker populations “would be financed through surplus system revenues, grants and loans.” As DoD is well aware (through financial documents provided by GWA to DoD and its consultants), GWA does not have any “surplus system revenues”, and no source for grants has been identified. The DEIS states that “GWA has prepared a 5-year CIP for fiscal years 2009-2013.” GWA’s five year rate plan is for critical system projects, based on the GWA Water Resources Master Plan (WRMP), that are needed; irrespective of the military build-up; to satisfy regulatory and system need requirements. GWA will not have any additional borrowing capacity once these projects are financed using GWA Revenue Bonds.

Volume 6- Section 3.2.3 conflicts with the **Volume 6**-Section 3.1.2.1 statements by saying that the water system expansions “would be funded through collection of user fees from GWA customers. This would include user fees to be paid by contractors funded by DoD that would provide housing for construction workers.”

As DoD is aware, GWA has only recently received approval for these System Development Charges (SDC’s) by the Consolidated Commission on Utilities (CCU) and the Guam Public Utilities Commission (PUC). The fees go into effect on March 01, 2010. However, even as these fees are collected, funding will lag far behind even normal growth needs. GWA estimates of user fee accrual rates indicate that it would require approximately 20 to 50 years before GWA would have collected sufficient funds to finance the full scope of the system projects required to support military growth project populations. Thus, depending upon SDC’s to finance growth would result in inadequate funding. It will supporting only areas for single facilities rather than permit utilizing good overall system planning. The net effect would likely be delays in construction while infrastructure projects are completed which in turn could impact DoD schedules. This approach further ignores the fact that the SDC’s are subject to approval by the PUC. Further there are other projects as described in the GWA WRMP that are expected to use these fees, exclusive of projects related to the military buildup. Finally, having individual small developers pay to bring water and sewer services to individual sites may not be good for the overall system.

Recommendations 21: Upgrades need to be engineered in holistic fashion using full system planning for which individual developers cannot be expected to pay. These decisions will require cooperation of all agencies on Guam.

The DEIS in considering the water supply issue; has noted that DoD water could potentially be supplied to supplement construction worker usage, and for upgrading the NDWWTP for wastewater treatment. GWA will continue to actively engage in planning in these areas. However, no discussion is provided for other infrastructure, including water transmission, water storage, water boosters or water distribution. Further there is no discussion of wastewater collection and pumping, all of which will need financing for military impacted growth upgrades.

landscaping, Intelligent irrigation (with the exception of key limited areas no irrigation will be incorporated), high efficiency water fixtures, reuse of rainwater, and detain, retain and treat techniques for stormwater. It is DoD’s intent to incorporate many of these requirements into its facilities and site infrastructure. By applying low impact development (LID) initiatives, DoD will focus on precluding and/or minimizing runoff and maximizing the infiltration of quality water to recharge the NGLA. A LID study has been done and has been added to the final EIS. So a conscious effort is being undertaken to reduce water demand, maximize infiltration of quality water and reuse water resources wherever possible to minimize demand for water from the NGLA. DoD could address a Joint Region effort to conserve water by applying policies that would limit the use of water and initiate water saving improvements throughout installations on Guam. With the support of NAVFAC MAR this has been committed to in the FEIS.

J-005-006

Thank you for your comment. DoD agrees that protection of GWA infrastructure that may ultimately end up within DoD property is needed, and will work with GWA to protect these assets. For protection of the aquifer, DoD is concerned about preventing contamination of surface waters and groundwater (particularly drinking water aquifers). The EIS describes numerous programs and actions that will be taken to protect surface waters and groundwater from stormwater runoff. Construction of new facilities will use Low Impact Development (LID) principles to the extent practical. LID is a design philosophy that seeks to reduce the impact to the environment from new construction projects through the reduction of impervious surfaces. LIDs principles incorporate the design of facilities the use of native vegetation, pervious (porous) surfaces to reduce storm water runoff and encourage recharge of groundwater, and water conservation. DoD is currently conducting a LID study that will identify specific types of alternative designs that can be incorporated into the construction of facilities associated with the

J-005-013 GWA does strongly concur with and supports the concept of rate relief for existing customers to shield them from the costs of growth caused by military development. However, no sources were identified for this relief in the DEIS, it merely notes that such relief is “anticipated” (Volume 6-Section 3.1.2.1) and will be “significant” (Volume 6-Section 3.2.3).

Recommendation 22: DoD needs to work closely with the “federal family” of agencies to define specific funding sources for the off-base impacts to GWA’s systems and for rate relief to existing customers. Such sources must be identified as soon as possible so that incoming construction workers and other induced growth do not stress existing systems and their needs can be met in a timely manner.

2. Land Use

Volume 6-10.2 ENVIRONMENTAL CONSEQUENCES

Volume 6-10.2.6 Off Base Roadways

Volume 6-10.2.6.6 Summary of Impacts

“The Draft North and Central Guam Land Use Plan (GLUP) has addressed the changes in future land use as a result of the proposed Guam and CNMI military relocation project, as well as other military facility expansions over the next 20 years”

The Northern and Central Guam Land Use plan as cited in the DoD section above does not provide clear answer for land use. The following paragraph is cited from the Draft North and Central GLUP, Chapter 2 Land Use, Section 2.3. Summary of Existing Conditions – Population and Demographics, paragraph 4:

“...Total population growth over the next 20 years is forecast at 34%. While it has not yet been determined where on Guam this growth will primarily occur, current land use plans indicate that the northern portion of the island is likely to absorb a greater proportion of this growth than the south, given the less mountainous terrain and more widespread availability of public services.”

In addition, the following statement is also cited from the Draft North and Central GLUP Chapter 6-Transportation, Section 6.2 Goals and Policies, Goal T2, Policy T3,

“Work with the Department of Defense and other agencies to prioritize needs and funding sources associated with future military-induced growth.”

J-005-014 is evident from these statements the Draft North and Central GLUP does not provide a definitive answer related to changes in land use as DEIS “Summary of Impacts” asserts. In addition, this statement ignores the many military personnel who reside in Central and Southern Guam, and after the buildup these numbers will undoubtedly increase thereby placing greater demands on GWA’s water and wastewater systems in these areas

Recommendation 23: The EIS needs to fulfill the objectives set called for by Gov Guam and DoD in the Draft North and Central GLUP. It presently does not provide a definitive answer related to changes in land use as DEIS claims;

Recommendation 24: DoD must clarify and quantify population impacts off-base, both during the construction phase and after military relocation is completed. It must also

buildup. DoD is also preparing a stormwater pollution prevention plan (SWPPP) and will apply for permits that regulate stormwater discharges during construction. The permit and plan is focused on reducing the amount of earth and soil that is exposed to stormwater during earth-disturbing activities (such as land clearing and grading), providing stabilization of soils during construction through the use of ground covers, and sediment ponds and traps/screens to reduce pollutants getting into storm runoff and from percolating into the ground. These plans also have specific requirements for containment of potential pollutants at construction sites (such as storage areas for equipment fuel). Lastly, DoD is developing a recycling plan in consort with the stormwater construction plan that calls for the use of mulch on exposed soils, mulch that will be generated during the clearing of trees and low growth during land clearing activities. Once construction is complete, a SWPPP will be developed to control stormwater runoff and infiltration from base operations. This is being done on a regional DoD Guam-wide scale, and has the involvement of Guam EPA.

J-005-007

Thank you for your comment.

From the initial and now near monthly meetings with GWA that began in October 2009, DoD has focused efforts on the off-base water demand generated by workforce housing and induced civilian growth resulting from the buildup. Since the release of the DEIS, DoD has moved up its water Private Entity effort to begin in 2011 vice 2013 to allow it to make the water produced from the new wells at AAFB available to support the off-base demand (depending on the rate that the Marines occupy the new base, beginning in 2013 it is expected that 2 to 6 MGD can be provided to GWA depending on their requirement for the water and after full occupancy of the new base it is projected that 2 to 4 MGD could continue to be provided) . Making water excess to DoD needs available

J-005-014

address the variability in population locations other than limiting the evaluation solely to northern Guam.

to GWA allows DoD to address GEPA's concern that GWA does not have available yield to support the off-base demand related to the buildup. GWA does not prefer the option to obtain water from DoD and prefers that the resources to produce water be transferred to them. This is a complex issues that involves federal water rights and will likely not be resolved to support GWA desires to control the production assets. However, it may be possible to address their desire to have a special rate for water obtained from DoD if a means to support this request can be accommodated in the Navy Working Capital Fund construct that NAVFAC MAR must comply with. Understanding that this water will not be available to meet the early workforce related demand expected in 2010-2012, DoD discussed with GWA at its January 2010 meeting an effort to "wring out" excess water from the DoD (NAVFAC MAR) water systems. In line with this effort as part of the creation of the Joint Region on Guam, NFM is in the process of integrating the former Air Force water system into a single DoD water system for the island and is aware that this system has excess capacity. As GWA points out in its comments there are wells owned by DoD that are not currently being produced for various reasons that include: high operating costs, treatment concerns, well reconditioning requirements, and excess to the needs of current demand. These wells have the potential to produce somewhere between 3 to 5 MGD of water (Tumon-Maui well can produce 1 MGD, the AF has indicated that their former system has 1.7 MGD excess and wells at Finegayan have excess capacity depending on who is asked .5 to 1.5 MGD). By identifying all the excess water and working closely with GWA, DoD has the ability to help GWA address the near term requirement to provide water to workforce housing. The water appears to be available now and is already connected to distribution systems that will assist in the effort to move it to the demand areas. The effort to make this excess water available to GWA is underway and will become an item to be addressed in an MOU that is being negotiated with GWA. Further providing excess water to GWA will be an issue that will be addressed in a customer service agreement that will likely outline DoD's

II. B. Potable Water

1. Aquifer Management (Source Water)

As discussed in:

Volume 2-3.1.1.1 Geologic Overview

Volume 2-3.1.1.3 Geologic Units

Karst Geology

Volume 2-4.1.1.3 Groundwater

Groundwater Availability

Groundwater Quality

Table 4.1-1. Sustainable Yield Estimates and Recent Annual Average Pumping, NGLA

Volume 6-2.2.3.1 Water Supply Sources

Volume 6-2.2.3.1 DoD Water Supply Sources

Volume 6-2.2.3.2 Non-DoD Water Supply Sources

Volume 6-2.2.5.5 Guam Water Well Testing Study

Volume 6-2.2.5.6 Northern Guam Lens Aquifer (NGLA) GWUDI Evaluation

Volume 7-2.3.4 Potable Water

The above referenced sections evaluate the Northern Guam Lens Aquifer (NGLA) as a single intact unit. The studies of sustainable yield which have been done have also focused on aggregate recharge for usable supply.

The NGLA is in fact composed of 6 sub-basins. (This excludes Southern Guam which realistically can serve mainly as a source of surface water.) [Please see “*Figure 1. Mapping the 7 water management zones of Guam*” below.] The necessity of managing the sustainable water supply on a basin by basin basis, while identified, has never been adequately quantified. The bulk of available data applies to the Yigo-Dededo Trough section through the middle and which is the largest single sub-basin.

J-005-015

The divisions between the sub-basins are weathered volcanics which while porous are much less permeable than the Karst limestone formations that they separate. The volcanic sub-basin partition permeability is lower by 3 to 6 orders of magnitude (1/1,000th to 1/1,000,000th of limestone permeability). This porosity difference amounts to virtual total barriers to transmission of water between sub-basins. For all the reasons described in the above referenced sections of the DEIS, it is clear that there is a need to quantify the recharge and sustainable yields for each individual sub-basin so that each can be managed individually. Even the proposed “6-2.2.5.7 USGS NGLA Study” does not address this need.

The University of Guam Water and Environment Research Institute (WERI) already has initial information to support the quantification of sub-basin sustainability. WERI is also drafting a true Three Dimensional Subsurface model of Guam’s groundwater.

Recommendation 25: Quantifying the yield on a sub-basin by sub-basin basis is critical to viable potable ground water planning before wells can be properly sited to work within sustainability limits for any given location. It may be practical to obtain good decision making information in a very short time period, especially if the “USGS NGLA Study” it teamed up with WERI and supports WERI’s ongoing projects studying Guam’s source waters. [See also Recommendations 02, 04, 05 and 06 above.]

efforts to work more closely with GWA to optimize the effectiveness and efficiency of the respective water systems. Although GWA does not like to obtain water from DoD, this option allows GWA to avoid the capital improvement costs required to develop water resources and allows them to focus their capital on improvements to their distribution and storage system.

J-005-008

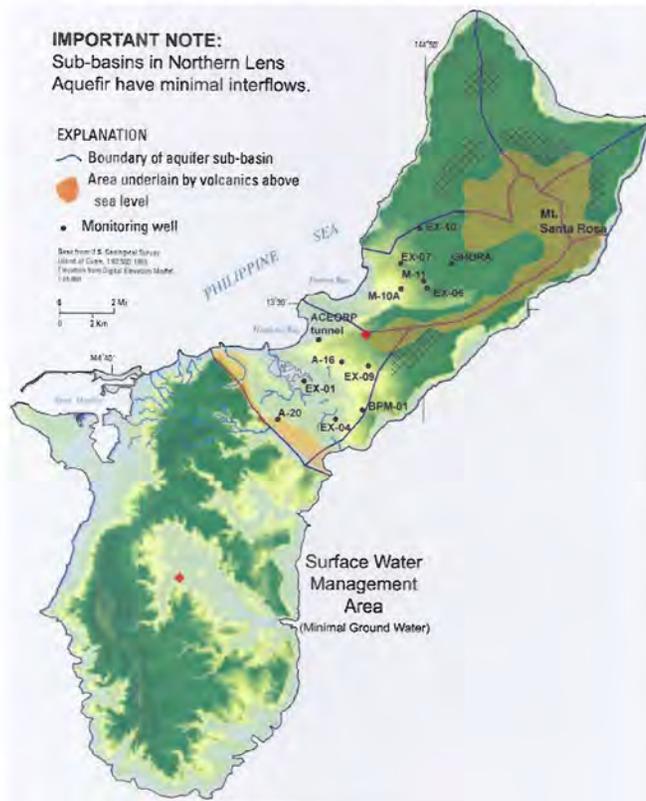
Thank you for your comment. DoD concurs that converting septic tank/leach field systems would enhance protection of the NGLA. This mitigation will be added to the Final EIS in the category of mitigations outside of DoD control.

J-005-009

Thank you for your comment. The Guam Water Authority (GWA) and DoD are cooperatively working together to plan for the expected increase in population on Guam. DoD has agreed to drill the 22 new DoD water supply wells early, and provide this water to GWA, along with excess water from DoD's Fena Reservoir, to meet the near-term increase in water demand that is expected to occur off-base during the construction phase of the buildup. During this time, GWA will make improvements to their system to meet the long-term water needs of off-base communities. Concrete plans to resolve the projected shortfalls in the GWA water system must be in place prior to commencement of the DoD buildup. DoD and GWA are working on these solutions and they will be included in the final EIS.

Combining and integrating both the DoD and GWA water systems would be a major undertaking that is beyond the scope of the EIS. Also, it would cause DoD to lose control of their water systems to GWA, whose performance to date has not been exactly exemplary as they are under a stipulated order from EPA. At this point in time, DoD certainly plans on cooperating with GWA and assisting them to the full legal extent of their

Figure 1. Mapping the 7 water management zones of Guam.
(6 subsurface water lens sub-basins and one surface water area.)



The impacts on recharge of the aquifer due to the DoD buildup projects was presented with supporting data to collected to perform quantitative analysis for water quality and water quantity. The reduction in permeability and unspecified needed increases in ponding basins exacerbates the uncertainty of the supply of the aquifer per **Volume 2-Section 4.1.1.3**. The potential increased sensitivity to contamination of the aquifer due to the recharge impacted by DoD buildup activities while noted had no quantitative mitigation strategy. **Volume 2-Section 4.2.2.1** further indicates that construction will have an impact on the aquifer recharge both in terms of water quality and water quantity without quantification or adequate mitigation addressed.

Recommendation 26: Recharge impacts need to be quantitatively evaluated, and remedial mitigation must serve the determined need.

capability, but would not concur to combine the two water systems. Interconnects would be planned to permit water sharing back and forth as agreed upon.

Existing water rates are not within the scope of the EIS.

J-005-010

Thank you for your comment.

Recommendation 13: The final EIS has been modified to include the required upgrades to the North District Wastewater Treatment Plant (NDWWTP) that were documented in the recent study of that plant. Long-term needs for wastewater treatment are the jurisdiction of GWA, and once the impacts of the proposed DoD buildup have been provided for, DoD defers to GWA to properly maintain, operate, plan, and fund future needs. DoD would be a rate paying customer and contribute their fair share for those needs.

Recommendation 14: The DoD would install collection system improvements for the areas of new development, but by law cannot financially fix other current deficiencies in the GWA sewer collection system.

Recommendation 15: Please see response to Recommendation 14.

Recommendation 16: The final EIS has been modified to recognize that other locations besides northern and central Guam may be impacted by civilian growth. DoD is willing to work with GWA in assisting with finding and helping to facilitate funding sources to fund the required upgrades.

J-005-011

Thank you for your comment.

J-005-015 | **Recommendation 27:** Considerable aquifer recharge modeling has already been done by WERI and support for extending this work would significantly shorten the time it would take to reach reliable quantification of recharge impacts which in turn would allow balanced mitigation strategies.

2. Water Production

Volume 6-2.2 POTABLE WATER

Volume 6-2.2.3 Water Supply Sources

Volume 6-2.2.3.2 Non-DoD Water Supply Sources

J-005-016 | Between the existing non-DoD water supply sources and GWA's rehabilitation and expansion plans, there is sufficient water supply to meet the anticipated non-DoD water demand, provided that the proposed system expansion is operational in time to meet increased demand."

Recommendation 28: Under present circumstances, identified system needs "anticipated" by DoD will not be operational within the targeted time frame as funding for the stated system expansion will not be available by the time needed. GWA CIP funding is subject to grants, bonds and other outside sources. DoD needs to assist GWA in accessing timely funding to construct needed infrastructure.

J-005-018 | Surface water.

Volume 2-Section 4.1.5 and Volume 6-Section 2.2.3.5 suggest the use of the Talofofo River watershed (misnamed in the DEIS as the Lost River Watershed) while partly within the Naval Magazine Reservation is not an available option for DoD development. This watershed includes the Talisay, Maamong, Bonya and Talaeyus Streams which go underground to re-emerge in the Maagas River which meets the Mahlac River to become the Talofofo River. The Talofofo River is also fed by the Sagge, Tinechong, Sarasa and Malaja Streams.

"The Guam Surface Water Development Study" (Barrett Consulting Group, 1994) reserves The Talofofo watershed as an expansion source for GWA's existing Ugum Surface Water Treatment plant. The GWA Ugum facility will need to extend a second inlet to the Talofofo River to reliably maintain supply for the treatment capacity of 4 MGD in the dry season (or during below normal rainfall conditions). A minimum flow in the Ugum River of 2 cfs (889.2 gpm or 1.3 MGD) must be maintained and the river flow in dry season can drop below the necessary 5.3 MGD needed to sustain Ugum River Surface Water Treatment Plant's production rate. The second source inlet is engineered to access the Talofofo River (Lost River in the DEIS) just above its junction with the Ugum river. A minimum flow limitation for the Talofofo River will also be imposed, but the combination of the two sources are calculated to be sufficient to provide Ugum with its needed supply.

Recommendation 29: The EIS must drop the Talofofo Watershed ("Lost River" watershed) from its supply development options. This again points to the need of managing all of Guam's water systems as a single integrated system.

Recommendation #17: Detailed impacts to the GWA water system were not included in the DEIS because detailed up to date information was not readily available. The impact to the Hagatna WWTP is discussed in the EIS. Marine relocation would not impact wastewater flows to Agata-Santa Rita WWTP so the impacts to the plant were not included in the DEIS. Per federal regulations, DoD is restricted to certain types of expenditures.

Recommendation # 18: DoD agrees with this recommendation and a study on how to incorporate low impact development has been conducted. This study covers the proposed Marine facilities at Finegayan. The results of this study are included in the FEIS. Incorporation of the recommended elements in this study would minimize the reduction of aquifer recharge from the new Marine facilities.

J-005-012

Volume 2 Chapter 16, Volume 6, and Volume 7 of the Final EIS document less than significant direct impacts related to potable water and wastewater associated with construction and implementation of the proposed action. However, significant indirect impacts on potable water and wastewater systems associated with induced population of the construction workforce and other induced development may impact public health. These impacts would result in disproportionate, adverse health impacts on minority and low-income populations and children, as discussed in Final EIS Volume 6 Chapter 20. Mitigation measures are discussed in Volume 6 Chapters 3 and 20 and are summarized in Volume 7, including monitoring of the aquifer and potable water and wastewater systems and working with the Government of Guam to protect the water supply. DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and health care services on Guam that particularly affect minority and low income populations and children, and the interest to have DoD fund improvements to these

J-005-017 Surface Water Development.

The surface water management area of southern Guam (See “*Figure 1. Mapping the 7 water management zones of Guam.*” on page 10 above) was thoroughly studied by Barrett Consulting Group generating the 1994 report “*Guam Surface Water Development Study*”. This study provides the information that would allow GWA to maintain capacity for surface water production even through the worst drought on record in 1971-1972. In addition it provides the information necessary to manage future growth needs that can be satisfied by using surface water resources.

Recommendation 30: Should DoD feel that new surface water resource development is warranted, it would be to the advantage of all island residents if a cooperative project were put forward and the resources and water systems were integrated into a single operating system. In addition to the “economy of scale” business case, maintaining a fully redundant asset management program would not only maximize reliability, but would manage cost for the greatest return on investment.

J-005-018 Leak detection:

In **Volume 6-Section 3.2.3** the DEIS suggests in the Mitigation for Potential GWA Potable Water Shortfalls outside DoD Control finding additional supply via Unaccounted For Water in water loss (estimated at 50%) because of leaks. This has proven to be incorrect. The ongoing, multi-million dollar leak detection and system study, contracted by GWA, has verified that only a small portion of the “Unaccounted For Water” is a result of leaks. It has been demonstrated only 4 MGD in leaks exist in the system which is just over 10% loss by leaks. The acceleration of the leak detection program will not create this new source water. Even after a robust pipe replacement program based on the data collected by the leak detection program will the a significant amount (less the 3 MGD) of source water be recovered. GWA does not currently have funding sources for this pipe replacement program identified by GWA’s leak detection program.

It is a matter of record that the water distribution system about which DoD expresses leakage concerns is to a considerable extent a water piping system that was installed by DoD and later abandoned to Gov Guam when the military presence on island was drastically reduced.

Recommendation 31: It would benefit both DoD and GWA’s rate payers for DoD to accept a share of responsibility for the condition/age of the GWA distribution system and to help pay for the pipe replacement program identified by GWA’s leak detection program.

Water Quality

J-005-019 **Volume 6-Section 2.2.3.2** notes that GWA and GEPA have an ongoing well plan for chloride management in the island’s wells. In cases where the level of chlorides is increasing in GWA wells a flow rate mitigation strategy is being employed. With GEPA the well plan for the effected GWA wells includes supplementing supply from areas where chloride levels are stable or diminishing. The well plan targets GWA reduce the pumping of wells in the chloride affected well field by 2 MGD. Due to the uncertainty of weather the reduction will work to evaluate this project and collect additional data will continue.

systems and services. DoD’s ability to fund actions is limited by federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam, particularly its disadvantaged populations.

J-005-013

Thank you for your comment.

Funding to meet on-base DoD water demand is described in the FEIS and is expected to come from Government of Japan loans. Additionally, DoD proposes to transfer excess DoD water to meet anticipated off-base shortfalls during the military relocation construction period, and will also seek Government of Japan loans to provide interconnection between the DoD and GWA water systems. Funding for needed upgrades to the GWA wastewater treatment plants and island-wide sewage collection system (other than that which is directly related to upgrades and repairs the NDWWTP), and for off-base water systems is not identified in the FEIS beyond what has already been identified in the GWA’s Capital Improvements Program (CIP), and in a recent EPA Region IX assessment of GWA’s CIP and companion conceptual cost estimate for 5-year and 25-year capital and operational needs. The FEIS provides information on GWA and GovGuam’s ability to fund upgrades, including information on GovGuam’s debit rating and history of funding shortfalls.

DoD acknowledges the existing sub-standard conditions of the GWA water system on Guam and the desire by many for DoD to fund improvements to these systems and services. DoD’s ability to fund projects that are not within direct DoD ownership or control is limited by Federal law. However, DoD recognizes the need to identify and integrate solutions for both on-base and off-base utility infrastructure on Guam, and desires to minimize adverse impacts associated with the proposed military relocation program. To this end, DoD is serving as the lead

J-005-019 | **Recommendation 32:** DoD needs to become an active participant in the task force examining Guam's ground water resource water quality management.

J-005-020 | **Volume 6-Section 2.2.3.2,** DoD assumes GWA can keep all water storage the tanks filled. This is incorrect as GWA maintain approximately 15% of its water storage with this storage reaching as high as 30% of the available storage capacity during minimum water demand periods. This situation exists because of hydraulic issues within the distribution system, pressure balanced with production capacity.

Conservation as a Water Resource Strategy

Recommendation 33: Conservation is a viable method to increase the supply of water. Supply could be considerably enhanced were DoD to support a \$2M program for a civilian conservation program to replace shower heads and subsidize low flow toilet retrofits.

3 Water Distribution

Volume 7-2.3.4	Potable Water
Volume 7-2.3.4.2	Projecting Tipping Point(s) and Action Point(s)
Volume 7-2.3.4.3	Potential Impacts and Mitigation

Mitigation Alternatives

Volume 6-Section 3.2.3 describes mitigation measures for the eventuality that GWA's water supply cannot keep up with the off-base growth caused by the build-up. This is a likely scenario since the DEIS does not identify viable funding sources to support GWA expand to meet the demand.

The mitigation measure defined is for GWA to purchase more water from DoD increasing GWA's losses associated with selling over priced water supplied by the Navy to our customers whose rates are set by the PLUC. There is no proactive effort described on DoD's part to mitigate the situation, and the DEIS provides numerous potential obstacles to this. The obstacles described are not alleviated by any offsets, alternatives or mitigations. Obstacles include a requirement for GWA to pay and contract for connections to the DoD system, however, no funding sources are identified. Such connections may not directly support a contractor's development and therefore it may not be possible for GWA to require contractors to pay for such work.

Should there be a water shortage due to work supporting the military projects, GWA would need to place a moratorium on new connections to the water system until additional source could be developed since GWA's governing rules require that service limits must be observed. This would have a significant impact on the timing of the build-up work and on supporting economic development.

Volume 7-Section 2.3.4 further discusses mitigation measures, including those it describes as "beyond DoD control" such as accelerated off-base well construction and leak detection, leak repair and line replacement. However, DoD could assist with coordination and funding efforts. This means that these measures are clearly not beyond DoD control. DoD could certainly import water or set up small desalination plants to assist with the shortages, so these measures are certainly within their purview and capacity for mitigation or management.

federal agency on a multi-agency group charged with identify Federal programs and funding sources to make the necessary repairs and upgrades to Guam's utility infrastructure systems. Concurrently, DoD, EPA Region IX, GEPA, GWA and the CCU are working together to identify and integrate solutions for off-base water and wastewater needs which meet environment requirements, provide reliable and uninterrupted service, and are affordable for all users. Even with an infusion of federal funds to fix the existing problems with the GWA water and wastewater infrastructure, if there is no funding to keep the systems operated properly, maintained, and upgraded, the system will be unsustainable. This has even been acknowledged by EPA Region IX in its CIP assessment report. Both GWA and EPA state that the people of Guam should not have to carry the financial burden of supporting the military buildup. It is hard to argue with this position. However, what is not said is that the people of Guam should carry the burden of sustaining compliant water and wastewater systems required to ensure their health and well being. GWA's Water Resource Management Plan (WRMP) which was developed to achieve compliance with an EPA stipulated order, identifies projects required to correct \$200 Mil in infrastructure deficiencies that existed in the water and wastewater systems at the time the report was prepared. This estimate has increased after the preparation of the CIP. Very few of the deficiencies have been addressed to-date because GWA does not have the financial resources to address these issues. The Consolidated Commission on Utilities (CCU) and GWA continually push for a single water system on Guam. They feel that without the capital that would come from including DoD into a single island-wide water system and infusing the significant capital that would come with a large, paying customer, they are unlikely to ever have sufficient capital to sustain a compliant water system. The reality is that even with DoD as a customer they will not have sufficient capital to sustain their water system without raising the water rates. The ability to sustain the water and wastewater systems will be a topic of discussions with GWA, CCU and EPA in early March 2010. Without a

J-005-021 The methodology discussed in the above referenced sections does not adequately address the most effective means of providing reliable water delivery for both military (off base family) needs as well as those of the civilian residents of the island of Guam. Inadequate attention has been given to the robustness, reliability and redundancy that would result from integrating all water systems on the island into a single functional utility.

A single system would fully share and properly manage the water sources available in this limited environment. Further it would take advantage of the ability to manage distribution without having to utilize distant sources when adequate supply are already available wherever needed.

Recommendation 34: The EIS needs to include proactive measures on the part of DoD to address off-base water shortages. Include procedures, funding sources and methods of addressing obstacles such as advance planning to replace DoD water lines in aged, poor condition.

Recommendation 35: The potable water distribution system will only achieve the needed, economy, reliability, robustness and redundancy that is desired by all water users when it is operated as a single system. Planning for this needs to be included in mitigation objectives.

Table ES-3. Summary of Parcels for Each Main Cantonment Alternative, Executive Summary Page ES-10 cites areas within the Mangilao sub-basin that are proposed for *eminent domain* acquisition for military use. Some of these locations also contain GWA water production resources (wells). Provision for protection of these GWA resources must be made.

Recommendation 36: Planning to protect all existing GWA infrastructure must be included in the EIS.

II. C. Wastewater

1. Wastewater Flows

Volume 6-Section 2.3.3 defines the projected wastewater flows from transient personnel and off-base civilian workers as 35 gpcd. The reference for this data is UFC 3-240-02N. Section 3.3.2.2 of this UFC states that 35 gpcd is to be used for "non-resident populations." "Non-resident" includes

- a) Non-resident military, calculated by subtracting the resident military from the total military strength
- b) Civilian personnel under Civil Service or non-appropriated funds (NAF)
- c) Personnel from other services, foreign military, or nonmilitary tenant organizations
- d) Contractor personnel (for example, base maintenance and custodial)
- e) Daytime schools
- f) Daytime transients

J-005-022 However, in the case of the build-up, the "non-residents" of the base will still be residents of Guam contributing fully to the plant loading, and therefore must be included as "residents." This will significantly modify the loading unless these people were counted elsewhere in the off-base population calculations, but it is not clear that they were.

continuous influx of federal funds to support daily operations, GWA cannot sustain their current systems. Hence the fundamental problem that will not be fixed by a huge infusion of federal funds to correct all of the ills of the GWA water and wastewater systems. GWA's rate base is not sufficient to sustain its system. If the user rates are not increased to a level that will allow GWA to sustain their systems, in a matter of just a few years the systems will be back to a state of total disrepair and require another large infusion of federal money. Guam is unwilling to require its users to pay what is required to sustain their water and wastewater systems at a level that will ensure their safety and well being. So either the rates have to be increased or EPA needs to find a continual source of funds to support routine operation and maintenance of the GWA water and wastewater systems.

J-005-014

Thank you for your comment. The North and Central Guam Land Use Plan (2009) was an important resource when assessing the land use impacts. Volume 2, Chapter 8 describes the planned land uses presented in the North and Central Land Use Plan and assesses whether the proposed action is consistent or compatible with the Plan.

Overall traffic congestion and resulting travel times will increase as organic (non-military) population increases on Guam. The increase in population associated with the military build-up will also add traffic and increase congestion. The DEIS identifies a number of roadway improvement projects for the 2030 planning horizon, that if implemented, will offset the increased congestion attributable to the military at many locations.

The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the U.S. Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means

J-005-023 Volume 9-Appendix K, “Wastewater Supplementary Analysis Letter Report” states that Navy transient personnel will be living on ships and not fully contributing to the daily flows. However, they are counted as Northern District flows, and there are up to 2,000 “transient” Marines identified. This needs to be clarified. The impacts of persons on “shore leave” from berthed vessels needs to be included as well.

Recommendation 37: Clarify the definition of transient in the context of the DEIS and justify the use of 35 gpcd for civilian base workers or correct it to the typical 120 gpcd for residents.

2. Wastewater Collection

J-005-024 Volume 6-Section 3.1.3 describes the wastewater collection systems on island, including their limitations however, Volume 6-Section 3.2.4 does not describe any collection system impacts. Except for noting that a new gravity sewer will be built from the Marine base to the NDWWTP, there are no impacts defined to any other gravity sewer lines, pump stations or force mains, despite the amount of growth that will occur off base.

The *Wastewater Utility Study* in Volume 9-Appendix K documents only collection system improvements to directly support the bases. Volume 9-Appendix K-Section 7.2 of the study does propose a new sewer interceptor from AAFB to NDWWTP, but does not include any off-base connections.

Recommendation 38: The EIS must address impacts to the wastewater collection system. Its failure to identify issues and mitigations measures will result in sanitary sewer overflows leading to significant health and environmental problems. The EIS should assume that DoD will build a new collection line from Anderson AFB to the Northern District Treatment plant as discussed in DoD’s alternative. DoD may want complete the study of the Route 3 gravity line and include the recommendations of the study. Review impacts and mitigation of those impacts to other areas of the collection system, particularly the already stressed sewer system along Marine Corps Drive (described in Volume 6-3.1.3).

3. Alternatives 3 and 8

Volume 9-Appendix K, “Wastewater Supplementary Analysis Letter Report” states that for Alternatives 3 and 8 the preferred wastewater treatment option is to pump the additional flows to the NDWWTP. However, the referenced *Barrigada Utility Study Report* is not provided and therefore there is no flow data or other justification for this option presented, nor any mitigation measures for the ancillary impacts of these alternatives (e.g. additional civilian growth along the back road to Anderson to support the bases) and impacts to GWA’s collection system and Hagåtña WWTP.

Recommendation 39: Provide the Barrigada Study and the basis and justification for the option chosen, as well as all potential impacts and mitigation for that option. Provide details for and environmental impacts of a force main from Barrigada to Tanguesson, as well as full discussion of collection system impacts (the map shows the force main discharging to existing gravity system).

for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The Department of Defense, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council, which includes the USDOT to seek solutions to island-wide traffic issues.

Guam-wide population impacts are addressed in the socioeconomic chapters of Volumes 2 through 6.

J-005-015

Thank you for your comment.

DoD has already committed funds to conduct the NGLA 3-D model. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for

J-005-0254 NDWWTP Upgrades

Volume 9-Appendix K's population sand chart shows a peak construction flow above the maximum capacity of the NDWWTP. The DEIS states that this will be addressed by chemical treatment. Chemical treatment is a highly variable process dependent on dynamic conditions and requires intense evaluation in order to succeed. There is nothing in any of the studies or the DEIS to define what process or processes might be used or to demonstrate that any chemical process would be effective in meeting the NPDES permit limits at the peak flows.

Volume 6-3.2.4.1 describes the preferred alternative as upgrading the NDWWTP. GWA would concur in principle if the flow volumes can be better defined but Volume 9-Appendix K's utility studies discusses flow proportioned cost apportionment. GWA has not programmed to upgrade this plant to secondary treatment in the 20 year planning horizon and has numerous other CIP needs that will drive bond acquisition and expenditures in the foreseeable future. Moving ND to secondary in the timelines discussed and asking GWA to pay a flow proportioned percentage of the costs would definitely place a burden on existing ratepayers, and would drive residential sewer fees above USEPA defined affordability levels.

Recommendation 40: Reassess and review cost apportionment and funding sources to ensure that GWA's existing ratepayers are not impacted by the through buildup generated increased costs or deferral of other critical projects to meet buildup schedules. Insure that the defined affordability criteria are met.

J-005-0265 Outfalls

Volume 6-3.2.4.1 states that the ND outfall is adequate to support the buildup, however does not note that the Naval Facilities Engineering Command's *Northern District Wastewater Treatment Plant Outfall Assessment*, February 2009 states that the outfall's diffuser is not adequate to support the increased flows. The DEIS does not discuss the need to assess and install a diffuser in order for the outfall to meet anticipated discharge requirements.

Volume 6-13.2.4.1 No explanation is provided for why a dilution factor of 300 is used instead of the 200 for which the outfall was designed.

Volume 6-Section 3.2.5.8 states that "The ocean outfall for the Hagåtña WWTP does not have a diffuser installed and is in a heavily populated area of Guam". The Hagåtña WWTP has a newly installed ocean outfall with a diffuser system and the effluent discharges in a relatively remote area of the island."

There are numerous factual errors in this statement. The two outfalls were installed at the same time; the Hagåtña outfall went on line one month before the NDWWTP outfall. The Hagåtña outfall does not have an elaborate diffuser because diffusion modeling determined that a it was unnecessary for mixing. The discharge is 270 feet deep. Because the NDWWTP outfall is much shallower (140 feet deep) diffusion is necessary. Although the NDWWTP outfall was designed to include a and a diffuser and one was constructed as a part of the outfall project, it was not installed. Realistic data on military growth generated additional flows; will require a different design from the one that was constructed. Regardless of the outfall used, modeling using accurately projected flows will be required in order to determine the resultant mixing and/or diffusion needs.

the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model.

In October 2009, fully comprehending the importance of protecting the sole source NGLA, DoD initiated an effort with GWA/CCU to co-manage the NGLA. In fact, co-management of the aquifer, and pursuit of a comprehensive 3-D model of the aquifer was a DoD recommendation, not one made by EPA, GWA or GEPA. This effort proposed that GWA and DoD, the two entities that rely on the NGLA as a major source of water would need to work as one to protect this critical resource. The proposal was to cooperatively assess the impacts of proposed developments, use the upcoming USGS study to guide efforts to manage the NGLA, and leverage DoD and GWA resources to cooperatively address potential impacts and propose alternatives to mitigate adverse impacts to the NGLA. Although this initiative to work together cooperatively has been advanced at subsequent meetings that created consensus on the way ahead, both GWA and EPA raised concerns with the DEIS knowing that many of the issues they raised are already being addressed. Additionally, EPA was invited to these meeting, but declined to attend unless DoD funded their participation. It is important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-

- J-005-026** | **Recommendations 41:** Complete diffusion modeling for any EIS retained alternatives to design the configuration that would be required for a diffuser.
- Recommendations 42:** Modify the DEIS to correct to use correct information.
- Recommendations 43:** Revamp and reconsider the options for discharging to Hagåtña WWTP based upon the fact that impacts at either outfall would be the same.

J-005-027 | **301(h) waivers**

In several cases throughout the DEIS, including **Volume 6-Section 3.1.3**, DoD notes that EPA has denied GWA's request for continued 301(h) waivers of secondary treatment for the Northern District and Agana Wastewater Treatment Plants. While correct, the DEIS fails to note that GWA has appealed this decision and EPA's Environmental Review Board has yet to issue a decision on the appeal.

Even if ultimately GWA and EPA agree to move to secondary treatment, EPA has concurred that a long time line balance with affordability factors and other system priorities would be developed. It is the rapid increase of inflows caused by the build-up that require consideration of a potential immediate change to secondary treatment. Therefore the short term cost impacts of secondary treatment must be considered in the DEIS as being required solely by DoD activities.

Recommendation 44: Revise the DEIS to consider GWA's appeal or the waiver denial. Eliminate the erroneous presumption that secondary treatment will be necessary with or without the build-up and address this as a direct DoD caused impact on GWA which must not be allowed to impact GWA's ratepayers. Further, secondary treatment on a flow proportioned basis would drive sewer bills over the EPA utility affordability threshold of 2-3% of household income.

J-005-028 | **Mitigation alternatives Volume 6-Section 3.2.4.1**

This section includes Potential Mitigation Measures "outside of DoD control." GWA disagrees that these measures are outside of DoD control.

Recommendation 45: The DEIS must be modified to address these cases. Example concerns with the proposed mitigation measures follow.

Mitigation 1. "Addition of chemical coagulants":

- There is not validation in the DEIS of the ability of chemical processing to improve performance of wastewater process performance.
- There is no discussion in the DEIS of how the addition of chemical coagulants would impact biosolids production, quantities and disposal costs.
- There is no justification in the DEIS to demonstrate that addition of chemical coagulants can provide the additional 0.8 MGD of treatment capacity as claimed in the DEIS.
- No valid testing, of any kind, that would identify chemical type, quantity, or O&M expenses for manpower and chemicals has never been done to support this concept.

Recommendation 46: This issue would need to be thoroughly assessed by DoD to obtain verifiable data if they choose to consider chemical processing as a viable option.

WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

J-005-016

Thank you for your comment. DoD has become an advocate for GWA in finding grants and low cost loans to help fund the required upgrades to their current system. Methods for supplying the short term needs to GWA have been discussed and established. These methods have been added to the final EIS. Success in finding grants and low cost loans to assist GWA has also been added to the final EIS. However, for long term sustainability, GWA and the CCU must come to grips with having a rate structure which would allow GWA sufficient revenue to properly maintain their system.

J-005-017

Thank you for your comment. DoD considered rehabilitation of the cofferdam at the Lost River to serve DoD demands in southern Guam. This option was carried forward as a long-term alternative to supplement water supply to DoD in southern Guam. However, it is acknowledged that this option could potentially result in loss of a potential surface water source to GWA, so DoD coordination and resolution with GWA would be required if it is considered in the future.

J-005-018

Thank you for your comment. The Guam water demand estimates have been updated in the Final EIS to account for 10% unaccounted for water

J-005-028

The mitigation by chemical addition requires time dependent, site specific evaluation and precise performance definition.

Mitigation 2. “Collection system upgraded and inspected to minimize inflow and infiltration (I&I)”:

- The DEIS does not provide any data to demonstrate if or how much I&I is a problem and how much capacity would be improved by its control.
- The DEIS does not provide any data on what the cost for and impacts of such work would be nor a cost/benefit ratio.

Recommendation 47: This issue requires DoD to execute an I&I survey; the associated system rehabilitation it might indicate and determine its cost and cost/benefit value.

Mitigation 4 Workforce housing in a different watershed; “Gov Guam could manage this through their permitting process”

- This might mitigate flows to the NDWWTP, but in so doing would generate impacts at the other plants that are not defined or considered.
- There would also be impacts (to roads and the environment) from continuous moving of personnel from such residential areas to the northern work areas and back.
- Gov Guam does not control land use beyond zoning and therefore any contractor may choose to house his workers on any appropriately zoned piece of property which they own or lease.
- GWA can specify infrastructure upgrades that may be needed to develop and use a specific piece of property in any given manner, but cannot control area(s) where the desired use might be located.

Recommendation 48: This measure could be within DoD control if it chooses to define where their contractors may house workers as a specification in their contracts.

J-005-029

Aquifer Impacts

Stormwater Runoff

GWA has two concerns regarding this issue. The amount of additional impervious surface that is generated will impact rainfall permeation into the aquifer, reducing aquifer recharge. The DEIS addresses this in **Volume 2-Section 4.2.1.1** and includes best management practices for both ensuring that the aquifer is recharged with stormwater runoff, and that the runoff is treated. The DEIS notes in **Volume 2-Section 4.1.1.3** that stormwater runoff is a potential source of pollution to the NGLA and references two ongoing studies for more site specific controls.

GWA applauds DoD’s stated intention to use Low Impact Development methods and enhancement of recharge. The controls discussed in the DEIS and the plans for moving forward are good as far as they go, but the site specific work for the alternatives must be completed and reviewed for individual projects and for overall impacts of development, impervious surface and stormwater runoff/first flush pollution impacts on the NGLA.

Recommendation 49: The two studies referenced in the DEIS must be completed before an evaluation of the impacts of alternatives can be validated. The studies must address cumulative and site specific impacts to the NGLA from increase impervious surface and stormwater runoff pollutants in more detail than the generic lists of BMP’s provided in the DEIS.

from leakage and 40% unaccounted for water from unmetered or undermetered loses. The DoD acknowledges the existing sub-standard conditions of key public infrastructure systems including the potable water system on Guam and the interest to have DoD fund improvements to these systems. The DoD cannot take full responsibility to repair GWA's off base water distribution system to remedy these serious existing conditions because DoD’s ability to fund infrastructure improvements is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, the DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam. DoD has identified mitigation measures within DoD control and outside DoD control, including measures that GWA and GovGuam could implement to address the shortfalls provided funding sources could be found. Because it is doubtful that GWA could fund and implement required upgrades in time for the start of the proposed DoD buildup, it is anticipated that public health and safety impacts from increased demand on potable water would be significant until the necessary off-base infrastructure improvements could be completed.

J-005-019

Thank you for your comment. DoD concurs with the recommendation and has endorsed the concept to create an aquifer management team. This will be added to the final EIS if not already in the draft EIS.

J-005-020

Thank you for your comments.

Recommendation 33: As GWA knows, DoD is limited in how it can spend its budget. DoD cannot fund activities that benefit the private sector, only those directly required for its personnel and facilities. DoD finds it hard to believe that Guam cannot fund water conservation efforts given the poor existing condition of its water system. Reductions in use would

J-005-029 *Septic Systems*

The NGLA already has a large number of septic systems located over it. The GWA WRMP identified septic systems as a significant potential source of pollution to the northern aquifer as Guam's population in the north grows if sewers are not extended. This may require additional treatment systems to put in place. Alternatively contemporary individual/small group wastewater may need to be used to replace conventional septic systems now in use. The DEIS acknowledges the threat septic systems pose to the NGLA in **Volume 2**-Section 4.1.1.3, and in **Volume 6** documents GWA's WRMP plans to sewer areas in the north.

The build-up will cause rapid growth in the north, including growth in presently unsewered areas, which will increase the risk of contamination to the aquifer by inadequately managed conventional wastewater systems. GWA does not presently have resources to extend sewers to unsewered areas at the rate that growth will proceed according to the DEIS. Nowhere does the DEIS discuss the impacts on the NGLA from this potentially increased amount of poorly managed waste from intense development. The DEIS does not offer any mitigation for the increased use of such systems in the north.

Recommendations 50: The EIS must address impacts that would be caused by installing additional septic systems and provide mitigation measures to protect the NGLA from the increased potential pollutant loading generated by those systems. This could include providing funding and resources for additional sewerage or other more advanced on-site treatment alternatives.

be expected to be the most economical way of putting demand and supply in a better relationship.

Other portions of this comment: DoD has initiated near monthly meetings with GWA that began in October 2009. These meetings have focused efforts on the off-base water demand generated by workforce housing and induced civilian growth resulting from the buildup. Since the release of the DEIS, DoD has moved up its water Private Entity effort to begin in 2011 vice 2013 to allow it to make the water produced from the new wells at AAFB available to support the off-base demand (depending on the rate that the Marines occupy the new base, beginning in 2013 it is expected that 2-6 MGD can be provided to GWA depending on their requirement for the water and after full occupancy of the new base it is projected that 2-4 MGD could continue to be provided) . Making water excess to DoD needs available to GWA allows DoD to address GEPA's concern that GWA does not have available yield to support the off-base demand related to the buildup. GWA does not prefer the option to obtain water from DoD and prefers that the resources to produce water be transferred to them. This is a complex issues that involves federal water rights and will likely not be resolved to support GWA desires to control the production assets. However, it may be possible to have a special rate for water obtained from DoD if a means to support this request can be accommodated in the Navy Working Capital Fund construct that NAVFAC MAR must comply with. Understanding that this water will not be available to meet the early workforce related demand expected in 2010-2012, DoD discussed with GWA at its January 2010 meeting an effort to "wring out" excess water from the DoD (NAVFAC MAR) water systems. In line with this effort as part of the creation of the Joint Region on Guam, NFM is in the process of integrating the former Air Force water system into a single DoD water system for the island and is aware that this system has excess capacity. As GWA points out in its comments there are wells owned by DoD that are not currently being produced for various reasons that include: high operating costs,

treatment concerns, well reconditioning requirements, and excess to the needs of current demand. These wells have the potential to produce somewhere between 3-5 MGD of water (Tumon-Maui well can produce 1 MGD, the AF has indicated that their former system has 1.7 MGD excess and wells at Finegayan have excess capacity depending on who is asked .5-1.5 MGD). By identifying all the excess water and working closely with GWA, DoD has the ability to help GWA address the near term requirement to provide water to workforce housing. The water appears to be available now and is already connected to distribution systems that will assist in the effort to move it to the demand location. The effort to make this excess water available to GWA is underway and will become an item to be addressed in an MOU that is being negotiated with GWA. Further providing excess water to GWA will be an issue that would be addressed in a customer service agreement that will likely outline DoD's efforts to work more closely with GWA to optimize the effectiveness and efficiency of the respective water systems. Although GWA does not like to obtain water from DoD, this option allows GWA to avoid the capital improvement costs required to develop water resources and allows them to focus their capital on improvements to their distribution and storage system.

DoD will also support GWA in their quest to obtain grants and/or low cost loans to facilitate system improvements so sorely needed. The above developments have been incorporated into the final EIS.

J-005-021

Thank you for your comment.

Indirect Population Water Demand: The FEIS provides a detailed analysis of water demands from the direct DoD population, and the indirect population (construction workers and induced population). Refer to Volume 6, Chapters 2 and 3. All water demands are accounted for, both on-base and off-base, during the construction phase of the military

relocation and after all construction is completed in 2019. DoD and GWA sources of water are counted in the FEIS when assessing the off-base shortfall that potentially could occur in the peak construction year of 2014. As described in the FEIS, the total indirect off-base demand on the GWA water system (including demand associated with the construction workforce and induced civilian growth) is projected to reach 50.6 MGd in 2014. That same year, the GWA water system would have the capacity to supply 42.4 MGd of potable water. Based on discussions with GWA, they plan to install new wells to meet expected baseline growth, adding an additional supply of 1.3 MGd. This results in a shortfall of water of 6.9 MGd. DoD has agreed to transfer water up to 7.0 MGd to GWA to meet this shortfall. This would include the continued transfer of 4 MGd to GWA under the current memorandum of understanding, 1.7 MGd from existing DoD wells, and the remainder from new DoD wells that would be installed early (new well capacity in 2014 will be 4.7 MDd).

Interconnection: The FEIS describes how water distribution and transmission lines will be constructed to collect water from the new DoD wells and deliver it to a new pumping station that will push the water through a new transmission line to the water storage tank that will be constructed at the new Marine base Guam. There are numerous existing interconnections between the GWA and DoD systems which allow for transfer of water between systems. Planned interconnections and system upgrades to restore the ability to transfer excess water from the Andersen AFB system to the Navy island-wide water system would be needed. Additional interconnections between these two systems will be constructed to provide an enhanced ability for water exchange between the two systems. Where and how these interconnections will be made will be a cooperative effort between DoD and GWA, and will begin as new wells are sited. This will allow for DoD water that is needed to meet GWA shortfalls during the military relocation to be transferred through the DoD distribution system to the closest interconnection to the GWA

system where water it is needed. Maximizing the use of the DoD island-wide water distribution system will minimize the negative impacts that may occur from using the substandard GWA distribution system. Additionally, DoD water storage facilities, including elevated tanks and reservoirs, can be kept at maximum capacity at given times of the year in anticipation of drought conditions and water shortfalls in the GWA system.

Funding: Funding for needed upgrades to the GWA island-wide water system is not identified in the FEIS beyond what has already been identified in the GWA's Capital Improvements Program (CIP), and in a recent EPA Region IX assessment of GWA's CIP and companion conceptual cost estimate for 5-year and 25-year capital and operational needs. The FEIS provides information on GWA and GovGuam's ability to fund upgrades, including information on GovGuam's debit rating and history of funding shortfalls. DoD acknowledges the existing substandard conditions of the GWA water system on Guam and the desire by many for DoD to fund improvements to these systems and services. DoD's ability to fund projects that are not within direct DoD ownership or control is limited by Federal law. However, DoD recognizes the need to identify and integrate solutions for both on-base and off-base utility infrastructure on Guam, and desires to minimize adverse impacts associated with the proposed military relocation program. To this end, DoD is serving as the lead federal agency on a multi-agency group charged with identify Federal programs and funding sources to make the necessary repairs and upgrades to Guam's utility infrastructure systems. Concurrently, DoD, EPA Region IX, GEPA, GWA and the CCU are working together to identify and integrate solutions for off-base water needs which meet environment requirements, provide reliable and uninterrupted service, and are affordable for all users. Even with an infusion of federal funds to fix the existing problems with the GWA water system, if there is no funding to keep the systems operated properly, maintained, and upgraded, the system will be unsustainable. This has even been acknowledged by EPA Region IX in its CIP assessment

report. Both GWA and EPA state that the people of Guam should not have to carry the financial burden of supporting the military buildup. It is hard to argue with this position. However, what is not said is that the people of Guam should carry the burden of sustaining compliant water and wastewater systems required to ensure their health and well being. GWA's Water Resource Management Plan (WRMP) which was developed to achieve compliance with an EPA stipulated order, identifies projects required to correct \$200 Mil in infrastructure deficiencies that existed in the water and wastewater systems at the time the report was prepared. This estimate has increased after the preparation of the CIP. Very few of the deficiencies have been addressed to-date because GWA does not have the financial resources to address these issues. The Consolidated Commission on Utilities (CCU) and GWA continually push for a single water system on Guam. They feel that without the capital that would come from including DoD into a single island-wide water system and infusing the significant capital that would come with a large, paying customer, they are unlikely to ever have sufficient capital to sustain a compliant water system. The reality is that even with DoD as a customer they will not have sufficient capital to sustain their water system without raising the water rates. The ability to sustain the water and wastewater systems will be a topic of discussions with GWA, CCU and EPA in early March 2010. Without a continuous influx of federal funds to support daily operations, GWA cannot sustain their current systems. Hence the fundamental problem that will not be fixed by a huge infusion of federal funds to correct all of the ills of the GWA water and wastewater systems. GWA's rate base is not sufficient to sustain its system. If the user rates are not increased to a level that will allow GWA to sustain their systems, in a matter of just a few years the systems will be back to a state of total disrepair and require another large infusion of federal money. Guam is unwilling to require its users to pay what is required to sustain their water and wastewater systems at a level that will ensure their safety and well being. So either the rates have to be increased or EPA needs to find a continual source of funds to support

routine operation and maintenance of the GWA water and wastewater systems.

Protection of GWA Infrastructure: DoD agrees that GWA infrastructure on DoD property should be protected, and envisions that such matters will be addressed through the continued cooperative efforts between DoD and GWA, and as part of the MOU and customer service agreements currently under development.

J-005-022

Thank you for your comment. The FEIS describes the assumptions used for the direct DoD population, and the indirect population that would result from construction workforce and induced population growth. For direct DoD population, the following assumptions are made: 1- Resident Personnel, 120 gpcd 2- Transient Personnel, 35 gpcd 3 - Civilian Workers living off base but working on base, 35 gpcd 4 - Construction Workers living in off-base camps, 70 gpcd, 5 - Industrial Users, 15,500 gpd/acre

"Resident Personnel" includes personnel who will work on base but may live off base. The generation rate used (120 gpcd) for these residents is the same as is used for off-base civilians.

For indirect populations, a per capita wastewater generation of 120 gpcd was applied to estimate wastewater flow generated by the nonmilitary population, which includes the local Guam population, the construction workforce, and their dependents not living in construction workforce camps, and induced civilian population increases. Domestic wastewater flow is determined by multiplying per capita wastewater generation by the respective population. Industrial wastewater flow is calculated by multiplying the above industrial wastewater generation per unit area by industrial used land acreage.

J-005-023

Thank you for your comment.

Transient personnel identified as Navy and USMC are different. The statement that the Navy transient personnel would all be on ships, and would not initially contribute to demands on public utilities still holds good. However the transient personnel from USMC will be stationed at Finegayan and will have impact on NDWWTP. The transient personnel are the ones who will be spending short time on the base for training or other short time assignments. The civilian base workers are the ones who live on island but work on the base. As per the UFC code, the wastewater flow contribution from civilian workforce is 35 gpcd. The reason for smaller flow is that they contribute only wastewater flows from rest rooms and lunch rooms etc.

J-005-024

Thank you for your comment. The wastewater utility study looked at the impacts to collection system (Sewer along Route 3 and 9) due to improvements at Finegayan and AAFB. The study didn't analyze sewers and pump stations in other areas. The study findings are based on initial discussions with GWA. The study determined that the sewer along route 3 has enough capacity to handle additional DoD flows. A separate study to assess the capacity of Route 3 sewer is underway and details of the study will be included in FEIS. The FEIS provides information on GWA and GovGuam's ability to fund upgrades, including information on GovGuam's debit rating and history of funding shortfalls. DoD acknowledges the existing sub-standard conditions of the GWA wastewater system on Guam and the desire by many for DoD to fund improvements to these systems and services. DoD's ability to fund projects that are not within direct DoD ownership or control is limited by Federal law. However, DoD recognizes the need to identify and integrate solutions for both on-base and off-base utility infrastructure on Guam, and desires to minimize adverse impacts associated with the proposed

military relocation program. To this end, DoD is serving as the lead federal agency on a multi-agency group charged with identify Federal programs and funding sources to make the necessary repairs and upgrades to Guam's utility infrastructure systems. Concurrently, DoD, EPA Region IX, GEPA, GWA and the CCU are working together to identify and integrate solutions for both on-base and off-base wastewater needs which meet environment requirements, provide reliable and uninterruptable service, and are affordable for all users.

J-005-025

Thank you for your comment.

A separate study was performed to identify the process improvement requirements for NDWWTP. The study NDWWTP Evaluation was completed in January 2010 after the DEIS was published. The study findings will be added to FEIS.

Repairs and upgrades to the NDWWTP that are needed to bring the plant into compliance absent the military relocation, and those needed to expand the plant as part of the military relocation, were identified were detailed in a report conducted by DoD and included in the FEIS. This includes repairs and upgrades to the existing primary treatment facilities at the plant to meet both interim flows and maximum flows during the construction phase of the military relocation and long-term secondary treatment plant upgrades that may be needed in the event that the 301(h) secondary waiver denial stands. These upgrades considered the current civilian flows to the plant, DoD and civilian flows to resulting from the military relocation (including construction workforce and induced populations), and future growth on Guam absent the military relocation.

The FEIS provides information related to the funding of the NDWWTP upgrades. Funding for NDWWTP: While the Navy will continue to coordinate with GWA and USEPA Region 9 to ensure that GWA implements planned Capital Improvement Program (CIP) projects designed to refurbish the existing primary treatment capability of the NDWWTP and expand it to meet needs associated with the proposed

Marine Corps realignment and associated civilian population growth, the ability of GWA to secure necessary funding for the required CIP projects remains a key concern and potential impediment to the Guam military realignment effort and the return of GWA to full compliance with the requirements of the CWA. In the underlying agreements with the Government of Japan covering the realignment of Marine Corps forces from Okinawa to Japan, the Government of Japan agreed to provide funding to develop facilities and infrastructure on Guam to support the realignment of Marine Corps forces. These agreements further recognize that necessary infrastructure improvements will cover not only improvements on military installations, but also improvements to the civilian infrastructure. Therefore, the U.S. Government, through the Department of Defense (DoD), is currently seeking approximately \$50M in Japanese Fiscal Year 2011 (JFY11) funding from the Government of Japan to cover required CIP projects necessary for refurbishment and expansion of primary treatment capabilities at the NDWWTP. Such funding would allow necessary improvements to be made by the 2013 date noted above. Should DoD fail to secure necessary funding from the Government of Japan, significant environmental impacts would occur as outlined in Volume 6. Further, consistent with Navy's commitment to apply adaptive management noted in Volume 7, failure to secure necessary funding would severely impact construction pace and the ability of Navy to completed required construction to support the Marine Corps realignment. As with refurbishment and expansion of primary treatment, the ability of GWA to secure necessary funding for CIP projects required to achieve secondary treatment at the NDWWTP remains a concern and potential impediment to the Guam military realignment effort and the return of GWA to full compliance with the requirements of the CWA. As with efforts to secure funding for required primary treatment refurbishment and expansion, DoD is working to secure necessary funding, including funding from the Government of Japan. Adverse impacts associated with the failure to secure funding for secondary treatment upgrades, including impacts on the proposed

Marine Corps realignment, would be similar to those noted with failure to secure funding for primary treatment.

J-005-026

Thank you for your comment. The initial flows used in the report Northern District Wastewater Treatment Plant Outfall Assessment, February 2009 have changed since then. The updated study will be included in the FEIS with its analysis of outfall impacts at the NDWWTP. Based on new flows provided by GWA and flow projections, the existing outfall and diffuser has enough capacity. This is discussed in the FEIS. An explanation for using a dilution factor of 300 will be provided in FEIS.

J-005-027

Thank you for your comment. Due to the necessary cutoff date for making revisions to the DEIS, the appeal filed by GWA was not known of at that time. The final EIS will be revised to discuss the appeal of the 301(h) waiver denial.

J-005-028

Thank you for your comment.

Mitigation 1 - A separate study was performed to identify the process improvement requirements for NDWWTP. The study NDWWTP Evaluation was completed in January 2010 after the DEIS was published. The study findings has been added to FEIS. Type of chemical and its affect on solids removal and disposal need to be determined by performing further tests. This will be done during the design of the CEPT system.

Mitigation 2 – The impact due to I&I flows should be addressed by GWA. Our understanding is that GWA is implementing a program to reduce I&I

flows. DoD will follow-up with GWA and provide additional necessary information in FEIS

Mitigation 3 – The intent of this mitigation is that GWA by sewer connection permitting process can direct location of construction force to Central Guam. Hagatna WWTP located in central Guam has enough capacity to handle future flows. DoD in coordination with GWA will locate the construction force at a location that minimizes impacts to environment.

J-005-029

Thank you for your comment. Interim Sustainable Yield Assessment: DoD agrees that protection of the sole source NGLA is imperative. The FEIS discussed the two available estimates of the NGLA that have been published, one by the Northern Guam Lens Study (NGLS) (CDM 1982) and one by Barrett Consulting with John Mink (Barrett 1992). The CDM 1982 study estimated the sustainable yield of the NGLA as 57.5 MDd, and the Barrett 1992 study estimated the sustainable yield as 80.5 MGd. University of Guam (UoG) Water and Environmental Research Institute (WERI) provided an expert technical review for DoD of the two sustainable yield estimates for the NGLA in 2009. The study concluded that the approach and methodology used in Barrett 1992 to estimate the sustainable yield are still valid and are appropriate for initial planning; and the Barrett 1992 sustainable-yield estimates should be used instead of the earlier 1982 sustainable-yield estimates because the later values are based on an additional decade of field data. Additionally, this expert communicated that the additional data that had been gathered from the NGLA since the 1992 study would not likely change the sustainable yield estimate for purposes of the FEIS because the data collected was from sub-basins of the aquifer that are not located where DoD proposes to withdrawal water. Therefore, the FEIS uses the Barrett 1992 sustainable yield estimate of approximately 80 million gallons per day. However, it is important to note that the estimated total average daily demand from the

aquifer for all sources (DoD and non-DoD) during the peak construction year of 2015 is 50.33 MGd, which is below both sustainable yield estimates. Volume 6, Chapter 2, Section 2.2.4.1 and Chapter 3, Section 3.2.3.1 discuss this in detail. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model, and will help guide decision-making during well installation. It is also important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the

adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS. Long-term Comprehensive Aquifer Study: DoD has already committed funds to conduct the NGLA 3-D model. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model. Aquifer Management Plan: In October 2009, fully comprehending the importance of protecting the sole source NGLA, DoD initiated an effort with GWA/CCU to co-manage the NGLA. In fact, co-management of the

aquifer, and pursuit of a comprehensive 3-D model of the aquifer was a DoD recommendation, not one made by EPA, GWA or GEPA. This effort proposed that GWA and DoD, the two entities that rely on the NGLA as a major source of water would need to work as one to protect this critical resource. The proposal was to cooperatively assess the impacts of proposed developments, use the upcoming USGS study to guide efforts to manage the NGLA, and leverage DoD and GWA resources to cooperatively address potential impacts and propose alternatives to mitigate adverse impacts to the NGLA. Although this initiative to work together cooperatively has been advanced at subsequent meetings that created consensus on the way ahead, both GWA and EPA raised concerns with the DEIS knowing that many of the issues they raised are already being addressed. Additionally, EPA was invited to these meeting, but declined to attend unless DoD funded their participation. It is important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

**Draft Environmental Impact Statement (DEIS) /
Overseas Environmental Impact Statement (OEIS)
Comment Sheet**

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DEPARTMENT: Department of Education

J-006-001 REFERENCE: Volume 9, page 4-44, Appendix F, Table 4.4-2. Construction Component Assumptions for Public Education Agency Impacts

ISSUE: The projected values presented for the elementary, middle, and high school teacher to student ratios do not align with the existing agreement between the Guam Education Policy Board (GEPB) and Guam Federation of Teacher (GFT) Agreement.

DISCUSSION: The projected values for teacher to student ratio will provide guidance on the number of teachers that will be needed to meet the projected increase in student population. The assumed values should be based on the maximum number of students for each program and grade level listed in the Collective Bargaining Agreements between the GEPB and the GFT.

RECOMMENDATION: The Collective Bargaining Agreement between the GFT and the GEPB for the Guam Department of Education (GDOE) Faculty and Staff, 5.B.12 Class Size are as follows: (p. 19 – 21, GFT – GEPB Contract)

"There shall be no more than twelve (12) special education students in a class."

5. B. 12.a (Elementary Grades)

<u>Program</u>	<u>Maximum Students</u>
Preschool & Kinder -	18
Grades 1-3	24
Multiage	23
Grades 4-5	25
Grades 6-12	28 (except for specific classes or programs)

J-006-001

Thank you for your comment. As noted in the SIAS, the public service impact methodology was intended to ensure that stated impacts are just those due to the proposed action, not pre-existing problems or deficits. The methodology also took into account existing staff to student ratios instead of any collective bargaining agreements. However, the existence of such deficits for individual agencies is noted where applicable, and the impact analysis will also note the larger picture of deficits and challenges affecting GovGuam overall.

Staffing numbers used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing levels. It is acknowledged that staffing levels fluctuate, and it is not possible for this analysis to capture all these fluctuations. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service fluctuations.

J-006-002

REFERENCE: Volume 9, page 4-47, Appendix F, Table 4.4-7 Primary and Secondary Education Teacher Requirements Impacts Summary (Unconstrained)

ISSUE: Table 4.4-7 reflects the proposed Primary and Secondary Education Teacher Requirements Impact Summary action's impact on GDOE's staffing for the action's peak year and steady state. It is anticipated that more than 600 teachers will be needed to meet the significant increase in student population during the peak year and thereafter. Such growth will significantly compound GDOE's current problems with the recruitment and retention of highly qualified and certificated teachers.

DISCUSSION: DOE must fill an average of 300 teaching positions each year. This is attributed to a high turnover of teachers and insufficient number of certified teachers. The University of Guam graduates approximately 125 educators annually. Approximately 50% of vacant positions are filled by retired teachers. These statistics clearly indicate a need to explore other means for addressing the teacher shortage.

Statistics also reveal that after the peak year, the number of teachers that will be needed will decrease significantly. Such anticipation will result in GDOE incurring an over-employment of teachers. Thus, what would we do with teachers that were hired to meet the peak year if the student population decreases?

RECOMMENDATION: Among the suggestions presented by educators to address this issue are:

- a. Stretch out the buildup so that a more manageable number of schools and personnel are necessary.
- b. Make Federal Grants available to provide incentives for US trained certificated teachers to move to Guam during the surge as well as reach out to potential mainland applicants.
- c. Make it easier for teachers from foreign countries to teach on Guam during the surge. They should be on a year to year contract.
- d. Provide funds to UOG to provide stipends and grants to students who are studying to become teachers and administrators.
- e. Provide federal funding to build permanent schools and purchase collateral equip and textbooks to address the permanent increase in school aged kids.
- f. Provide federal funding to build temporary schools and purchase collateral equip and textbooks to address the temporary increase in school aged kids; investigate the possibility of moving these schools to Micronesia when done, or other uses e.g., turning them over to homeless organizations for programs for the homeless, satellite classrooms for GCC/UOG.

J-006-002

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

Your mitigation recommendations have also been taken under consideration and extended mitigation discussion is available in Volume 7 of the FEIS.

J-006-002

- g. The EIS should provide a proposed solution to include either accessing federally funded education facilities that were designed to accommodate the incoming military and collateral personnel or that the federal government create a formula for compensation, for GDOE, for increased student populations

J-006-003

REFERENCE: Volume 9, Appendix F, page 4-57, GPSS Administrative Staffing and GPSS Facilities

ISSUE: The DEIS addressed the impact of the build-up on teacher supply, however, the report does not address other personnel needed to provide direct and support instructional services.

DISCUSSION: Teachers need support from principals and assistant principals, program administrators, health and guidance counselors, school aides, support and maintenance staff to effectively achieve learning outcomes. The impact on the delivery of instructional programs can only be determined when all the personnel needs are included. For example, if the build-up will result in hiring 600 more teachers, this may require additional employees for payroll and personnel services.

RECOMMENDATION: Include an analysis of all personnel needed to provide direct and support services to students. This should include both school site and central office personnel.

J-006-004

REFERENCE: Volume 9, Appendix F, page 87, 5. Buildup b. Pressure on School Systems

ISSUE: The military build-up will further create a divisive relationship between DODEA (DDESS) and Guam DOE Schools given the comparison between the teaching and learning conditions. It is also anticipated that more schools will be built to meet the increase in DDESS student population, which will result in more teacher and support staff needs. How can we minimize or eliminate the underlying tension between the school systems?

DISCUSSION: Upon the establishment of DDESS schools on Guam many teachers from the Guam Department of Education were recruited to fill positions in schools for military dependents. This resulted in GDOE not having adequate certified teachers just before school was scheduled to open. Educators and community leaders are anticipating the same situation will occur when DDESS facilities increase. Moreover as DDESS opens professional development sessions to GDOE teachers and administrators, comparisons in the condition of facilities between both school systems naturally occurs.

J-006-003

Thank you for your comment.

It is noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.

The staffing numbers used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing levels. It is acknowledged that staffing levels fluctuate, and it is not possible for this analysis to capture all these fluctuations. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service fluctuations, as well as support staffing requirements.

J-006-004

Thank you for your comment. DODEA would recruit teachers primarily through their existing system; that is, teachers in the Okinawa and other locations would have an opportunity to transfer to Guam. If local recruitment does occur, it is an individual's decision to apply for and potentially obtain a position in the DODEA system. This is also true of the anticipated parochial school system that has plans to open new schools on Guam.

J-006-004 RECOMMENDATION: Charter schools, comprised of both public and military dependent students can be established to integrate both populations. The schools can be federally and locally funded.

J-006-005 REFERENCE: Volume 9, Socioeconomic Impact Assessment Study Executive Summary, vii, Table ES-4 Summary of Public Agency Service Population.

ISSUE: GDOE statistics for 2014 only reflect the elementary grades. If all grade levels are to be summed as noted in Table 4.4-3, the total should be 7,937 instead of 4,018. The constrained projection for GPSS should be 2, 796 instead of 2,021.

DISCUSSION: The credibility of this study can be easily undermined by statistical errors. Authors should pay close attention to the accuracy of data, which will be used for planning purposes.

RECOMMENDATION: Have a third party, not involved with the write-up, review the tables and write up for consistency and accuracy.

J-006-005

Thank you for your comment. Clerical edits have been made as appropriate.

**Draft Environmental Impact Statement (DEIS) /
Overseas Environmental Impact Statement (OEIS)
Comment Sheet**

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DEPARTMENT: Guam Department of Education

J-007-001 REFERENCE:

Page 4-57 GPSS Facilities (Socioeconomic Impact Assessment Study) "Guam Public Law 28-009 "Limitations on Capacity Levels for the Construction of New Public Schools"

ISSUE:

As outlined in Guam Public Law 29-106 (amended on August 27, 2008) the Student Enrollment Capacity should be reflected.

DISCUSSION:

The feasibility of the Military Build-up would result in a significant increase in student enrollment which may have an adverse effect on the current educational system that would necessitate for additional teachers, support staff, facilities, equipment, instructional and non-instructional supplies and materials.

The Question is: *Who will fund the need to increase the number of classrooms, school facilities, equipment, supplies and materials, teachers and other school personnel?*

J-007-001

Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-007-001

RECOMMENDATION:

Amend the Impact Aid grant (CFDA No. 84.041) to increase the Federal Funds made available to Guam as to accommodate the increase in student enrollment and to allow for public school students whose parents that are directly and indirectly involved in the Military Build-up be included in the Impact Aid calculations. This additional increase in Federal funding will help support additional teachers and support staff, provide instructional and non-instructional supplies and materials, help upgrade the existing educational infrastructure and supra-structure as a result of the Military Build-up increase of student enrollment.

**Draft Environmental Impact Statement (DEIS) /
Overseas Environmental Impact Statement (OEIS)
Comment Sheet**

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REFERENCE:

J-007-002] Page 4-45 *Estimation of Effects: Effects on GPSS Student Populations* (ref: Table 4.4-3 GDOE Student Population Impacts Summary (Unconstrained))

ISSUE:

Although the SIAS mentioned anticipated Peak Year Student Population, the study was silent regarding the number of school facilities needed to accommodate the increase of student population as a result of the military build-up.

DISCUSSION:

Table 4.4-3 noted the following student enrollment increase by the Peak Year of 2014:

GDOE Elementary:	4,018
GDOE Middle:	1,685
GDOE High:	2,234

Based on P.L. 29-106, Student Enrollment Capacity should not exceed the following:

Elementary:	770
Middle:	1,120
High:	1,700

J-007-002

Thank you for your comment.

The EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.

The numbers used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing level requirements, while providing additional information on facility impacts. It is acknowledged that it is not possible for this analysis to capture all impacts in detail. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service fluctuations, as well as facility requirements and the fiscal impact of these requirements.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-007-002 Therefore, the following additional school facilities must be built to accommodate increase in student enrollment:

- Elementary: 5 new schools
- Middle: 2 new schools
- High: 2 new schools

RECOMMENDATION:

Funding and feasible land should be made available to build and operate the 9 new schools to accommodate the anticipated student enrollment. Anticipated construction and operational costs (excluding land):

Type of School	Construction Cost per school	Collateral Equipment Cost	Instructional/Operational Supplies & Materials	Library Book Cost
Elementary	\$7,266,243.00	\$434,135.00	\$100,000.00	\$117,579.00
Middle	\$12,911,109.00	\$913,864.00	\$400,000.00	\$166,788.00
High	\$26,796,405.00	\$1,709,337.00	\$700,000.00	\$373,669.00
TOTAL COST	\$46,973,757.00	\$3,057,336.00	\$1,200,000.00	\$658,036.00

Books & Consumables	Child Nutrition Cost	Utility Cost	Total Cost
\$ 137,500.00	\$ 302,940.00	\$ 344,500.00	\$ 8,702,897.00
\$ 210,000.00	\$ 257,040.00	\$ 245,900.00	\$ 15,104,701.00
\$ 360,000.00	\$ 293,760.00	\$ 245,900.00	\$ 30,479,071.00
\$ 707,500.00	\$ 853,740.00	\$ 836,300.00	\$ 54,286,669.00

Type of School	Cost p/ school	Number of Schools Projected	Total Cost
Elementary	\$ 8,702,897.00	5	\$ 43,514,485.00
Middle	\$ 15,104,701.00	2	\$ 30,209,402.00
High	\$ 30,479,071.00	2	\$ 60,958,142.00
TOTAL	\$ 54,286,669.00	9	\$ 134,682,029.00

Footnote: Estimates based on the 2007 costs of Liguan & Adacao Elementary, Adacao Middle and Okkodu High Schools



Felix P. Camacho
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Joseph W. Duenas
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February 16, 2010

JGPO
C/O NAVFAC Pacific
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Attention: GMPO

Hafa Adai from Guam! Attached you will find the official comment submission from the Guam Department of Parks and Recreation, and Historic Preservation Office on the Draft Environmental Impact Statement (DEIS) on the, "GUAM AND CNMIC RELOCATION."

Should you have any concerns, please feel free to contact our office.



JOSEPH W. DUENAS
DIRECTOR

Cc: Director, Guam Buildup Office (Paul Shintaku)
DPR Deputy Director/ Chief Planner (Jose Quinata)
Guam State historic Preservation Officer (Lynda Aguon)

Xx: Director's Chrono

A	B	C	D	E	F	G
1 No.	Volume / Chapter	Page	Paragraph	Issue	Comments	Question
1	J-008-001 Vol. 2, Chap. 2	33	2.7.1.5	DEIS estimates for off-island/transient construction workers range from a low of approximately 3,200 to a high of approximately 18,200 per year. The potential for the loss of life of such workers (natural, work related or other causes) will directly impact DPR's public cemetery operations and reduce the life span of DPR's existing facility capacity accordingly (3 yrs. to capacity @125 ground burials per yr.)	Recommended that contractual provisions for off-island/transient workers include transport and associated cost for return to point of origin in case of death as well as joint local and DoD effort to expand existing Veteran's Military Cemetery and DPR public cemetery to accommodate population increase.	
2	J-008-002 Vol. 2, Chap. 2	35	2.7.1.10	Recreation for workers will be provided at housing operations as well as transport to "public" recreational sites.	DPR recommends that construction workers be afforded access to DoD facilities and recreational resources as a measure to lessen impact on existing public recreational resources and amenities.	
3	Vol. 2, Chap. 9	5	9.1.3.2	Admiral Nimitz Golf Course listed as "restricted to installation personnel and guests."	This site may currently be open to the general public. Discount provided for DoD personnel.	
4	Vol. 2, Chap. 9	6	9.1-3	Updated information.	Target Golf no longer in existence. Add DPR Dededo Skate Park, DPR Guam Sports Complex, Tepungan Beach Park (Fish Eye, Pili), Tanguisson Beach Park, Dededo Central Park. Change "Adelup" to "Ricardo J. Bordonio Complex".	
5	Vol. 2, Chap. 9	13	9.1-7	Updated information.	Historical/Cultural Attractions: Add Ft. Soledad, Umatao.	
6	Vol. 2, Chap. 9	16	9.2.2.1	Operation. DEIS discussion on impacts of population increase and mitigation confined to "DoD facilities". No discussion or analysis on impacts of population potentially seeking "public" recreational resources as an alternative to overcrowding of resources on DoD installation. DEIS estimates 75% of non-DoD personnel to reside off-base, which inevitably will result in overcrowding, accelerated deterioration, conflict, etc. of existing public recreational resources.	DPR recommends to expand proposed mitigation plan for QOL facilities to be located outside of DoD installation for shared usage for both DoD and civilian personnel. Increase in QOL facilities does not ensure that DoD personnel will not utilize public recreational resources and therefore does not mitigate the overall impact of the proposed alternative.	
7	Vol. 2, Chap. 9	16	9.2.2.1 Cont.	The loss of recreational resources such as the Guam Raceway Park, Marbo Cave, Pagat Trails, etc., would significantly impact public recreational resources, as this would directly impact the increase in usage of the available and remaining public recreational resources.	Additionally, the loss of the Guam Raceway Park may result in increased illegal street racing, racing related accidents, deaths, etc. Unlike the Historical/Cultural resources site, the raceway park activity can be addressed by providing an alternate site.	
8	Vol. 2, Chap. 9	19	9.2.2.2	Impact of proposed construction would restrict access to recreational resource. Indication that comparable resources would be available in adjoining properties.	No mention of restriction to local residents or DoD personnel. Recommend that access to replacement (adjoining) site be open to general public.	
9						

OK

J-008-001

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process, and are meant to involve the people of Guam and governmental agencies in the process.

Comments received from the public, such as yours, allow DoD to make changes to the EIS before the document is finalized. This information becomes part of the Final EIS and is evaluated when DoD issues a Record of Decision at the end of the NEPA process. The Final EIS has provided greater discussion the schedule of the proposed action and Guam's readiness to support this proposed action.

Your recommended mitigation measure(s) have been taken under consideration. Because a number of mitigations were recommended during the DEIS comment period, the FEIS includes expanded discussions on mitigation measures.

J-008-002

Thank you for your comment. DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access will be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

DPR DEIS/OEIS COMMENTS
2/16/2010

J-006-002	A	B	C	D	E	F	G
10		Vol. 2, Chap. 9	19	9.2.2.2 Cont.	The MCSS proposes to construct a variety of QOL facilities aimed at alleviating the demand, deterioration, etc., of recreational resources on non-DoD lands. The addition of QOL facilities on DoD lands which are only available to DoD personnel and guests does not ensure that the use of non-DoD recreational resources will be utilized and thus impacted.	Although the addition of QOL facilities will provide alternative recreational activities for DoD personnel and guests, it will not provide an alternative to local beaches and parks which are limited in number in Central Guam. These recreational resources on non-DoD lands (beach parks) will continue to be a popular recreational resources for all persons residing and visiting Guam. As a result, the proposed alternative will directly and significantly impact recreational resources on non-DoD lands. Historically, the local government, private business sector, as well as the DoD commands have encouraged and embraced interation between the local population and our military neighbors.	
11		Vol. 2, Chap. 9	19	9.2.2.2 Cont.	Construction in the Apra Harbor area will directly impact local recreational resources as the displacement of recreational resources and users in the subject area will naturally divert to other sites such as the East Agaña Bay and other beach park sites. This will not only accelerate the impact to marine resources, but present significant conflict between users (commercial operators and general public) in areas regulated by Guam's Recreational Water Use Management Plan areas due to the limited sites (accessible and safe locations) available for popular water activities (mechanized and non-mechanized water crafts, diving, etc.).	Unrestricted - controlled access (open to non-DoD personnel) to sites located on DoD lands during and after construction operations is recommended.	

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J-008-003	A	B	C	D	E	F	G
12	Vol. 4,	Chap. 9.2		9.2.2.1	The transient berthing of an aircraft carrier would significantly impede access to non-DoD recreational resources and opportunities as the temporary surge in population and resulting usage of recreational resources (beaches and parks) by carrier personnel would result in overcrowding and thus limiting and possible restricting access due to capacity constraints; substantial conflict between recreational users is anticipated due to the limited - developed resources (i.e., Asan, Pib, Tumon and Magaña Beach and Parks) for similar activities as well as compatible water uses (swimmers may infringe on windsurfing lane due to overcrowding, etc.); and would cause substantial deterioration of non-DoD recreational resources as a result of accelerated usage. The DEIS mitigative measures provide for the shutting of carrier personnel to non-DoD recreational resources to limited the impacts (no impact) to DoD resources.	Additional mitigation measures should include the funding for the maintenance, upkeep and operation of non-DoD recreational resources impacted by the transient berthing as well as the deployment of DoD and/or DoD contract personnel to augment the local government's limited lifeguard and park patrol personnel.	
13	Vol. 5,	Chap. 9.2		9.2.2.1	Access to recreational resources located in NCTS Finegayan currently restricted to DoD personnel, guests, and civilian workers and their dependants. Recreational options available to these personnel include other bases as well as resources located on non-DoD lands.	It is recommended that access to the Finegayan site, as well as to other unique historical and cultural resource sites located on DoD lands, be permitted to some degree (scheduled, permitted, escorted, etc.). This option would provide recreational options for non-DoD personnel and as a result, ease congestion at other resources site, both non-DoD and DoD lands.	
14	Vol. 5,	Chap. 11.9		11.2.6.1	Park lands identified for potential taking as a result of roadway construction along RR 1 include portions of Dedado Buffer Strip (Dedado Central Park), Chinese Park and Paseo de Susana.	DPR recommends that replacement park lands within the subject locations be identified and developed prior to the taking. In addition, it is recommended that the replacement park sites be equal to or greater than the lands taking, resulting in no net loss of public recreational resources.	

J-008-003

Thank you for your comment. The summary lists of BMPs and mitigation measures in Volume 7 were updated based on comments received during the public comment period and will continue to be updated after the Final EIS is published, during agency consultation and construction permit application processes. BMPs and mitigation measures listed in the Record of Decision and attached as conditions to a permit will be implemented. Restrictions to certain areas are required to maintain public safety. DoD acknowledges that maintaining access to important cultural and recreational sites is important. Although plans concerning access to sites potentially impacted by the proposed action have not been developed, it is not the intent of DoD to totally restrict access. DoD looks forward to working with stakeholders in developing plans for access that balance operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

Impact to Paseo De Susana Park would not require acquisition of park land. There may be restrictions to the park during construction of the Agana #1 bridge replacement. The park property, acquired from Chinese Park, would include a triangular sliver on the southeast corner of the park. Currently this portion of the park is on a steep grade and acquisition would not diminish the usable area of the park. The park property required from Buffer Strip Park only includes a narrow strip along Route 1.

In January of 2010, a meeting between DPR, FHWA and DPW was held to discuss the Section 4(f) properties (parks). At this meeting, the impacts to the Chinese Park, Buffer Strip Park and Paseo De Susana Park were described as mentioned above. The representatives from DPR agreed that the impacts to the parks would be minimal.

DPR DEIS/OEIS COMMENTS
2/16/2010

J	A	B	C	D	E	F	G
1005-003		Vol. 7 33	Chap. 24	3.3.8.1	<p>The DEIS asserts that by providing comparable and alternative recreational resources to military, dependants, and civilian personnel, impacts to local recreational resources would be alleviated, benefiting Guam residents and off-island visitors as well. All proposed QOL facilities to mitigate the demand on recreational resources by the build-up are planned for DoD facilities and restricted to use by military personnel, guests, civilian workers and guests. Mitigation has been confined to reducing the impact to recreational resources located on DoD lands. No mitigation has been proposed to address the impacts of the increase in population to public, non-DoD recreational resources.</p>	<p>No restriction is currently placed on or is anticipated to be placed on the population of military, civilian, and dependant personnel associated with the the Marine Corps relocation to Guam, and thus the use of local, non-DoD recreational resources is highly likely. It is strongly recommended that the DEIS expand its scope of study to include impacts to non-DoD recreational resources by military, dependants, and personnel. Specifically, that the DEIS include the probability of usage (survey, historical data, etc.) by DoD personnel of non-DoD, local recreational resources and the resulting impact, as well as the feasibility of shared QOL facilities located outside of restricted DoD facilities (i.e., Admiral Nimitz Golf Course) as a alternative to the proposed mitigation.</p>	
15							
16							

Item	Chapter	Page	Page Title	Comments on CULTURAL RESOURCES and Historic Properties	Recommendation
J-008-004 1				General statement Was the Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs applied / referred to / considered in the development of pertinent "Cultural Resources" sections and chapters of the DEIS? Pursuant Section 110 of the National Historic Preservation Act (16 U.S.C. 470)? Section 111? Section 112?	Refer to law and indicate in FEIS that these NHPA sections were considered -- and where appropriate, state if plans, etc. were developed.
2				General statement Throughout the DEIS -- determinations were made that historic properties are eligible for the National Register. What happens next to these eligible properties? Will these sites be nominated?	Indicate in the FEIS what is the future prospect for these historic sites/properties/cultural resources?
3				General statement The DEIS fails to recognize historic properties listed on the Guam Register of Historic Places. This Register is just as important as the (U.S.) National Register. Sites listed on the Guam Register are potentially eligible for listing on the National Register.	Acknowledge State/Local government preservation laws and indicate it on the FEIS.
4	1, et al.	All Glossary and Acronym Chapters	All related pages	Lacking pertinent definitions, and acronyms relative "cultural resources," NHPA, GRHP, among others. Cultural resources, traditional cultural properties, all other terms pertaining to "historic properties": The use of the term "cultural resources" in the DEIS is not used nor contained in the NHPA, nor in 36 CFR 800 - regulations implementing Section 106 of the NHPA. Consider the term "culture" - as used in the National Register programs "it is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the people of the nation as a whole." It is misleading to define "cultural resources" as ONLY "archaeological, architectural, and traditional cultural properties" - and at the same time use historic sites, elsewhere in the DEIS to mean cultural resources! Do not confuse the reader by interchanging the terms. Adhere to one definition, one term.	Include: ARPA, NHPA, NRHP, SHPO, ACHP, Section 106,>NNL, adverse effects, area of potential effect, Guam Register of Historic Places, and other pertinent definitions where appropriate in glossary and acronym chapters. > Re-define cultural resources in all the glossaries and include "Historic Property" definition as found in 36 CFR 800.16(j)(1); OR use the legal definition and remain consistent throughout the DEIS, i.e., do not interchange terms - adhere to one term. > Define the EIS "chosen" term in all Volume glossaries. > Define in glossaries NHPA, and>NNL - National Natural Landmarks.

J-008-004

Thank you for your comment. The Secretary of the Interior's Standards and Guidelines were used in the performance of all studies conducted for the EIS. Professionals meeting these criteria and have substantial expertise in the archaeology of the Mariana Islands conducted surveys of over 5,000 acres on Guam. In accordance with federal law, resources that are eligible for listing on the National Register of Historic Places will be treated the same as resources listed. The DEIS (Section 12.1) discusses all historic properties that are listed on the Guam Register of Historic Places. Chapter 12 also includes definitions of these terms (Sections 12.1.1 and 12.2.1) as well as discussions of various cultural resources laws.

Item	Vol	Chapter	Page	Comments	Comments on CULTURAL RESOURCES and Historic Properties	Recommendation	
J-008-005	5	2	9	9-23	9.2.2.6	On recreational use, Marines "could provide maintenance up to Hilaan that contain significant natural, cultural, scenic, and recreational resources." Is there a plan on how the site is to be maintained? Why the Marines? Why not contract an entity to maintain and manage all on-base historic properties - as provided for in Section 111(e) (16 U.S.C. 470b-3(c). Hilaan is listed on the Guam Register of Historic Places, and is eligible for the National Register. G DPR (Guam SHP Office) has been in contact with the Navy since 1999 to nominate Hilaan to the National Register. Navy ignored and discounted the recommendation. Nomination is a responsibility under NHPA Section 110 (a)(2)(A).	Develop and provide maintenance of historic sites plan to DPR for review and comments. Nominate Hilaan to the National Register.
	6	2	12	12-1 12-19		Approach to Analysis / Methodology: State specifically what the methodology is. Was the National Register criteria for evaluation used? the SOI S&G? - of which there are several? What is the basis for determining that a "site" is considered a "traditional cultural property"? Who determined and designated a site as traditional cultural property? Indicate specific federal law.	Identify the relevant historic context(s) on which the historic property is associated with. State references used pertinent to NHPA, i.e., NR Bulletins; 36 CFR 800 - Protection of Historic Properties, etc.
	7	2	12	2-37 / 12-19	12.1.3.3	Non-DOD Land / Route 15 Valley and Escarpment: We do not support locating the firing range in this area, most especially since it will be directly above the Pagat Site - a Settlement Complex listed since 1974 on the Guam and National registers. The lease of this property to construct the firing range and its other facilities will result in fencing the access to the site and lessening its accessibility to less than 100 days a year. The DEIS did not adequately assess the adverse effects of the undertaking pursuant 36 CFR 800.5, nor the area of potential effect. Applying the criteria of adverse effects, the site will be affected in that the action will diminish the integrity of the property's setting, feeling, and association; it will change the character of the property's use or of physical features within the property's setting that contribute to its historic significance, and it will introduce visual, atmospheric and audible elements that will diminish the integrity of the property's significant historic features. Any intrusion, obstacle, or hindrance on the site's accessibility will adversely impact the public's right to visit and appreciate its beauty and tranquility, but most importantly the site's connection to the Chamorro indigenous past dating back 4,000 years ago. This site is significant for its research value, and as stated in a recent article, is considered "a sacred burial ground." We strongly recommend to evaluate and assess other alternatives, including the prospect of relocating it to our neighbor island, Tinian.	> Include the Chamorro Land Trust Commission as a consulting party to the programmatic agreement. The CLTC has jurisdiction over land areas that will be impacted, and who is ENTITLED to participate as consulting party under 36 CFR 800.2(c)(3). > We strongly recommend to evaluate and assess other alternatives, including the prospect of relocating it to our neighbor island, Tinian. > Comply with NHPA Section 112(b)(3). > Consider exchange of federal historic property pursuant NHPA Section 111.

J-008-005

Thank you for your comment. The DoD has a vigorous program of managing and protecting historic properties on its lands on Guam. Properties managed by the DoD comply with all federal laws relating to cultural resources. Each installation has an Integrated Cultural Resources Management Plan that stipulates the standard operating procedures for evaluating resources according to National Register of Historic Places criteria and long term management of these resources. Because these resources fall under federal jurisdiction and access to many of these areas is limited, they are, in general, protected from vandalism, collecting, or other forms of disturbance that could occur when areas are completely open to the public. If historic properties would be affected by future projects, all installations would comply with the National Historic Preservation Act and go through the Section 106 process to avoid, minimize or mitigate adverse effects to these resources.

The DoD conducted a number of studies, including a traditional cultural property (TCP) study on Guam and Tinian. The studies on traditional cultural properties were conducted by individuals from the Micronesian Area Research Center at the University of Guam. They interviewed people on Guam who were knowledgeable about the traditional uses of plants and animals on the island. The TCP study used information from oral histories, archival and documentary research, archaeological investigations, and natural resource inventories. Seventeen TCPs were identified that included landforms, historical sites, archaeological sites with latte stones, and gathering places. DoD will continue to work very closely with the Guam SHPO and other interested parties to mitigate any adverse effects to these resources.

Marines stationed on Guam require annual qualification or requalification on individual and crew –served weapons to maintain their combat readiness. Every Marine on Guam will require this type of training. This

Item	Vol	Chapter	Page	Line or Para	Comment on CULTURAL RESOURCES and Historic Properties	Recommendation
J-008-005 8	2	2	2-42 / 2-44	2.3-4	Maneuver Training Area: NMS3 - maneuver area would require an access road. At Mount Lamlam: an access (paved) road will be constructed. The hiking trail entrance may be fenced to keep out vehicles but still will be accessible from the sides. Historical records indicate that Mt. Lamlam is owned by Govt. of Guam; and from conversations with HP staff, the peak is owned by the DoD. Mount Lamlam is one of Guam's four National Natural Landmarks. It is listed on the National Registry of Natural Landmarks. It is very disturbing that Mount Lamlam is not specifically identified as part of the training at the Naval Munitions Site. The APE for this undertaking extends to Mt. Hamuyong Manglo, where parishioners, and residents from throughout Guam hike up the trail during Good Friday. For whatever reason DEIS writers and planners excluded this important fact of Mt. Lamlam - it is imperative that the area be further evaluated if the property itself is a "traditional cultural property" which may be eligible for inclusion in the National Register of Historic Places under one of the "Criteria Considerations". FACT Mt. Lamlam is the highest peak on earth when it is measured from the bottom of the sea to its peak!	> Research and evaluate the significance and importance of Mt. Lamlam. > Research ownership!
9	2				Cumulative Impact: Tangwisson, Hiliian, Haputo: If the decision is made to allow the construction of housing facilities for DOD personnel at Finegayan (Volume 2 Alternative 2: USMC Cantonment) and Volume 5 Alternative 2: Army Housing Collocated with Marine Corps Housing at South Finegayan, it was estimated by U.S. Navy Cultural Resources Manager that all of the surface artifacts will be subject to collecting, foot traffic damage, and vandalism within ten years. The Area of Potential Effect is not limited to the footprint of the proposed housing - it includes the beach areas where these historic properties are located. Additionally, the proposed Dos Amantes Workforce Facility, south of the proposed DOD housing, to house an estimated 24,000 workforce individuals, will definitely cause a dramatic increase in effects that may adversely impact significant historic properties. We anticipate that these areas will be used as recreational areas for swimming, fishing and hiking, and the like.	> Revisit MOA developed by the GSA, and the Guam SHPO in August 2007 for the disposal and reuse of a 450-Acre Site at South Finegayan. Public participation 106 process may have been overlooked.
10	2	12	12-62	12.2.6	No-Action Alternative: The statement that -- "DoD management of cultural resources on non-DoD lands at the Harmon Annex or Route 15 would not occur and these sites could be vandalized or allowed to deteriorate. Implementation of the no-action alternative would maintain existing conditions, although there could be a significant adverse impact to NRHP-eligible or listed sites on non-DoD lands" is presumptuous, disingenuous, and misleading.	Re-phrase.

high volume can only be met with ranges located in close proximity to cantonment areas. It would be logistically and cost prohibitive to move every Marine to an off island location to meet these reoccurring training requirements.

DoD understands the importance of the cultural and historic issues related with land in Guam, and in particular those associated with the Pagat site. As stated in the DEIS in Section 12.2, no direct disturbance to the Pagat site would occur from the construction or operation of the proposed firing range. Because of a drop of 300 feet in elevation from the plateau containing the firing range to the Pagat site on the coast, there would not be a visual impact to the site. Noise from the firing range would be equivalent to noise levels when the raceway is in use. It is the intent during the final design phase to contain all rounds and effects within the footprint of the range through the use of berms and other media.

J-008-006

Thank you for your comment. Mount Lamlam is on DoD land, but access to this area is not currently restricted. Mount Lamlam is considered to be a traditional cultural property, but would not be impacted by the trail improvements. Access to Mount Jumullong Manglo would not be restricted under the proposed action. A discussion of National Natural Landmarks has been added to the FEIS in Chapter 3, Geological Resources. Indirect impacts to coastal sites from occupants of housing units on South Finegayan are discussed in Section 12.2 of the DEIS. Impacts due to construction worker housing has been added to the FEIS.

Item	Vol	Chapter	Page	Page/Section	Comments on CULTURAL RESOURCES and Historic Properties	Recommendation
J-008-007 11	2	12	12-62	12.2.7	Summary of Impacts: "Extensive data collection and surveys associated with this EIS/OEIS have examined more than 5,000 acres in Guam and recorded more than 100 NRHP-eligible archaeological sites and architectural resources. Recent studies have also identified traditional cultural properties, and conducted interviews with individuals knowledgeable about the history of WW II and of traditional practices." "The impact analysis has identified significant adverse impacts from the proposed action to between 26 and 35 NRHP-eligible archaeological and architectural resources and traditional cultural properties. Most of the impacts would occur on DoD lands. This EIS/OEIS has proposed potential mitigation measures to reduce those impacts to less than significant levels through data recovery, implementation of a preservation plan, public education, signs, brochures, and documentation."	> List all the studies and suveys indicating this. > Are there plans to nominate NR-eligible sites.
13	4	12			Aircraft Carrier Berthing for New Transient Port. Preferred Alternate Site - Polaris Point: Since the determination of the boundaries of the Area of Potential Effect (APE) for this undertaking (in all alternatives) was not included, it is safe to say that the assumptions posed that significant impacts on historic properties will not be affected is misleading, if not confusing. Figure 2.6-5, illustrates the proposed dredging (preferred alternative: Polaris Point), at the entrance area of the Outer Harbor. The red boundary indicates the project area and black borderlines of the proposed dredge areas. The Area of Potential Effect should extend out to all of the shoals (Western, Middle and Big Blue Reef) to the southwest, and in all of the shoals on the northern area (Jade Shoals and near Sasa Bay). We expect that the area of potential effect of the dredging should include a 300 meter buffer zone from the red line. An underwater -- submerged resources survey must be conducted to determine the effects of their undertaking on historic properties when they are located and identified.	> Conduct submerged historic properties survey on the APE. > Conduct comprehensive archival research. > Report findings.

J-008-007

Thank you for your comment. The DoD conducted cultural resources surveys (including archaeological, architectural, and ethnographic surveys) of over 5,000 acres of land to identify historic properties. All studies conducted for the Marine Relocation are discussed in Volume 2, Chapter 12, Cultural Resouces. Information on submerged resources were obtained from a series of underwater surveys conducted previously that located and identified 31 shipwreck sites and submerged objects in Outer Apra Harbor. These include 29 shipwrecks consisting of fishing boats, yachts, barges, tugs, landing craft utility vessels, British passenger ships, WWII Japanese freighters or transport ships, and two plane wrecks.



GUAM REGIONAL TRANSIT AUTHORITY
Government of Guam

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J-009-001

Thank you for your comments.

February 15, 2010

Joint Guam Program Office
c/o NAVFAC Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Attention: GPMO

Re: Official Comments- Draft Environmental Impact Statement

Buenas Yan Hafa Adai !

J-009-001

The Guam Regional Transit Authority (GRTA) is pleased to submit its official comments on the Draft Environmental Impact Statement (DEIS) relative to the proposed military buildup on Guam, USA. Attached for your review and response are the line item areas of the DEIS that addresses the public (mass) transit and transportation issues. We look forward to continued dialogue and communication with your office on these very important issues facing the island, its People, resources and its future.

Si Yu'ps Ma'ase,

JOSEPH C. MANIBUSAN
Interim Executive Manager

FOR THE BOARD OF DIRECTORS:

Vicente D. Gumataotao
Interim Chairman

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Interim Secretary

Louise C. Rivera
Member

Michael J. Terlaje
Member

J-009-002

Thank you for your comments.

DEIS STATEMENTS and GRТА COMMENTS
Item by Item

1. Volume 6 – Chapter 4 (Roadways) – Pages (None Specified)

~~J-009-002~~ GENERAL COMMENTS

Roadways: throughout the entire Chapter 4 discussion focused on the existing public (mass) transit services provided, including routes serviced and hours of operation. However the report falls short of identifying the other required "infrastructural" elements needed for the transit system to be effective in the delivery of transit services.

For example, there is no discussion of (a) the need for bus shelters, bus stop signs, route and schedule information, etc. (b) the lack of adequate bus shelters and passenger amenities at most of the designated bus stops, (c) the lack of adequate information posted on bus shelters on the schedules, (d) the lack of a permanent bus maintenance facility(s) and administrative offices, (e) the need for newer and more buses, etc.,

These issues and more are addressed in the newly adopted Transit Business Plan, a separate document recently completed by Parsons-Brinkerhoff America. When implemented the plan will address those "short falls" outlined in the DEIS. Furthermore, the 2030 GTP adequately addresses these shortfalls and proposes certain improvements needed together with institutional and policy recommendations that directly tie into the overall master and integrated transportation network for the entire island.

Issues in the 2030 GTP include (a) Mass Transit and Bicycle and Pedestrian Facilities (b) Transit, Bicycle, and Pedestrian Improvements, (c) Transit Performance Measures, (d) Mass Transit Improvements, (e) Proposed Revenue Sources, (f) Transit Public-Private Partnerships, (f) Coordination between land use and transportation planning, etc.

2. Volume 6 – Chapter 4 – Pages 3-4

DEIS Statement-

Public Transportation

Public transportation on Guam includes the following modes and service types:

- *Tour buses*
- *Shopping buses*
- *Taxis*
- *School buses*
- *Special service for Navy shore leave*
- *Guam Mass Transit*
- *Fixed-route (buses on designated routes at prescribed headways)*
- *Demand-response (reservation-type service linking residential areas with fixed-route service or nearby activity centers)*
- *Para-transit*

For purposes of this project, the discussion focuses on Guam Mass Transit. It describes the existing conditions for fixed-route, demand-response service (DRS) areas, and para-transit service in each of the four areas of interest. There is overlap between the routes, DRS areas, and para-transit areas in the

areas of interest, so descriptions of routes and areas may be described in multiple areas.

There are currently six fixed-routes, seven DRS areas, and five para-transit areas on the island. A section of Chamorro Village, located in Hagatna, currently acts as a transit center consisting of a shared-use parking lot with two bus shelters. Only one route in the fixed system is not anchored by this location. In addition to the fixed routes, all DRS routes originate and terminate at Chamorro Village. In this respect, the current network acts as a low-frequency "pulse" system, having most of the routes service one central location simultaneously to maximize transfer potential.

The third type of mass transit on Guam is para-transit. Para-transit service, provided by Guam Mass Transit, supplies door-to-door transportation for persons with certified disabilities and is available by advance reservation. Hours of operation are 5:30 a.m. to 7:30 p.m., Monday through Saturday, and 7:30 a.m. to 6:30 p.m. on Sundays and holidays.

There are overall scheduling issues with mass transit on the island. Buses generally run ahead of the published schedule, and they do not adhere to slower speeds or wait time to follow the schedule, that often causes passengers to miss the bus and thus does not provide a reliable public transportation system on the island.

J-009-002 GRTA Comment(s) – The DEIS statements are accurate, however, GRTA agrees in part with the statement on the current state of the present public (mass) transit system. It is to be noted that para transit services is a curb-to-curb service which provides origin to destination transportation based on assessed need. This section requires expansion to identify other "infrastructural" issues that presently exist with the current services, such as the lack of adequate safe, clean and accessible bus shelters with passenger amenities, lack of a public educational and marketing program, lack of passenger travel training etc.

3. Volume 6 – Chapter 4 (Roadways) – Pages 74, 81, 96, 106, 107

DEIS Statement-

Public Transportation Impacts. Impacts to the public transportation system relate to the delays caused by increased levels of congestion on roadways and at intersections. In the Central Region, this would affect the fixed-route service along Routes 1 and 10, as well as the demand response and para-transit services.

Delays on the roadways increase passenger travel times, with longer headways and missed transfers. This would also affect the fixed-route services proposed for Routes 16 and 26. Implementation of new transit services should take into consideration the impacts of the military relocation.

Public Transportation Impacts. Impacts to the public transportation system in the Apra Harbor Region should be minimal and would relate to the delays caused by increased levels of congestion on Route 5 or at intersections near DOD lands. This would possibly affect the fixed-route service along Route 1, as well as any demand response and para-transit services. Implementation of new transit services should take into consideration the impacts of the military relocation.

GRTA Comment(s)- Public Transportation Impacts: We agree with this statement, however, GRTA recommends the implementation of new transit services cannot be based solely on the impact of the

J-009-002 military relocation, but must also include and factor in the current users of the system particularly riders with disabilities, expanded employment opportunities on and around military installations and neighboring residential areas, and the normal local population growth in both central and northern Guam.

Recommendations- We also recommend that DOD/JGPO consider the following remedies:

- a. Explore the possibility of augmenting the existing transit system with additional buses from the Futenma base if the military already has a public transit system in Okinawa serving the military personnel;
- b. Explore the possibility of providing additional funding to the GRTA over and above current allocations to serve the military population within the military installations on Guam;
- c. Assist GRTA in the identification of specific pickup and drop off points within the military installations (i.e. Northwest Field, AAFB, Naval Station, Anderson South, etc.)

4. Volume 6 – Chapter 2 – Pages 105 - 135

DEIS Statement-

2.5.1.1 Project Background

In response to the island's ongoing roadway problems, the 2030 Guam Transportation Plan has programmed projects to address many of the immediate needs of Guam that have not been addressed in many years. The planned military buildup would include relocation of approximately 8,600 military personnel and 9,000 dependents from Okinawa, Japan; improvements to pier/waterfront infrastructure to support transient nuclear aircraft carriers on the island; and placement of an AMDTF on Guam, as well as related construction activities required to support these relocations. Troops would begin relocating to Guam in 2011; relocation would be complete by 2014. Buildup activities related to military facility construction would occur from 2010 through 2016, with peak construction and population in 2014. Road construction to support the military buildup would also need to commence in 2010 and be complete by 2016.

The existing traffic volumes, physical conditions, and designs of Guam's roads vary widely. As a result of the military buildup on the island, traffic volumes and congestion levels are anticipated to reach unacceptable levels. Military-related traffic would add to the congestion levels, worsening already poor conditions. In addition, the structural integrity of the roads and bridges would be compromised as a result of the increased number and weight of trucks.

2.5.1.5 Mass Transit

The traffic projections developed by the Guam DPW show that congestion levels in both the short term and the long term would result in substantial delays, as measured by the ratio of traffic volume to roadway capacity. Analysis indicated that it is unlikely that sufficient additional roadways or traffic lanes could be built to completely eliminate traffic congestion. Mass transit would help address this need.

Existing mass transit routes and service areas are depicted in Figure 2.5-3.

As part of the 2030 Guam Transportation Plan, a new Core Bus System has been proposed to help support island-wide mobility during the 2010-2014 time period. Although most construction worker housing areas would be expected to include vans or buses to and from the work sites, the Core Bus System is expected to be operational by 2012. The new system is designed to connect major employment and population centers. The system consists of five new fixed routes. All major military

facilities that house workers or are major employment destination points would be connected by this new system. The Dededo area (near NCTS Finegayan) would be especially well served because it is one of the major population centers; by 2030 it would experience a 50% increase in population. Projections show that ridership has the potential to reach 1.32 million annual trips.

The Core Bus System would also provide direct service between the Naval Base and Tumon Bay, which is the major tourist area on the island. A total of 50 buses are needed to operate this service, and GovGuam is pursuing a Federal Transit Administration Section 5309 discretionary grant to fund the acquisition of these vehicles. The proposed mass transit fixed-route network is depicted in Figure 2.5-4 and Figure 2.5-5. [GRTA Comment(s)- Note that the amount allocated to Guam under the Section 5309 grant program will only purchase 3 – 4 buses, not 50 as stated in this paragraph]

J-009-002

GRTA Comment(s)

Related Actions- Utilities and Roadway Projects

Sec. 2.5 - 2.5.5 : Off Base Roadways- refer to sec. 2.5.1.5 (Mass Transit) on pages 2-109-2-112....This is a very important section of the DEIS as it lays out the required specific action for the next two years which lead up to 2012 implementation of the new "Core Bus system". The new core system will address those areas identified as being heavily impacted by increased traffic congestion. To that end the following actions must be aggressively pursued by the GRTA... (a) work closely with the Governor's Office, GIAA, DPW, FAA, FTA and FHWA to secure a minimum of 10 acres of GIAA property for the construction of a maintenance facility, bus parking/security area, administrative offices, etc. for the GRTA bus fleet. (b) implement the recommendations of the newly adopted Transit Business Plan, (c) procure new transit buses based on federal funding already available, and (d) pursue additional federal funding to procure additional buses as recommended in the transit business plan. The goal is to purchase 50 buses in Phase I of the transit business plan and work towards the goal of 100 buses in Phase III of the transit business plan.

5. Volume 6 – Chapter 2 – Page 109

DEIS Statement

Section 2.5.1.5 (Mass Transit) 2.5.1.5

The traffic projections developed by the Guam DPW show that congestion levels in both the short term and the long term would result in substantial delays, as measured by the ratio of traffic volume to roadway capacity. Analysis indicated that it is unlikely that sufficient additional roadways or traffic lanes could be built to completely eliminate traffic congestion. Mass transit would help address this need. Existing mass transit routes and service areas are depicted in Figure 2.5-3.

GRTA Comment(s)- The DEIS statement is accurate, however GRTA would like to see recommendations on how can the existing system be upgraded to mitigate the expected traffic volume and congestion. What solutions does DOD proposes to address in this respect?

6. Volume 6 – Chapter 2 – Page 112

GRTA Comments(s) - The DEIS statements are accurate on the need for a new Core Bus System to address the expected demand. GRTA will require additional financial assistance over and above the present level of funding as outlined in the DEIS and the 2030 Guam Transportation Plan to meet operational and resource requirements.

1-009-002 To that end we recommend that DOD/JGPO coordinate with the U.S. Department of Transportation, Federal Transit Administration (USDOT-FTA) and the Federal Highway Administration (FHWA) including other federal agencies to identify other possible funding sources that will augment the existing public transit system with the necessary resources for both acquisition of additional rolling stock (buses), capital facilities planning and other related amenities.

GRTA Comment(s) – With respect to the Section 5309 discretionary grant to fund the acquisition of vehicles (buses), the Guam Regional Transit Authority (GRTA) has already initiated the process of procurement, subject to the limits of funding allocated for Guam. GRTA will require additional funding through other sources if it is to follow the Transit Business Plan recommendations that an initial fleet of 50 new transit buses be procured, and the ultimate acquisition goal of 100 buses be pursued.

Recommendation- DOD/JGPO must review the recently completed and GRTA-approved Transit Business Plan and partner with GRTA for its funding and implementation.

GRTA Comment(s) - Over and above the actual procurement of buses, the GRTA require a permanent home and place for new (i) Administrative Offices, (ii) Maintenance Facilities, (iii) parking/security of buses, (iv) central dispatch office, etc. Funding support is necessary for such significant capital outlays.

Recommendation- DOD/JGPO must review the recently completed and GRTA-approved Transit Business Plan and partner with GRTA for its funding and implementation.

7. Volume 6 – Chapter 2 – Pages 111 - 114

DEIS Statement(s):

ISLAND WIDE MAPS - Existing Mass Transit Network and Demand Service Areas on Guam – Proposed Mass Transit Network on Guam, - Mass Transit Network on Guam-

GRTA Comment(s) – The DEIS statements are accurate. Note that for the GRTA to implement and increase the level of transit services for the military buildup it will require additional funding sources to increase its fleet of buses, construct and install of adequate bus shelters at all designated bus stops, a permanent maintenance and administrative support facility with adequate bus parking grounds.

Recommendation- DOD/JGPO must review the recently completed and GRTA-approved Transit Business Plan and partner with GRTA for its funding and implementation.

END OF REPORT



Felix P. Camacho
Governor

Michael W. Cruz, M. D.
Lt. Governor

Department of Agriculture
Dipattamenton Agrikottura
163 Dairy Road, Mangilao, Guam 96913

Director's Office 734-3942/43; Fax 734-6569
Agricultural Development Services 734-3946; 735-3946; 735-3950
Plant Nursery 734-3949
Aquatic & Wildlife Resources 735-3955/56; Fax 734-6570
Forestry & Soil Resources 735-3949/51; Fax 734-0111
Plant Inspection Station 475-1426/27; Fax 477-9487

www.guamagriculture.org

February 3, 2010

MEMORANDUM

TO: Director
FROM: Chief, Forestry
SUBJECT: Comments on DEIS

Submitted for your review is our comments regarding the DEIS. Contact me should you have any questions.

Joseph S. Mafnas



Joseph D. Torres
Director

Joaquin N. Naputi
Deputy Director

J-010-001

Purpose: The following are comments pertaining to the military buildup on Guam, using information presented in the draft EIS (November 2009), and applying data gathered and analyzed as part of Guam Forestry's 5-year Statewide Assessment and Resource Strategy (SWARS), in preparation for the USDA Forest Service in May 2010. The following comments are not inclusive of all aspects of the proposed actions in the EIS; rather the information presented below represents a focused assessment of how the proposed actions of land development are likely to influence Guam's forests and Guam Forestry's mission.

Overview:

The areas of focus for this assessment were strictly the Proposed USMC Main Cantonment & Family Housing compounds ("Housing"), the proposed Andersen South Training grounds and associated firing ranges ("Andersen"). This memo addresses threats to forests and trees and quantifies the potential impact of development within the boundaries of the proposed compounds, and offers a range of mitigation options and considerations to offset these impacts.

Spatial data were obtained from the DoD that outlined the boundaries of the analysis areas described above (Figure 1). A newly created fine-scale vegetation map developed as part of Guam Forestry's SWARS project I and was used to identify individual tree locations, based on aerial imagery, LiDAR analysis and ground truth data. The SWARS also identified locations that were highly likely to produce sediment to streams through surface erosion processes and locations where vegetation types and topography would represent a high risk of fire to native forests (see mitigation). A full review of these methods and findings will be available in May 2010.

Forest Analysis Summary:

Forested zones are highly fragmented on Guam and represent only approximately 56,496 acres, or 42% of the land area of the island. These forests are mostly relegated to the northern half of the island, with 53% of the total island forest cover residing within the affected watersheds (Agana, Mangilao and Northern watersheds). There are few remaining fragments on Guam of what has been identified as pristine, or native undisturbed, forest; the majority of which are also relegated to the areas under the proposed action alternatives and in areas surrounding current military operations.

J-010-001

Thank you for your comment and the analysis. Watershed erosion studies and projects are being considered as mitigation for marine impacts in Apra Harbor and other greenbelt plantings are being considered. Your recommendation for offset planting projects fits well with this planned mitigation and the Navy and Marine Corps looks forward to working with you on this initiative. The SWARS study that you are finalizing will be helpful to determine specific mitigation targets and methods. Your comment concerning your desire for involvement in community and urban forestry initiative for the proposed housing projects may not be feasible due to the limitations of space and timing for these particular projects.

Some of the information in your comments is incorrect: The total acreages that you project would be disturbed by the proposed EIS actions are much higher than the actual acreages that would be disturbed. The specific areas that would be disturbed are shown in figures and tables in the EIS and are broken out by vegetation type.

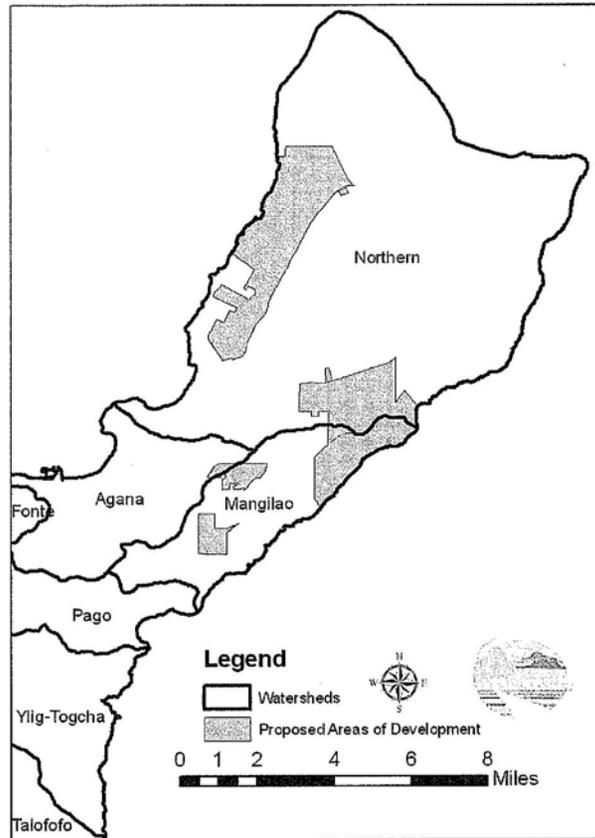


Figure 1. Locations of the proposed development areas addressed in this analysis.

For the purposes of this comment assessment, the proposed actions involve the creation of housing developments and associated land use on approximately 5,055 acres in two major locations, and an additional 3,870 acres of affected areas within and adjacent to the proposed Andersen training grounds (Figure 1). In total, the area used for this assessment included approximately 9,375 acres that would be directly influenced by development or activities. This assessment did not account for additional roads or other infrastructure that would be associated with these developments; it considered only the spatial area that encompassed the proposed activities.

Affected Forest Environment:

Individual trees and forest fragments were identified on the landscape in the development of a fine-scale vegetation map (2 m resolution, see SWARS) and were overlaid onto the spatial boundaries of the Housing and Andersen proposed activity areas. Tree cover was calculated

J-010-001

using the classified forest and individual trees at fine scales and reported as a percentage of land area within the development zones.

Looking only within the 9,373 acres of proposed development, up to a total of 5,432 forested acres are at risk of deforestation or secondary effects of development (compaction, fragmentation, invasive species pressure, vandalism). This represents 10% of the total 56,496 acre forested environment on Guam (Table 1).

A mapped overview of the tree cover within the proposed development sites and at island scales are presented in Figure 2 and Figure 3.

Table 1. Summary of affected forested acres on the proposed parcels and island-scale effect on the forested environment.

Location	Total of Forested Acres	Total Acres Affected	% Affected Forest within Development	% Total Forest on Guam
Andersen	2,733	3,868	71%	5%
Housing	2,699	5,505	49%	5%
Totals	5,432	9,373	58%	10%

The proposed reduction of forest cover of up to 10% of the total forest cover of Guam is a significant impact that affects the viability of Guam's forests, including reductions in the benefits of forests: groundwater infiltration, potential habitat, biodiversity, and water quality.

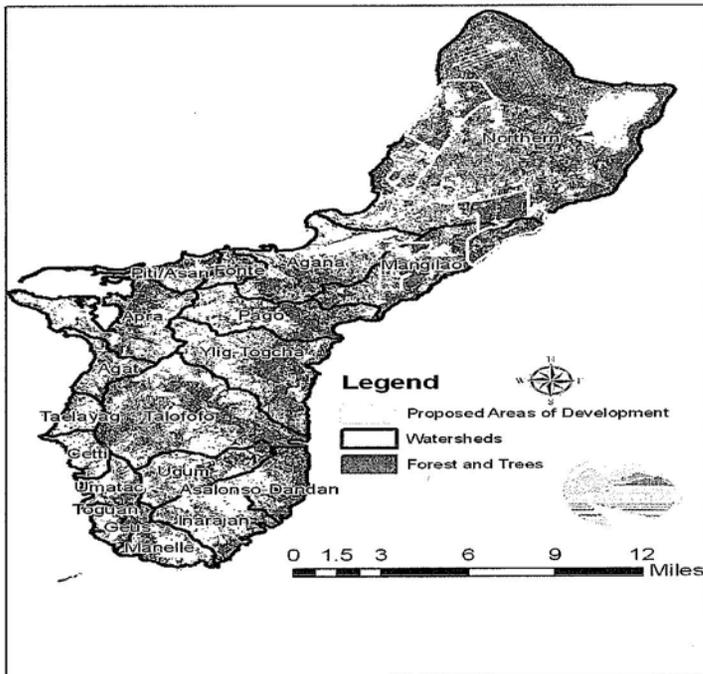


Figure 2. Island-scale view of tree cover and the proposed areas of development.

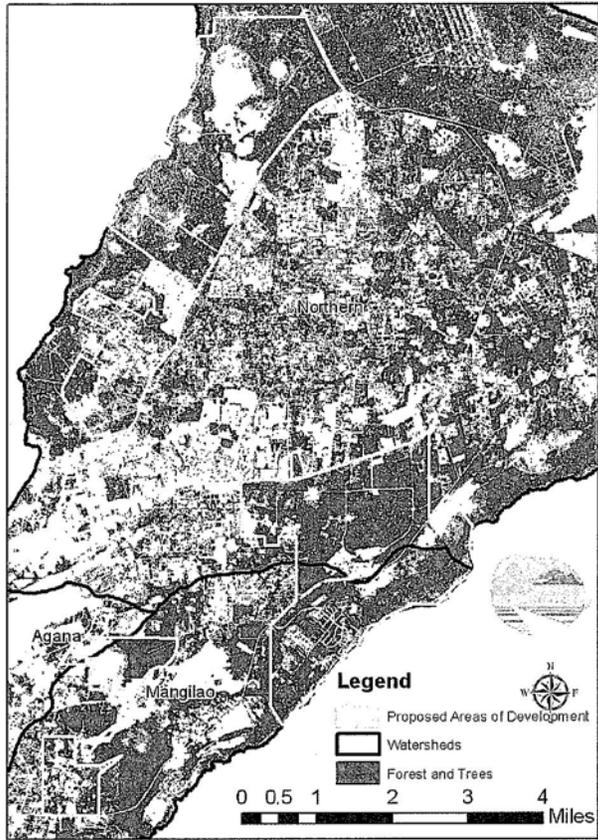


Figure 3. Close-up view of the current tree cover within the proposed areas of development.

J-010-001 Proposed Mitigation Parameters:

Given the high potential for reductions in the remaining forests of Guam due to development and training activities, mitigations should involve a combination of several key mechanisms:

1. Urban and Community Forestry Program Involvement. Planning and development of the proposed housing development should include a role for Guam Forestry to identify areas within the proposed properties to protect fragments of native forest and provide “green space” in the development design. This will provide an immediate reduction of the affected forest by conserving existing forest fragments into the development designs.

2. Identify offset planting projects on Guam that accomplish multiple goals (see figures below):

Increase forest fragment size

Convert vegetation types that pose a high fire risk to standing forests

Target direct or buffer plantings of forest in areas that pose high risks for erosion and sediment delivery to streams.

The SWARS currently in development by WPN and Guam Forestry is in the process of targeting site-specific locations for conversion of non-forest and degraded lands to forest environment to meet the combined objectives identified in Mitigation Goal #2 above. A prioritized action plan for planting projects for expanding forests, mitigating soil losses and to lower fire risks is in the process of being completed for Guam (May 2010).

Preliminary SWARS results have been compiled that met the combined objectives of Mitigation Goal #2 above and are presented in Figure 4 and Figure 5. Overall, 8,906 acres are priority ranked to meet these objectives. Of these, 3,095 acres (35% of priority ranked areas) are designated as “extreme”, or having elevated risk of fire, sediment and/or fragment size; 5,811 acres (65%) are classified as having a “high” priority, having at least a moderate risk for all objectives.

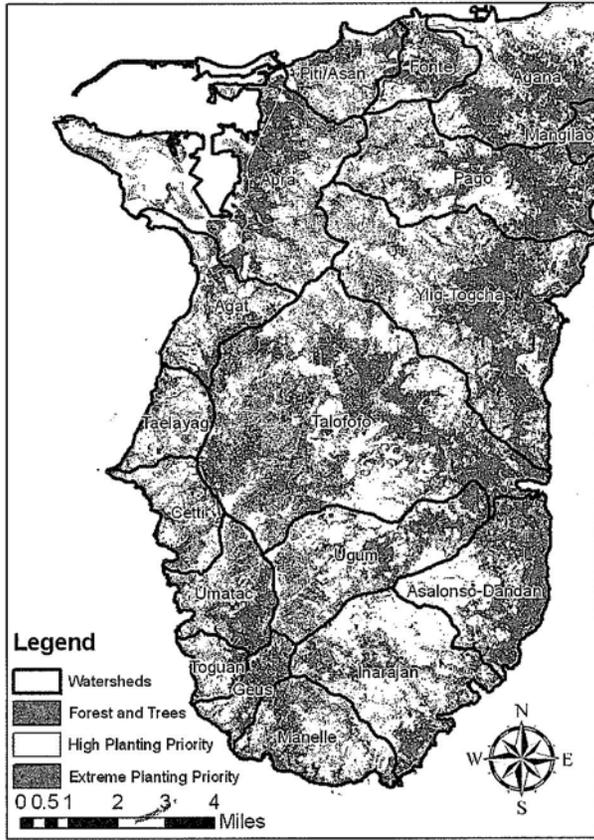


Figure 4. Highest priorities for planting and expanding forest to meet the combined objectives of (1) limiting sediment delivery, (2) lowering fire hazard risk, and (3) expanding current forest edges to increase fragment size. “Extreme” priorities represent severe risk in any of the three categories (3,095 acres) and “High” priority areas represent at least low threats in all three categories (5,811 acres). In total, there are 8,906 acres of priority mitigation planting areas identified on Guam meeting these combined criteria.

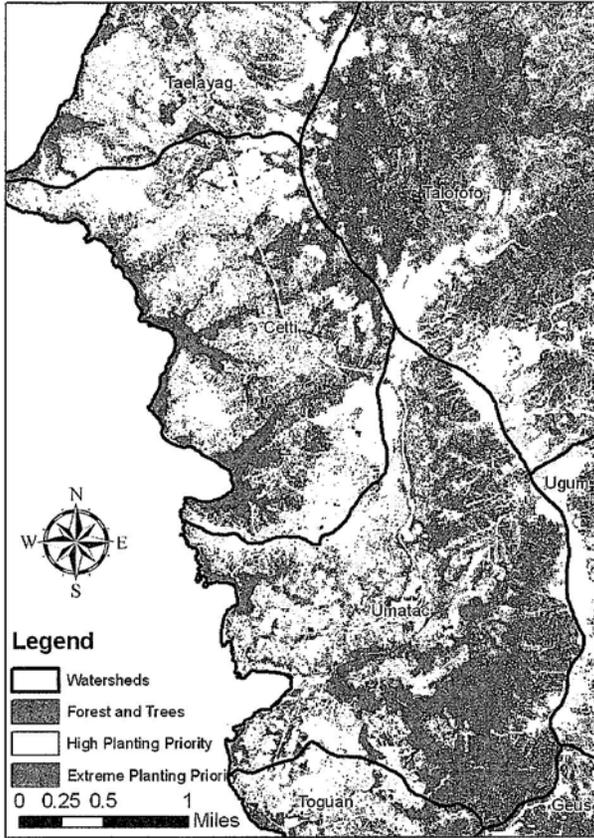


Figure 5. A close-up view of SW watershed top priority planting sites that will meet combined objectives of (1) limiting sediment delivery, (2) lowering fire hazard risk, and (3) expanding current forest edges to increase fragment size (see Figure 4).

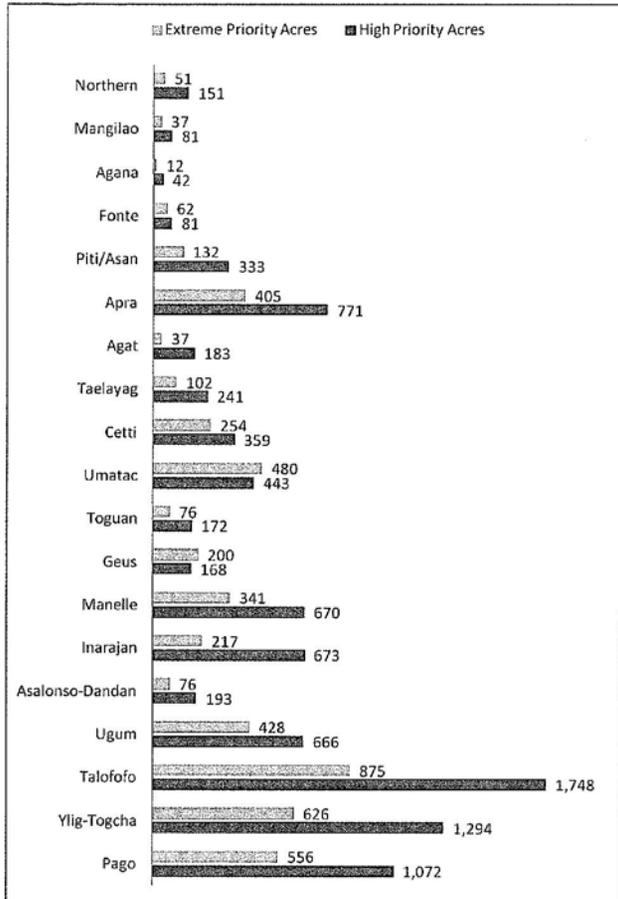


Figure 6. Watershed-level summary of “Extreme” and “High” priority planting acres that achieve combined mitigation objectives of offsetting sediment delivery to streams, fire risk to standing forest, and increasing existing forest fragment sizes.

Effect of the Proposed Mitigation on Guam Forestry Resources:

The proposed mitigation will require a significant effort by the Guam Forestry Department. The initial working drafts of the SWARS document already identifies a need for a major increase in program capacity to reduce existing fire risk, sedimentation, and water quality effects and implement restoration of priority watersheds. The proposed mitigation for the military build-up as identified above will require an increase in all facets of the Guam Forestry program. We will evaluate the resources needed to respond to the military buildup mitigation as a critical element of the SWARS plan.

Alicia G. Limtiaco
Attorney General



Phillip J. Tydingco
Chief Deputy Attorney General

J-011-001

Thank you for your comment.

OFFICE OF THE ATTORNEY GENERAL

February 17, 2010

JGPO c/o NAVFAC Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Attention: GPMO

Re: Office of the Attorney General Comments to DEIS

Dear Sirs:

J-011-001

The Office of the Attorney General hereby respectfully submits its comments to the Draft Environmental Impact Statement (DEIS) /Overseas Environmental Impact Statement (OEIS) concerning the "GUAM AND CNMI MILITARY RELOCATION (Relocating Marines from Okinawa, Visiting Aircraft Berthing, and Army Air and Missile Defense Task Force), which are attached to this letter.

It is important to bear in mind that the Office of the Attorney General is administered by the elected Attorney General of Guam who is mandated to be the Chief Legal Officer of the Government of Guam and shall have cognizance of all legal matters, excluding the Legislative and Judicial Branches of the government of Guam, involving the Executive Branch of the government of Guam, its agencies, instrumentalities, public corporations, autonomous agencies and the Mayors Council. The Attorney General is also the public prosecutor and, by himself, a deputy or assistant, shall conduct on behalf of the Government of Guam the prosecution of all criminal offenses against the laws of Guam which are prosecuted in any of the courts of Guam, the District Court of Guam, and any subsequent appeals there from.

Finally, it is also important to note that the Office of the Attorney General for the U.S. Territory of Guam (Guahan) is comprised of four (4) divisions whose operations, personnel, resources, and services that are provided to all residences of Guam, presently and in the near future, will be impacted by the anticipated military build-up. These are the Child Support Enforcement Division, Civil/Solicitors Division, Family/Juvenile Division, and the Prosecution Division. The comments pertaining to the impact of the military build-up upon these four divisions of the Office of the Attorney General should be deemed to be preliminary due in part to the paucity of relevant data and information provided to us thus far.

Should you have any questions do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Alicia G. Limtiaco".

Alicia G. Limtiaco
Attorney General of Guam

287 West O'Brien Drive • Hagåtña, Guam 96910 • USA
Telephone: (671) 475-3324 • Facsimile: (671) 472-2493 • law@guamattorneygeneral.com

OFFICE OF THE ATTORNEY GENERAL

COMMENTS TO DEIS

CIVIL DIVISION COMMENTS TO DEIS

The Civil Division of the Office of the Attorney General (OAG) is a combination of the Civil Litigation Division and the Solicitors Division and also includes the government claims unit, the consumer protection unit, and the notary public unit.

CIVIL LITIGATION DIVISION

The Civil Litigation Division handles civil actions in which the government is an interested party. This includes bringing actions on behalf of the government and its agencies and defending actions brought against the government and its agencies. These actions include both trials and appeals in the courts of Guam and the courts of the United States. The Attorney General is also tasked with bringing actions when necessary to insure compliance by government agencies and officials and private parties with the regulatory laws of Guam. Additionally, the Attorney General brings actions on behalf of the people of Guam in matters regarding the protection of the public interest.

Some of the types of cases handled by the Civil Division include the following: land condemnation cases, land registration cases, zoning and easement disputes, civil rights actions, federal regulatory actions, wrongful death cases, personnel injury cases, government employee discipline and grievance cases, wage and hour disputes, maritime cases, contract disputes, procurement appeals, civil forfeitures, consumer complaints and mediation, involuntary commitments, environmental protection cases, cases to determine the extent of government authority and the legality of government action, and cases resolving the interpretation, constitutionality and organicity of laws and regulations.

The complex litigation cases often require more than one lawyer to work on the case. For example, four lawyers (including the Attorney General) appear at the quarterly status hearings in the landfill case, because different lawyers must work on different aspects of the case. As a new task, the Civil Litigation Division must take over the permanent injunction case against the DMHSA and DISID. Like the landfill case, more than one lawyer will have to work on this case. As an additional task, recently court rulings have required litigation attorneys to appear at many juvenile cases involving DMHSA and DISID. Another ongoing case that takes a great deal of legal resources is the federal law suit against the Department of Corrections (DOC) which now includes the DMHSA because a forensic unit for inmates and detainees is established at the DMHSA.

Hearing Officers. The Civil Division has the task of providing hearing officers to government agencies, boards and commissions when they conduct administrative hearings pursuant to the Administrative Adjudication Act and other legal mandates

requiring a administrative hearings. This includes providing a hearing officer for fair hearings which are federally mandated. For example, the food stamp and public assistance programs require fair hearings.

Government Claims Unit. The government claims unit must investigate and processes all claims filed under the Government Claims Act against the line agencies of the government and the Mayors within the timelines established by law. The claims include tort claims – property damage, personal injury, wrongful death – and contract claims.

Consumer Protection Unit. The consumer unit enforces the Deceptive Trade Practice Act and various other consumer laws. In addition to handling consumer complaints and litigation, the consumer unit reaches out to inform both the consumers and the businesses of Guam about the requirements of the Deceptive Trade Practices Act and other matters affecting Guam’s consumers. The unit issues press releases to make the public aware of consumer scams and various consumer issues. Additionally, the consumer unit enforces the Tobacco Master Settlement Agreement (MSA). Guam has received \$40 million through the MSA. In return, local tobacco distributors and their manufactures who are not parties to the MSA must register with the OAG to insure that escrow accounts are set up for tobacco sold on Guam.

The Notary Unit. The Notary Unit process new applications for persons who want to become a notary public. This includes reviewing applications and giving notary tests once a month. The tests are prepared and updated by the unit. A notary commission is good for four years. The unit also renews applications for renewals of notary commissions. In addition, the unit investigates and resolves complaints made against a notary, including conducting administrative hearings. Further, the unit reviews requests from the public for the certificate of authority of a notary, reviews the history of the person’s commission and issues such certificates when appropriate.

SOLICITORS DIVISION

The Solicitors Division provides legal services to the agencies, boards, commissions and other instrumentalities of the Executive Branch and writes legal opinions and legal memoranda for the Executive agencies, the Legislature and the Mayors.

The tasks of the Solicitors Division include the following: writing Attorney General opinions and legal memoranda; giving legal advise to agencies either verbally or through written information and guidance; reviewing documents and giving opinions regarding bond issues; drafting, reviewing and approving proposed agency rules and regulations before they go to Governor for introduction to the Legislature; attending public meetings of boards and commissions; assisting in conducting public hearings for agency rules and regulations; drafting and revising standardized forms for use by agencies; acting as agency counsel at administrative hearings; drafting and/or reviewing procurement contracts; assisting agencies with procurements, including reviewing and approving procurement records and contracts as to legality and form; reviewing and approving other

types of contracts (i.e., non-procurement agreements such as inter-agency memoranda of understanding, qualifying certificates, government real property transactions, etc.); reviewing and/or drafting bills or legislation as requested by an agency or required by the Attorney General; coordinating responses to Sunshine Act requests; assisting in administrative matters relative to Commission on Post-Mortem Examiners (the Attorney General has traditionally been chairperson of the Commission).

IMPACT STATEMENT

In order to meet the objectives of the Civil Division, it must have trained and experienced lawyers in a variety of fields as well as highly qualified and experienced support staff.

The Civil Division has very recently been given additional mandates that will require the hiring of experienced attorneys and staff. These new mandates include advising all Executive Branch agencies – including line agencies, autonomous agencies, public corporations and other government entities – during all phases of a procurement of \$500,000 or more, representing GMHA, and representing DMHSA and DISID in the permanent injunction case to bring these agencies in line with federal requirements. The Civil Division is trying to give more direct and immediate legal advice to the various agencies which will be required as the Guam buildup begins and increases.

Public Law 72-30. Public Law 72-30 requires the OAG to act as legal adviser during *all phases* of a solicitation and procurement which is estimated to result in an award of \$500,000 or more. This is a new task for the OAG. The review by the OAG of all stages of a procurement applies to procurements by every Executive Branch agency, autonomous agency, instrumentality or public corporation of the government. One autonomous agency – the Guam Port Authority – has already indicated to the OAG that they believe they will need a full-time attorney for their agency alone in order to insure the timely letting of contracts funded by federal ARRA funds. It is difficult to obtain accurate estimates of the future procurement needs of all government entities, particularly with significant ARRA funds and funds for the military buildup coming to a number of agencies. However, we believe that, at a minimum, based on present circumstances, the OAG will need at least one attorney dedicated solely to reviewing and assisting with line agency procurements and one attorney dedicated to reviewing and assisting with autonomous agency procurements and one legal secretary to assist each of the dedicated attorneys.

GMHA. Another task that has very recently fallen to the Civil Division is handling legal matters for the GMHA (the “hospital”). The hospital has a myriad of legal matters which require regular attention. A private law firm was acting as legal counsel for the hospital. However, very recently the private counsel discontinued its representation of the hospital. Consequently, the OAG is now responsible for handling *all* legal matters involving the hospital. In recent discussions, the hospital administrator has indicated that he would like to have a full-time Assistant Attorney General assigned to the hospital to handle all legal matters except medical malpractice and tort claims for which a private firm would be

retained. Handling the legal matters of the hospital has placed a large burden on the resources of the OAG. Assuming that medical malpractice and tort claims are outsourced to a private law firm, the OAG will require one Assistant Attorney General to be assigned full-time to the hospital to handle all other legal matters. This Assistant Attorney General must be either paid for by the OAG or the GMHA. If the OAG is required to also handle medical malpractice and other tort cases for the hospital, at least one more attorney and a legal secretary would be needed.

DMHSA & DISID. The Department of Mental Health and Substance Abuse (the "DMHSA") and the Department of Integrated Services for Individuals with Disabilities ("DISID") are currently under a permanent injunction which is being enforced by the District Court of Guam in the cases of *J.C., et al. v. Camacho, et al.*, Civil Case No. CIV01-00041 and *R.A. v. Camacho, et al.*, Civil Case No. CIV04-00005. The permanent injunction case was being handled by private counsel, but has been recently transferred to the OAG. Representing the DMHSA and DISID and handling the permanent injunction case will require the services of a full-time attorney dedicated solely to matters involving the DMHSA and DISID.

DPW HIGHWAY DIVISION. The OAG currently has two lawyers and one legal secretary working full-time on Department of Public Works ("DPW") Highway Division legal matters. The lawyers spend most of their time at offices at DPW. Federal funding reimburses the OAG for the three persons. The Attorney General was able to hire the two lawyers and legal secretary based on a reimbursement commitment from the federal program manager for the Highway Division. Initially one lawyer was assigned to the Highway Division. Soon it became clear that the work load required an additional lawyer and a full-time secretary. The fact that two lawyers and one legal secretary are now working exclusively on Highway Division matters gives an idea of the increase in work load for the OAG as the buildup on Guam continues and increases. This should be the model for other government agencies.

Military Buildup. The impact from the military buildup on the Executive Branch boards and agencies will also impact the Civil Litigation and Solicitors Divisions of the OAG. As of mid 2009, the Planning Information Program of the Bureau of Statistics and the Bureau of Statistics and Planning has indicated the population of Guam was 178,287. Applying the increases in population estimated in the Guam Military Relocation Draft EIS/OEIS, Guam can anticipate the following population increases through 2014:

Cumulative Increases
From Current Population Level

2010	6% increase
2011	16.6% increase
2012	24.8% increase
2013	29.5% increase
2014	44.4% increase

These increases will no doubt require a comparable increase in the need for government services and enforcement of regulations and laws which, in turn, will increase the need of the government for legal services. We expect to see comparable increases in the need for legal services regarding procurement; contract review, drafting and assistance; labor matters, including enforcing wage and hour laws; enforcement of the regulatory authority of the Department of Public Health and Social Services (“DPHSS”); giving advice and assistance regarding construction matters to DPW, the PEALS Board and the Contractor’s Licensing Board (“CLB”), including assisting with administrative hearings and investigations; assisting GEPA with its regulatory and licensing functions; assisting the Department of Revenue and Taxation (“DRT”) with its non-tax regulatory responsibilities – assuming DRT will hire its own lawyer to handle tax matters; assisting law enforcement agencies with civil issues, including the Guam Police Department (“GPD”) – this would include assisting GPD’s own lawyer with litigation cases and other matters – assisting DYA, DOC (including representing DOC in the District Court stipulated judgment case with the Department of Justice), the Parole Board and the Post Mortem Commission; assisting the various medical boards and other boards with enforcement of their mandates, advice about the Open Government Law and administrative hearings; assisting the Department of Labor with enforcement of the wage and hour laws; assisting the Department of Agriculture with regulation of aquatic and wildlife resources; assisting the Guam Environmental Protection Agency with its enforcement functions; and enforcing the Guam Deceptive Trade Practices Act, including responding to a wide range of consumer complaints.

In sum, an increase in all government regulatory activities and public works projects comparable to the increase in construction activities and the increase in population is anticipated.

PROGRAM BUDGET PLAN

Funding for the Civil Division will be used to offset personnel and operational costs in the upcoming fiscal years. Based on past experience, the following plan of the Civil Division is calculated to best serve the legal needs of the various government agencies and government boards and commissions. The following personnel needs are set at attorney personnel levels of the Civil Litigation and Solicitors Divisions more than 10 years ago. The Civil Division will again need this level of personnel as the projects and population increases associated with buildup begin.

Lawyer/secretary ratio. Currently the Solicitor Division has seven lawyers and only two legal secretaries – one of the lawyers and one secretary work exclusively for the Highway Division of DPW. Excluding the Highway Division lawyer and secretary, leaves one legal secretary to handle the work of six lawyers in the Solicitor Division. The Litigation Division presently has six lawyers and one secretary (one lawyer works exclusively for the Highway Division of DPW). Again, excluding the Highway Division lawyer, leaves one legal secretary to handle the work of five lawyers. Therefore –

excluding the two lawyers and one legal secretary representing only the DPW Highway Division – the Civil Division currently has a support staff of two legal secretaries for eleven lawyers. A normal lawyer/secretary ratio is one legal secretary for two or no more than three lawyers.

Administrative hearings. The Civil Division must provide hearing officers to handle all administrative appeals to the various agencies, boards and commissions. This means that the Civil Division must have two lawyers at an administrative hearing – a lawyer representing the agency and a lawyer acting as a hearing officer for the board or commission. The demand for administrative hearings will increase as the buildup continues. Due to the problems with conflict of interest allegations, the Civil Division needs a separate hearing officer division to handle administrative hearings. At this time, a hearing officer division could consist of one lawyer who does not represent or advise any agencies or boards.

Plan for agency legal services. In order to provide adequate legal services to the various executive agencies, boards and commissions and to represent the government in all litigation handled by the OAG, the OAG needs sufficient staff to assign lawyers to particular agencies and to have a litigation staff sufficient to adequately handle all lawsuits involving the Executive Branch of the government. Larger agencies with a great deal of legal work need a full-time lawyer assigned with the agency providing an in-house office for the assigned lawyer. Smaller agencies requiring less than full-time legal services would be grouped together according to related functions with one lawyer assigned to the agencies grouped together. The following plan is intended to fulfill the legal needs of the Executive Branch as the military buildup begins and continues to grow on Guam.

Highways: As discussed above, two lawyers and one legal secretary are presently assigned full-time to handle DPW Highway Division projects. The OAG is reimbursed for the positions through federal highway funds. This model is working very well and should be adopted for other agencies.

One solicitor lawyer (reimbursed by federal funds)
One litigation/solicitor lawyer (reimbursed by federal funds)
One legal secretary (reimbursed by federal funds)

Land: One lawyer would handle land matters, advising the agencies and commissions dealing with land matters and filing land registration cases, reviewing private land registration cases, bringing condemnation cases and handling zoning and all other real property matters. Since there would be considerable litigation in handling this case load, a litigation lawyer would be assigned to handle land matters.

One litigation lawyer for:

Department of Land Management;
Ancestral Land Commission;
Guam Land Use Commission
Department of Agriculture

Medical: As mentioned above, One solicitor lawyer assigned full-time to handle GMHA (non-litigation matters).

One litigation lawyer assigned full time to:

DMHSA
DISID.

One solicitor lawyer to handle all other medical related boards and commissions, including:

Medical Board
Allied Health Board
Nurses Board
Dentistry Board
Pharmacy Board
Cosmetology Board
All other related boards and commissions

Environment: One litigation lawyer assigned full-time assigned to GEPA.

Procurement: As mandated by PL 72-30,
One solicitor lawyer assigned full-time to handle all procurement matters for the government line agencies, including

DPW
GSA

One solicitor lawyer assigned full-time to handle procurements by AUTONOMOUS agencies

Contracts: One solicitor lawyer assigned full time to review all contracts, memoranda of understanding, bond documents and other documents that are reviewed by the Attorney General.

Labor: On litigation lawyer would handle all government labor matters, including:

CSC
DOL

AHRD
All labor contract negotiations

DRT: One solicitor lawyer assigned to assist DRT with all its non-tax regulatory matters including:

Banking
Insurance
Securities
DMV
Licensing
ABC and other compliance

Agriculture and Planning: One solicitor lawyer assigned to assist
Dept of Agri.
BSP

Construction: This will become very important with the upcoming military build up.
One litigation lawyer to assist in all construction related matters, including:

DPW
PEALS Board
CLB

Law Enforcement: One litigation lawyer to handle all civil law enforcement issues coming before the Civil Division, including:

GPD (as assistance to GPD's lawyer)
DYA
DOC
Parole Board
Post Mortem Commission

Public Health: One solicitor lawyer assigned full-to enforcement for
DPHSS

Other Regulatory: One solicitor lawyer to assist other agencies,

DOA
DPR
GFD
Workers Compensation
Mayors
Consumer
Other agencies, boards and commissions

Hearing Officer: One litigation lawyer to act as a hearing officer for all government agencies, boards and commissions with administrative hearings

Regular Government Litigation: Experienced litigation lawyers are needed to either bring or defend litigation involving the government and to assist other lawyers representing specific agencies with any agency litigation being handled by the agency attorney. The OAG currently represents the government in eight lawsuits for over \$1 million; in lawsuits over \$300,000; and sixteen government claims over \$300,000; and numerous other cases including the Clean Water Act (landfill) law suit filed by the United States against the government of Guam, the lawsuit against the Department of Corrections filed by the United States, the permanent injunction case against DMHSA and DISID, the district court class action suit against DPW for compliance with the Americans with Disabilities Act.

The litigation case load requires: Four experienced litigation lawyers dedicated exclusive to handling law suits involving the government.

J-011-002

In conclusion, in order to adequately provide full legal assistance and fulfill its current mandates as we move forward with the buildup of Guam, the Civil Division of the OAG needs eleven litigation lawyers, ten solicitor lawyers and a minimum staff of seven legal secretaries.

CHILD SUPPORT COMMENTS TO DEIS

The Child Support Enforcement Division (CSED) is a division within the Office of the Attorney General (OAG). The CSED provides the following services to custodial and non-custodial parents: locating absent parents; establishing paternity; establishing and enforcing orders for child support and medical support; reviewing and modifying court orders of support; enforcing support orders of other states; and collecting and distributing child support payments.

The CSED uses the following tools to enforce child support orders:

- Automatic income withholding
- Intercepting federal and state income tax refunds
- Requiring employers to report new hires
- Suspending driver's and occupational licenses
- Passport denial
- Obtaining contempt of court orders
- Liens and levies on real and personal property

J-011-002

Thank you for your comment.

The EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

- Credit bureau reporting
- Seizing bank accounts

The CSED has a total of 56 employees: 48 support staff and 8 attorneys. The CSED is divided into the following sections: Attorneys, Investigation (includes process officers), Records, Systems, State Disbursement Unit, Accounting, and Administrative Support.

The CSED has an active caseload of approximately 8,000 cases. We serve a total of approximately 7,969 custodial parents, 7,977 non-custodial parents, and 14,000 children. We process approximately 5,500 transactions (checks, EFT's, receipts) per month and disburse approximately \$1,065,000 in child support payments each month. CSED receives an average of 800 telephone calls daily and initiates an average of 400 calls daily to custodial and non-custodial parents, employers, and private attorneys. CSED averages 800 walk-in customers per month in addition to approximately 100 appointments. The Judicial Hearings Division of the Superior Court of Guam holds an average of 500 child support hearings per month. Each investigator and paralegal handles an average of 1,000 cases.

The Child Support Enforcement Division also provides, without charges or fees and at the request of the custodial or non-custodial parent, certifications to the Department of Public Health and Social Services, Guam Housing and Urban Renewal Authority, or financial institutions.

The Access & Visitation (A&V) Unit administered by CSED provides the important service of assisting non-custodial parents to gain access and visitation with their children. The A&V Unit refers non-custodial parents to Inafa Maolek or Erica's House for mediation, supervised or monitored visitation, parenting classes, or neutral drop-off and pick-up arrangements. The goal of A&V Unit is to improve non-custodial parents' access to and visitation with their children. Research has shown that parental contact is related to the payment of child support and that fathers' involvement improves children's development and self-esteem.

The CSED needs additional critical support staff and attorneys. In the last year, the CSED has experienced a turnover of employees. The vacant positions are slow to fill for several reasons: the hiring process is slow and bureaucratic, lack of qualified applicants, or salary is too low. Currently the CSED has a total of 56 employees: 48 support staff and 7 attorneys plus IV-D Director. The attorneys handle a full caseload with a majority of the cases being heard by the Referee of the Judicial Hearing Division (JHD) of the Superior Court. Some cases, however, are heard before the Judges of the Superior Court of Guam (SCOG). There are not enough attorneys to attend hearings at both the JHD and SCOG.

Also, the lack of support staff, mainly investigators and paralegals, has led to a lack of enforcement on some cases. A lack of enforcement of cases results in less collection of child support payments. Not enough support staff also means some child support orders

are not reviewed and adjusted every 3 years resulting in an outdated order which does not keep up with the current cost of living.

The CSED's computer system, also known as the Absent Parent Automated Systems Information (APASI), is in dire need of update and upgrade. It is a transfer system from the State of Texas which was implemented in 1996. Although APASI was fully certified as meeting PRWORA requirements on April 30, 2004, it still has program and database issues. These deficiencies have resulted in a case management backlog, management reporting difficulties, accounting issues, and an overall loss in productivity.

J-011-003

Guam is currently preparing for the military buildup. A review of the Draft EIS shows that the impact to the Child Support Program was not addressed. The estimated increase in population of both military and civilians due to the buildup will have a huge impact on the Child Support Program. According to the Draft EIS, 8,552 Marines and their 9,000 dependents are being relocated from Okinawa (Japan) to Guam. An additional 630 Army personnel and their 950 dependents will be relocated as part of the U.S. Army (Army) Air and Missile Defense Task Force (AMDTF). There is also a transient population of military personnel of about 9,222 who are expected to be in port up to 63 visit days per year with anticipated length of 21 days or less per visit. A fourth group composed of DoD civilian workforce is estimated to be at 1,836. The total proposed population increase is 30,190.

However, the estimated total population increase from off-island that would result from the military buildup is even higher when dependents of DoD civilian workforce and off-island workers and their dependents looking for jobs are taken into consideration.

Project-related construction work is expected to begin in 2010 and reach its peak in 2014. By 2014, the total increase in Guam residents from off-island would be an estimated 79,178 people. These numbers include active duty military and their dependents, civilian military workers and their dependents, off-island construction workers and their dependents, as well as off-island workers and their dependents looking for jobs on Guam.

After 2014, project-related construction and the associated influx of construction workers would decline rapidly because 2014 is the last year that any new construction would begin. By the time construction is completed and military operational spending reaches a steady state, the off-island population increase is projected to level off by 2020 to an estimated 33,608 persons, approximately 58% below the peak level. Table ES-2 of the Draft EIS, pg ES-7 Executive Summary.

2010	11,038
2011	27,835
2012	44,301
2013	52,575
2014	79,178
2015	64,918

J-011-003

Thank you for your comment. It should be noted that the approximate figure of 80,000 represents the maximal population increase over the existing baseline year. It occurs in 2014 when the construction workers from off-island are still there and the military and their dependents arrive. After 2014, the population from the proposed action decreases. By 2017, the increase population reflects the permanent military population, their dependents, civilian federal workers, and the induced (or indirect) population of about 33,000 people. Population density if averaged over the entire Guam land area is expected to increase as a result of the proposed action; however, population densities are likely to be greater in some areas (i.e., Finegayan) and lower in southern Guam. The data used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing levels. It is acknowledged that it is not possible for this analysis to capture all requirements of GovGuam agencies. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service impacts, and provide a more detailed indication of fiscal impacts to GovGuam agencies.

2016	41,919
2017	33,431
2018	33,431
2019	33,608
2020	33,608

Guam's population as of July 2009 was estimated at 178,430. There are approximately 8,000 active child support cases. By the end of 2010, the population will increase by 11,038 to 189,468, a 6.19% increase. By the end of 2014, the peak year, the population will increase to 257,608, a 44.37% increase. At the steady state in 2020, the population is expected to taper off at 212,038, an 18.84% increase from 2009.

Year for	Population	Increase from 2009 pop	Current staff + add'l
2009	178,430	N/A	buildup
2010	189,468	+6.19%	56
2011	206,265	+15.60%	56 + 3
2012	222,731	+24.83%	56 + 8
2013	231,005	+29.47%	56 + 14
2014	257,608	+44.37%	56 + 17
2015	243,348	+36.38%	56 + 25
2016	220,349	+23.49%	56 + 20
2017	211,861	+18.74%	56 + 13
2018	211,861	+18.74%	56 + 10
2019	212,038	+18.84%	56 + 10
2020	212,038	+18.84%	56 + 11

J-011-004

With the anticipated military buildup and increase in civilian contractors and off-island constructions workers and their dependents, the CSED will experience an increase in child support services to be provided and documents to be processed. In order to continue to offer the services it now provides and to prepare for the influx of active duty military and their dependents, civilian military workers and their dependents, off-island construction workers and their dependents as a result of the military buildup, the CSED will need increased staff and resources.

At the beginning of the military buildup in 2010, CSED will need an additional 3 employees (plus 56 currently on staff): 1 child support attorney, 1 child support investigator, and 1 legal clerk.

By the height of the military buildup in 2014, CSED will need an additional 25 employees (plus 56 currently on staff):

- 4 child support attorneys to handle increased caseload
- 4 child support paralegals

J-011-004

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

- 4 child support investigators to handle increased caseload
- 2 accounting technicians for State Disbursement Unit (SDU)
- 2 accounting technicians for Accounting Section
- 2 process servers to handle increase in service of process
- 2 legal secretary
- 2 legal clerks
- 1 telephone operator
- 1 messenger
- 1 computer systems analyst

In addition, CSED will require the following infrastructural needs to accommodate the additional employees in 2014:

- 25 personal computers
- 25 additional communication lines (DISN, T1 lines, telephone lines)
- 14 cubicles for investigators, accounting technicians, computer systems analyst
- 25 desks and chairs
- 10 locked cabinets to store files containing federal tax information
- 2 vehicles for process server

While the population is expected to decrease after the height of the military buildup in 2014 and hit a steady state by 2020, the child support caseload will not necessarily decrease. A child support case, once opened, remains open until a child reaches the age of majority. Therefore, even though the population decreases, the case will remain open and enforceable until the child reaches age 18. So long as a custodial parent and child or non-custodial parent lives here, Guam will continue to enforce the Order.

APASI computer system:

The CSED's APASI computer system is in a vulnerable state. Any further increase to CSED's caseload could cause the system to fail. With the anticipated increase in caseload due to the impending military buildup, CSED must update and upgrade its APASI computer system. The choices are staying with the existing system and designing a new system by evaluating other states' systems, considering a transfer system from another state, or selecting a hybrid system. A new system requires major processes and requires federal approval. The first phase is the Advance Planning Document (APD), followed by the Implementation APD, and full Implementation of a new system.

The total estimated cost of a new system is estimated at \$10 million. Examples of cost of other states' systems are: Hawaii \$50 million, Colorado \$40 million, and South Carolina \$93 million.

The CSED requires additional funding to continue its operations. This will allow us to continue to ensure that the children of Guam receive the financial assistance that they

deserve. With a full staff, the CSED will be able to enforce child support orders which will result in an increase in the collection of child support payments. This helps families become self-sufficient as well as puts money back into the general fund for those children who are receiving public assistance/welfare/TANF.

In addition, once APASI is upgraded and updated, this will result in increased productivity, reduced annual maintenance and operation charges, increased client access to information through a web interface, increased collections through online bill payments, and a comprehensive website which will allow for easy access by parties and employers to case information and new hire reporting by employers.

Funding Requirements:

All child support-related expenditures are subject to matching funds by the Federal Office of Child Support Enforcement at the rate of 66% against 34% local funds.

Despite making remarkable progress in CSED operations, the following issues have arisen requiring further follow-up:

- CSED needs a point of contact (preferably a JAG) with email and phone numbers.
- CSED needs assistance with service of process of military or civilian personnel on base, better cooperation among branches of service and CSED.
- CSED needs assistance in how to read a Leave and Earning Statement (LES), especially where there is extraordinary temporary pay or benefits involved, so we can accurately determine child support obligation.
- CSED needs accurate income information from reporting systems; more cooperation from the military in getting wage information.
- CSED needs assistance in getting children health insurance cards and agent letters for custodial parents (CPs) to get children on base for health care.
- CSED needs training on locate information for military personnel when they leave Guam.
- If there is a population increase of between 15-45% due to military buildup, then CSED should expect that we will have an increase in new cases by the same percentage or more.
- CSED needs to know what can we ask the military to do if non-custodial parents (NCPs) do not comply (they are bound by a code of conduct but at times the superior officers may not be aware of their bad behavior).

FAMILY DIVISION COMMENTS TO DEIS

The Family Division is a separate division within the Office of the Attorney General (OAG) that was re-established in 2007 by the current Attorney General. The Family

J-011-005

Thank you for your comment. Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in Volume 7 of the FEIS.

J-011-005

Division, which handles all matters pertaining to juveniles in our community, including Child Protective Services cases, was once merged with the Prosecution Division of the OAG. Due to concerns regarding the propriety of juvenile special proceedings and juvenile delinquency matters, as well as other matters that appeared before the Family Court of the Superior Court of Guam, being handled by prosecutors of adult offenders, and especially with regard to the delicate issues of confidentiality of juvenile adjudications, the Family Division now functions as a separate and distinct division apart from the Prosecution Division with staff designated solely to handle matters within the Family Division.

The Family Division is the smallest division of the OAG and is comprised of six (6) personnel, which includes four (4) attorneys, one (1) legal secretary, and one (1) legal clerk, but the division continues to rely upon the administrative and other resources of the Prosecution Division to fulfill its mandates as the Family Division lacks the adequate professional and support personnel needed given its significant workload and caseload.

The Family Division handles all matters relating to juveniles in our community including juvenile delinquency matters, which are cases involving juveniles who commit criminal acts that are non-drug and alcohol related, and drug and alcohol related cases. The Family Division also represents Child Protective Services in cases brought to court involving children that have been subjected to abuse and neglect by their parents or caretakers, as well as cases involving juveniles who are deemed "beyond control" of their parents or caretaker. In addition to handling juvenile court proceedings, the Family Division also re-integrated the Pre-Adjudicatory Diversionary Program (PADP) in 2007. The PADP is a prevention program and unlike court cases, it is an informal process that allows for the Family Division attorneys to divert particular cases into the program, i.e., juveniles who are first-time offenders that have committed crimes deemed as petty misdemeanor offenses.

IMPACT STATEMENT:

For Budget Year 2010, the Family Division hopes to add to its staffing pattern necessary and critical positions in order to continue to effectively handle the juvenile issues and challenges that the division has faced in past years and continues to face. The Family Division would require the following additional staffing positions: one (1) Assistant Attorney General, Attorney II position; one (1) investigator position; one (1) legal secretary position; one (1) process server position; and one (1) paralegal position.

As in the previous years, the Family Division continues to maximize the handling and charging out of all juvenile matters. The number of juvenile delinquency cases filed by our division is dependant upon the number of police reports that are received by the OAG. For 2009, the Family Division filed a total 504 cases. This year, the Family Division received about 435 Guam Police Department reports. From those reports, the Family Division filed 466 juvenile cases, which includes 141 drug or alcohol related cases, 276 juvenile delinquency cases, and 49 beyond control cases. The Family Division

also filed 38 Petitions for Persons In Need of Services, which are cases that stem from the Child Protective Services Referrals, and deals with minors who have been abused or neglected. The Family Division was able to divert 15 juveniles into our Pre-Adjudicatory Diversionary Program.

The handling of juvenile proceedings/matters are fast paced and fast tracked as the laws provide for a much shorter time frame than what is provided in adult criminal cases, in so far as the charging and disposition of cases. This is due to the sensitive nature of juvenile matters, as well as the need to provide immediate attention and services to juveniles for rehabilitative purposes, prevention and to avoid recidivism. As a result, the Family Division attorneys and staff are challenged with the need to charge expeditiously and on a daily basis to ensure that the juvenile matters are brought before the Family Court judges in a timely manner and as quickly as possible.

In the past year, the Family Division encountered several tragic events that brought shock to our community. The Family Division was faced with handling the issues that were brought forth in addressing the death of a baby girl. Our division also dealt with providing services to the newborn baby that was left abandoned. In addition, the Family Division was faced with other cases that dealt with extreme and severe abuse and neglect of our children.

J-011-006

The number one priority of the Family Division is to ensure that our youth are provided with a safe and nurturing environment free from danger and harm. Aside from court cases, the Family Division has taken a very active approach in educating the community by providing countless presentations to schools, government and non-government agencies, and social/civic organizations, and participating in community outreach activities. These are just a few of the many preventive efforts made by the Family Division. The Family Division intends to engage in more prevention measures taken in order to educate the community about the crimes that occur on our island, recognition of the problems we face, and to stress the consequences that can occur as a result of, and most especially in light of, the significant population increase given the anticipated influx of military personnel and civilians in the upcoming years.

The Family Division continues to face many new challenges, and one recurring challenge that the OAG as a whole has faced throughout the years is the shortage of necessary and critical staff. As our island prepares for the influx of military and civilian personnel in the upcoming years, the Family Division continues to make strides in ensuring that we are equipped with the adequate amount of personnel to handle the rise in criminal activities that will occur as a result of the increase in population to our community. There is no question that our community will suffer a greater amount of criminal activity regardless of any type of preventive or mitigating measures. The Family Division hopes to increase its personnel to ensure that the division is adequately staffed in order to continue to provide diligent, quality and efficient services to our community.

J-011-006

Thank you for your comment. The EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

Public comments, such as yours, on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

J-011-006

Based upon the Draft Environmental Impact Statement (DEIS), Socioeconomic Impact Assessment Study, prepared in November 2009, the estimated population increase from off-island that would result from the proposed military action would be about 78,178, which is the peak level. The report indicates that the peak year of population change will occur in the year 2014, since the peak in construction activities and expenditures coincides with the arrival of the Marines and their families in this year. However, a population increase is expected to begin in 2010 because of the need to bring in civilian people for project-related construction work in preparation of the Marines, and their families arrival is expected to begin during this year. The report states that in 2014, upon completion of the construction activities, the community should see a decline in the population build-up of about 58% below the peak level, which the report estimates that the population increase of 78,178 would drop to about 53,786 (less 30,209 construction hired civilians). (Table ES-1 of the DEIS).

The DEIS does not dispute that the build-up of military and civilian personnel will greatly impact the community in so far as a rise in criminal activity and serious social disorder is concerned. The "Socioeconomic Impact Assessment Study", Section 4.5.1 and Section 16.2.2.4 discuss the possible impact on crime and serious social disorder that will result from the military buildup during both the construction phase and the operations phases. The report indicates that there will be a rise in overall crime, which will include an increase in prostitution, an increase in sexual assaults, an increase in drug use and substance abuse and alcohol related offenses, an increase in crimes against women and children, and an increase in military-civilian fights.

Section 4.4.4 of the DEIS, Socioeconomic Impact Assessment Study, pertained to the "Public Safety Service Impact". This section provided an analysis on the impact that the military build-up and increased population would have to selected Government of Guam safety agencies to include the Guam Police Department, the Guam Fire Department, and the Guam Department of Youth Affairs. The report indicated that in calculating the figures, several key construction component assumptions were used in the analysis of impacts, as well as the source or rationale for these assumptions. The OAG believes that such assumptions noted in the report and outlined in Tables 4.4-52 and 4.4-53 should be applicable to an analysis of the OAG's need to increase its staffing pattern.

Table 4.4-54 Impact on Public Safety Service Population Summary (Unconstrained) indicates that the current population serviced by the Guam Police Department is 160,797, and that the department will service 100% of the population increase. The OAG is the only Government of Guam legal entity that services our island and the island's various government agencies. It can be assumed that the OAG, in general, will also service 100% of the population increase on the island, which would mean that the percentage increase for the OAG would be at about 49% during the peak year (2014) and then it would drop to about 21% after the construction related-projects have been completed thereafter.

J-011-007

More relevant to the Family Division are the proposed figures of the Guam Department of Youth Affairs (GDYA), as both the Family Division and the GDYA service youth, and all of the youth currently in custody at the GDYA are youth that have cases with the OAG or are confined as a result of an open case with the Family Division. Based on Tables 4.4-52 and Table 16.2-43, the ratio of GDYA Social Workers is 1:316. The report notes on Table 4.4-54 and Table 16.2-45 that the current service population of the GDYA is 24,987, and that in the peak year of 2014, GDYA will service an additional 10,547, which would result in about a 42% rise in the service population. The table reports that upon completion of the construction related-projects, the steady population would drop about 6,328, which would be a 25% increase in the service population. Bear in mind that the 2009 statistics provided by the OAG are current cases that were filed in 2009, and that the service population of the Family Division is higher than that number as this number does not include the prior cases filed in the previous years that remain open and active. This number also does not include the cases wherein the Family Division has intervened with the Courts to take action, such as Beyond Control cases filed by the Probation Office, and Petitions for Persons In Need of Services filed by other private attorneys appointed in court as Guardians Ad Litem in Truancy cases. The figures provided in the Tables for GDYA also do not include the number of cases that the Family Division handles with respect to its Child Protective Services cases, and therefore the service population of the Family Division will be a higher number than what is stated in the reports.

J-011-008

Tables 4.4-57 (unconstrained) and 4.4-68 (constrained) provide a break down by year as to the proposed population increase for the GDYA. Table 4.4-59 provides the required number of staffing increase resulting in the increased population, which indicates that GDYA by 2014 should have an increase in staffing pattern of about 33 personnel, which upon completion of the construction related-projects should drop to about 20 personnel. And finally, Table 4.4-63 shows a breakdown by year of the number of staff increase based on the population increase. Looking at the combined total impact, the chart provides that for year 2010 - 4 additional staff is necessary; year 2011 - 10 additional staff is necessary; year 2012 - 15 additional staff is necessary, year 2013 - 17 additional staff is necessary; year 2014 - 33 additional staff is necessary; year 2015 - 30 additional staff is necessary; year 2016 - 22 additional staff is necessary; year 2017 - 20 additional staff is necessary; year 2018 - 20 additional staff is necessary; year 2019 - 20 additional staff is necessary; and year 2020 - 20 additional staff is necessary. (See also Table 16.2-46.)

As a result of the increase in service population and the need for the OAG to require an increase in its staffing, the OAG and each of its divisions would also require additional office space and equipment (e.g., tables, chairs, office equipment, etc.). The current office space at the OAG is already a tight fit with its current staffing, and the need for a bigger office area will become critical to accommodate the additional staffing to avoid further overcrowding and inadequate space, which if left unaddressed would become a safety hazard concern.

J-011-007

Thank you for your comment. Please see response to the comment immediately above. The data used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing levels. It is acknowledged that it is not possible for this analysis to capture all requirements of GovGuam agencies. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service fluctuations, and provide a more detailed indication of fiscal impacts especially to GovGuam agencies.

J-011-008

Thank you for your comment. Please see response the comments immediately above.

J-011-008

Based upon Table 4.4-54 and Table 16.2-45, which provide the current service population of the GDYA and the proposed increase in the service population as a result of the military buildup, it can be assumed that such projected percentages would equally apply to the Family Division. The table indicated that the service population would rise to about 42% during the peak time, and then drop to about 25% during the steady period. Based on those percentages, and the current staffing pattern of the Family Division, the number of additional staff required to ensure that services remain steady is about 3 additional staff, at the peak period, and then 2 additional staff during the steady period.

Additional staff will also be necessary for the Family Division with respect to cases wherein the Family Division provides legal representation to the Child Protective Services Agency in handling matters relating to abuse and neglected children. In this past year and currently, the Family Division has seen a rise in the number of Permanency Hearings brought relating to these matters. Unfortunately, the increase in the number of permanency and need to go into Permanency is not a good sign as to the economic status of some families on Guam. Permanency hearings mean that the reunification of children with their families can no longer occur, and it is designed to make determinations as to the permanent placement of children who have been displaced from their families as a result of the neglect or abuse, and as a result of the families failure to comply with the necessary service plans and treatments that would allow for reunification. This year, the Family Division is already working on about 6 permanency hearings, and expects that as the economy continues to suffer, these cases and hearings will increase.

Because the service population derived from the GDYA used by the Family Division only accounts for the juveniles within the delinquency system, it is not an accurate reflection of the service population of the Family Division. The figures do not account for services provided by the Family Division in cases wherein the Family Division represents the Child Protective Services Agency, in handling cases of abuse and neglected children. With that said, the Family Division can expect that the service population will be a greater number. In cases that address children who have been subjected to abuse and neglect, the Family Division services not only the children, but the family as a whole. It would be proper to assume that the service population may double from that which is provided by the GDYA requiring that an additional staff increase of 3 more would be required.

J-011-009

Based upon the DEIS report, the total number of new staff personnel that the Family Division would require as a result of the military buildup would be 6 - this figure does not include the investigators and victim advocates that have been assigned to Family Division, which would require an additional 2 positions- bringing the total number of required new personnel to 8. From this number, there should be three (3) additional attorneys, one (1) additional legal secretary, one (1) additional legal clerk, and one (1) additional process server. Aside from the current staff designated to the Family Division, the Family Division indicated that it has heavily relied upon the support and assistance of the Investigative Unit, as well as the Victim Witness Ayuda Services Unit (victim advocates) in performing the functions of the division. Because of the increase amount

J-011-009

Thank you for your comment. The data used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing levels for interviewed agencies. It is acknowledged that it is not possible for this analysis to capture all requirements of GovGuam agencies. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service fluctuations, professional and support staff requirements, and provide a more detailed indication of fiscal impacts to GovGuam agencies.

J-011-009

of staff required in the Family Division, it is apparent that the use of Investigators and Victim Advocates will also increase with the increase in caseload. As a result, the Family Division will also require at least one (1) additional investigator position and one (1) additional victim advocate position to be designated to the Family Division.

PROGRAM BUDGET PLAN:

Funding for the Family Division will be used to offset personnel and operational costs in the upcoming fiscal years.

GOALS:

To vigorously represent the government in juvenile special proceedings, juvenile delinquency cases, and other matters before the Family Court of the Superior Court of Guam, as well as vigorously charge out all juvenile matters referred to the Office by the Guam Police Department and Child Protective Services;

To vigorously represent the Child Protective Services in child abuse and neglect cases brought before the Family Court of the Superior Court of Guam;

To adequately staff and fund personnel and provide training to juvenile staff to update their skills and knowledge;

To establish and consistently conduct community outreach activities and participation in educational and social meetings dealing with juvenile issues;

To establish outreach activities and other programs that are designed to prevent and minimize crimes committed by juveniles, as well as crimes that are committed against juveniles (i.e. child abuse and neglect); and

To promote legislation that will significantly impact juvenile activities and other matters relevant to the mandates of the Division.

OBJECTIVES:

Obtain adequate staffing of experienced attorneys and support staff, to include an investigator, school resource officer, victim advocate and administrative support staff, to service the particular mandates of the Division, especially because of the expected increase in criminal activity that will result from the population increase due to the military build-up in the upcoming years;

Develop and implement a case management tool to better track cases, dispositions, and other information and that will generate reports to assist the efficient and effective operations of the Family Division.

J-011-010

Thank you for your comment. Please see the response to comments immediately above.

Develop and implement consistent outreach events designed to provide the community with information on juvenile issues and the prevention of juvenile offenses.

PROSECUTION DIVISION COMMENTS TO DEIS

The Attorney General of Guam is the sole Public Prosecutor for Guam with “cognizance over all matters pertaining to public prosecution, including the prosecution of any public officials” See 5 G.C.A. §30104.

Within the Office of the Attorney General is the Prosecution Division which is charged with the primary responsibility of prosecuting all adult felony, misdemeanor and traffic offenses referred by law enforcement authorities as well as those offenses independently investigated by the Prosecution Division. Among the types of cases independently investigated by the division are offenses such as white collar cases, government corruption and public integrity crimes. In addition, the division also handles all criminal appeals. In the course of prosecuting cases, the division maintains close collaboration with local and federal law enforcement officers and attorneys.

The Prosecution Division also provides criminal case disposition reports and clearances, to a myriad of local and federal agencies, employers and others (IRS, ABC board, armed forces recruiters, FBI, NCIS, OSI, etc.)

J-011-010

The Prosecution Division of the Office of the Attorney General (OAG) is currently staffed with 15 prosecutors, a support staff of 16, a victim’s advocate unit with 9 advocates and 12 investigators. These numbers are inadequate to handle the existing number of cases referred by the various Law Enforcement agencies¹ on Guam and will surely be inadequate to handle the anticipated increased caseload during and after the build-up.

In 2009, Guam’s population has been conservatively estimated to be 154,805. In 2009, the Prosecution Division received 3,822 case referrals from those Law Enforcement agencies. During the same time period, the Prosecution Division was able to charge out 2,017 cases using its existing resources. A review of the Draft Socioeconomic Impact Assessment Study indicates that by 2014, a mere 5 years in the future, the island’s population will have grown by more than 51% to 233,983. A look at the figures projected by the DEIS indicates that there will be an initial increase in calendar year 2010 of 11,038. Between December 2009 and the end of 2011 that number will have increased by 40% to 27,835. Another increase will bring that number to 44, 301 by the end of

¹ The Prosecution Division received cases from the Guam Police Department, Guam Customs and Quarantine, the Conservation Officers of the Department of Agriculture, the Park Rangers Division of the Department of Parks and Recreation, the Guam Fire Department, the Guam International Airport Police Department, the Criminal Investigation Division and the Regulatory Compliance Divisions of the Department of Revenue and Taxation, the Department of Correction, the Department of Youth Affairs and the Guam Port Authority Police Department.

J-011-010

2012. Finally, before the end of the build-up, there will be an additional 79,178 persons added to the 2009 population bringing the total population in 2014 to 233,983.

Although I realize there is no "straight-line" correlation, it is still reasonable to assume that with each increase in population there will be a corresponding increase in the Prosecution Division's caseload. Therefore, in the first year, with a projected increase in population to 170,843 for a 9.4% increase, there will be a need to add one additional attorney, support staff, advocate and investigator to handle the increase in caseload attributable to the build-up. By the end of the second year (2011) there will be nearly 17,000 additional residents added to the current 154,805. This will require an additional prosecutor, investigator and staff person. By the height of the build-up in 2014, the island will experience a population of 79,148 and, using that projection, the Prosecution Division will be in need of 10 additional prosecutors, 8 additional investigators, 5 additional advocates and an additional 10 support staff.

An additional factor is the anticipated increase in the need for additional judges. The DEIS anticipates that there will be one additional judge by 2012 and increasing to 3 additional judges by 2014 needed to service the increase in population attributable to the build-up. Those judges will have calendars which require the presence of prosecutors in each of those courts on a daily basis.

While in the years following the height of the build-up in 2014 the needs might decrease, they will never return to their pre 2010 levels. The DEIS estimates that in 2020 there will still be an increase of 33,608 residents on Guam over 2009 levels. Some of these positions created will be lost through attrition or absorption into locally funded positions. It is unlikely that there will be an excess of staff once the decrease in population directly attributable to the build-up begins.

The addition of the extra personnel is not without difficulty. At the present time, the Prosecution Division is housed on the 5th and 1st floors of the building housing the OAG. There is no space in the area allocated on either floor to house additional attorneys or investigators. There are no desks, computers, telephones, available for any additional staff beyond what exists today to support any additional personnel. All of this would have to be obtained to enable the Prosecution Division to function at an acceptable level. The costs to the Government of Guam will be substantial as the current salary range for an attorney is between \$42,000 and \$85,000, excluding benefits, while the costs for support staff, investigators and office equipment will also increase.



GHURA

Guam Housing and Urban Renewal Authority
Aturidat Ginima³ Yan Rinueban Siudat Guahan
117 Bien Venida Avenue, Strajans, Guam 96910
Phone: (671) 477-9851 · Fax: (671) 300-7565 · TTY: (671) 472-3701



February 17, 2010

Joint Guam Program Office
c/o Naval Facilities Engineering Command, Pacific
Attn: Guam Program Management Office
258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96860

Re: Draft Environmental Impact Statement / Overseas Environmental Impact Statement
(DEIS/OEIS) – Guam and Commonwealth of the Northern Marianas Islands (CNMI)
Military Relocation.

Gentlemen:

Guam Housing & Urban Renewal Authority (GHURA), a Government of Guam Agency, serves the Territory of Guam residents, providing affordable housing through the various program sponsored by the U. S. Department of Housing and Urban Development (HUD). These include the Housing Choice Voucher (HCV) program and the Public Housing program. Additionally, our agency administers the Community Development Block Grant program (CDBG), the Housing Investment Partnership program, and is the designated finance agency to administer the Low-Income Housing Tax Credit program (LIHTC).

Our agency is submitting the attached comments on the Draft Environmental Impact Statement / Overseas Environmental Impact Statement (DEIS/OEIS) for the Guam & CNMI Military Relocation in compliance with the National Environmental Policy Act (NEPA), on the proposed actions.

On behalf of the U.S. Department of Defense, the Department of the Navy is proposing the following actions:

1. *Marine Corps.* (a) Develop and construct facilities and infrastructure to support approximately 8,600 Marines and their 9,000 dependents relocated from Okinawa (Japan) to Guam. (b) Develop and construct facilities and infrastructure to support training and operations on Guam and Tinian (CNMI) for the relocated Marines.
2. *Navy.* Construct a new deep-draft wharf with shoreline infrastructure improvements creating the capability in Apra Harbor, Guam to support a transient nuclear powered aircraft carrier.
3. *Army.* Develop facilities and infrastructure on Guam to support relocating approximately 600 military personnel and their 900 dependents to establish and operate an Army Air Missile Defense Task Force (AMDTF).

GHURA does not discriminate against persons with disabilities.
The Chief Planner has been designated as Section 504 Coordinator.
The Coordinator can be contacted at the above address and telephone numbers.



While we understand the purpose to relocate the U.S. Military forces is to meet international agreements, treaty requirements, and to fulfill U.S. national security policy in the Western Pacific Region, the proposed actions are far reaching. environmentally, economically, socially and culturally, to Guam and the neighboring islands in the region.

J-012-001

This past year, GHURA had sanctioned the Guam Comprehensive Housing Study 2009, to provide necessary information for the upcoming Military Relocation. The study was completed and released in August 2009 and provided the necessary information to assess, evaluate and forecast the housing market on Guam. Included with the study, is a dynamic, interactive Housing Model that can be used to generate forecast of housing need for Guam. While the focus was to study Guam's housing situation in general, the study considered and developed forecasts for the proposed military relocation and expansion on Guam. We strongly recommend the full application and inclusion of the Guam Comprehensive Housing Study 2009 into the DEIS for review, evaluation and implementation for the proposed actions and final conclusion and mitigation in the FEIS – Appendices. We have provided a copy of the Guam Comprehensive Housing Study 2009 for your review.

J-012-002

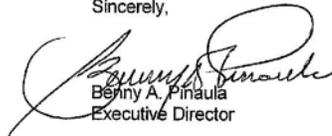
We are very concerned that the impacts of the upcoming Military relocation will have a dramatic effect on the civilian housing market. Moreover, proposed actions on the DEIS indicates no mitigation measures in relation to civilian housing market in both pre- and post-buildup period.

J-012-003

It is therefore imperative that the Department of Defense and the Navy fully address the risks and impacts of the Guam & CNMI Military relocation. We have reviewed the DEIS and have concluded that the statement is inadequate in its research, evaluation, and mitigating conclusions to fully address the implications of the proposed actions. The attached comments are intended to assist the Department of Defense with the development of the Final Environmental Impact Statement (FEIS) that will result in a NEPA decision document that adequately assesses the impacts associated with the U.S. Military relocation, and assures compliance with both the letter and spirit of NEPA.

Thank you for the opportunity to participate in the DEIS review process.

Sincerely,



Benny A. Pinaula
Executive Director

J-012-001

Thank you for your comment. The GHURA study has been reviewed. The study does not apply assumptions that are similar to the parameters of the proposed action, which are identified in Volume 1, Chapter 2 of the DEIS. Since the study does not conform to the project description, it will not be included in the EIS.

J-012-002

Thank you for your comment. The Draft EIS anticipates that military housing would be built within the main cantonment area. It is anticipated that the majority of Marine families would rent units in the military housing and generally would not compete with Guam residents for available housing units. After the construction period, housing and rental prices could decline because the construction labor force (not including the H2B who will live in dormitory type quarters) would leave Guam. Civilian military workers may vie for Guam housing; however, residential housing needed for these long-term workers would likely be about 3,200 units (maximal) by 2020 (Socioeconomic Impact Assessment Study [SIAS], Table ES-3, page v).

J-012-003

Thank you for your comment. Your comments and participation are important in the EIS process of the proposed military relocation. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

DEIS
REVIEW COMMENTS SHEET

No.	Vol.	Chpt.	Page	Line To/From	Comment	Commenter (Last Name)	Agency/Org.
J-012-004							
1	II	16	12		"As of the 2000 Census there were approximately 48,000 housing units on Guam". Current housing stock is 57,673 (Guam Comprehensive Housing Study 2009), a 9,673 difference in the number of units. The DEIS is using dated information that will understate findings. Recommend that housing data should be updated in the FEIS utilizing the Guam Comprehensive Housing Study 2009.	Villanueva, Caesar	GHJRA
2	II	16	57		"During the operational phase, all marines and their dependents will be housed on base." ; Is this a realistic evaluation by the military ? Historic data indicates 20 - 24% military personnel opt for off-base housing. If this holds true, an additional 1,600 housing units are needed in housing stock for off-base housing. Otherwise, a strict mandate for military personnel should be enforced to reside on-base during the first 4 years (2010 - 2014) of the military relocation and then rescinded after the post-construction phase (2015 - 2020) when a housing surplus is projected.	Villanueva, Caesar	GHJRA
3	II	16	58		"Civilian housing demand and supply impacts were found to be significant"; No mitigation recommended or stated to address the civilian housing deficit. Housing market forces will not respond appropriately to civilian housing demand. This is a "Significant Impact" that the DEIS is deafeningly silent. It is a major concern that DoD has no mitigation response or recommendations for this "significant impact" not to be addressed by the proponents of these actions. We request DoD to provide information and data on similar proposed actions by the U.S. Military, and successful mitigation alternatives that are not stated in the DEIS.	Villanueva, Caesar	GHJRA
4	II	16		16.2 -24	"9,431 units needed by 2014. 2,959 by 2020. (Unconstrained) compared to Vol. 9, Appendix F - SIAS page 6 Executive Summary indicates 11,893 units needed. 3,205 by 2020." These discrepancies appear throughout the document. Recommend that housing data should be updated in the FEIS utilizing the Guam Comprehensive Housing Study 2009.	Villanueva, Caesar	GHJRA
5		ES	ES-6	Tbl. ES-2	2014 - 16,988 (indirect/induced off-island workers (non-DoD). With the DEIS indicating that housing units needed are either 9,431 or 11,893 (SIAS) respectively, the number of units should reflect a similar amount of units needed by the immigrating off-island workers who will be seeking civilian housing units.	Duenas, Mike	GHJRA

J-012-004

Thank you for your comment. The current information was not available to meet the deadline for the completion of the DEIS. The FEIS has been revised to reflect the newest information on housing units on Guam.

The discrepancy you note is because Volume 2 only represents impacts from the Marine action while Appendix F (the Socioeconomic Impact Assessment Study [SIAS]) considers all actions to include Army, Navy and other related actions.

The DEIS anticipates that military housing would be built within the main cantonment area. It is anticipated that the majority of Marine families would rent units in the military housing and generally would not compete with Guam residents for available housing units. After the construction period, housing and rental prices could decline because the construction labor force (not including the H2B who will live in dormitory type quarters) would leave Guam. Civilian military workers may vie for Guam housing; however, residential housing needed for these long-term workers would likely be about 3,200 units (maximal) by 2020 (SIAS, Table ES-3, page v). During the DEIS a number of mitigation measures were recommended; an expanded discussion on mitigation measures has been provided in the FEIS.

DEIS
REVIEW COMMENTS SHEET

J-012-005

6	X	Ap. F	2.2.4.2	"Limited Housing for New Workers" - Housing for H-2B may be provided "by law" but it is not mandated that foreign workers are required to reside in designated "workforce housing" sites. Workers that opt to reside outside "workforce housing" sites will aggravate an already stressed housing supply shortage (i.e., affordable housing). DoD contractors should include in their employee agreements that upon hire, employees will reside at a designated workforce housing site provided by the contractor/employer.	Villanueva, Caesar	GHURA
7		16	57	"During the operational phase, all marines and their dependents will be housed on base." - Verification is needed with this statement. Living in Hawaii, I experienced rental increases from \$800. to \$1,400. a month due to military personnel using their housing allowances to rent off-base, which forced me to move and rent a unit owned by my relative. If it wasn't for my relative, I would be homeless.	Cobb, Daniel	CLIG (CMTF)
8	X	4	22	"DoD would rely on construction contractors, who have significant expertise in areas of workforce housing and logistics, to support temporary foreign worker housing requirements." - Adequate funding for DoD contractors should be provided by DoD to incorporate cost for workforce housing. Additionally, developers of workforce housing and the accompanying facilities must provide competitive and affordable pricing to the DoD contractors to house H2B workers. Otherwise, alternative options (i.e., apartment units & complexes / housing rentals) will be considered by the DoD contractor, which will aggravate a stressed housing supply shortage.	Villanueva, Caesar	GHURA
9	X	App. F ; Ch.4	20	"It is unlikely that construction of new housing will fully respond to the demand to eliminate the housing deficit." - This statement reflects a major concern regarding the proposed actions on the DEIS. A housing shortage is forecasted during the first 4 years of the proposed actions (2010 - 2014). This will have a dramatic effect on affordable housing, low-income families, and the recipients of the services our agency provides. "The unmet demand, even among GHURA's low and moderate-income families will be very high during the buildup phase as new residents arrive and vie for housing at the lower and middle levels of the market" (Guam Comprehensive Housing Study 2009 - page 58) We recommend the timelines of the proposed actions be extended to an additional (a) years to allow market forces to reset accordingly with gradual and sustained development.	Villanueva, Caesar	GHURA

J-012-005

Thank you for your comments. Many of your specific comments on housing have been addressed in our responses to your earlier comments.

Workforce housing would be provided by the contractors as described in Volume 2, Chapter 16, "Socioeconomics and General Services." DoD would not provide workforce housing, but design/construction contracts would require the contractor to accommodate the workforce in accordance with specified health and safety standards. Various proposals are being developed by potential contractors in anticipation of winning a contract. The timing and location are unknown for construction and/or renovation of housing to accommodate the construction workforce, but it is possible that some of the workforce housing projects would begin independently of DoD's Record of Decision.

There are no plans to allow contractors to locate workforce housing on DoD-controlled land. Therefore, it is anticipated that should workforce housing needs require the construction of new housing, such workforce housing would be located on either private or Government of Guam lands. In either instance Guam officials would control the underlying land use and permit decisions associated with the siting of such housing. DoD would work with Government of Guam land use and natural resource officials to identify any contractor plans or efforts to construct workforce housing and DOD shall ensure that contractors are informed of their responsibilities to comply with Government of Guam land use restrictions. In particular, the Guam Land Use Commission recently issued GLUC 2009-1 which specifically addresses the issue of zoning for workforce housing.

The provision of worker housing will be part of the selection criteria for contractor proposals to DoD.

DEIS
REVIEW COMMENTS SHEET

J-012-006

10	X	App. F; Ch.4	21	"If sufficient housing is not supplied, this could lead to: Crowding of housing (more persons per unit); Construction of illegal (non-permitted) housing; illegal rentals; Homelessness. - As indicated in the SIAS (Vol.IX; App.F; Chpt. 4; pg. 20), sufficient housing will be not be supplied, therefore the aforementioned conditions will be in place. We request DoD to support our efforts for additional funding from HUD to provide for community development projects and affordable housing programs to prepare for effects the proposed actions of the military relocation and buildup will bring to the region in relation to the socioeconomic impacts and housing.	Villanueva, Caesar	GHURA
11	X	App. F; Ch.4	20	"During the construction period, since large amounts of materials will be used for military base construction, building materials for other projects such as civilian housing will be in short supply." "Labor supply is also expected to be an issue. The requirement for construction workers to build civilian housing is an increment above and beyond labor demands." - The cost to build, purchase, or rent housing units will dramatically increase due to unmet demand in housing stock. Additionally, competition between contractors to hire and/or retain a workforce as well as a shortage in raw building materials (i.e., aggregate, cement, etc.,) will contribute to cost increases. Low to moderate-income families will not be able to afford to build, purchase, or rent a home. Timelines expressed on the proposed actions should be reconsidered and adjusted to alleviate the stress caused by a compressed (4) year buildup/construction period (2010 - 2014). An additional 3 to 4 years for the proposed buildup will reduce the immediate need for civilian housing, the availability of a large, skilled, labor force as well as raw building materials. The housing market will also respond and adjust accordingly with gradual and sustained development.	Villanueva, Caesar	GHURA
12	X	App. F; Ch.4	11	"The average FTE salary for jobs related to the military operation phase (\$40,000) can be compared to the 2007 Guam FTE salary of \$28,150." - The difference in FTE salary in civilian military jobs compared to Guam FTE will cause a migration of employees from local employment to civil service employment. The DEIS indicates Guam residents to capture approximately 3200 - 2700 (unconstrained scenario) civil service jobs during and after the construction phase. The Government of Guam as well as local employers are expected to realize a loss in skilled, qualified workforce to civil service employment. To address the possibility of the loss of existing staff, GHURA will pursue future employment of skilled, qualified, past employees that have retired or have pursued other employment opportunities and desire to return to Government of Guam service.	Pinsula, Benny	GHURA

J-012-006

Thank you for your comments and recommended mitigation measures. The DoD construction on Guam could affect the availability and cost of building supplies for other developments. This is dependent on the amount of materials that can be brought in and processed by the Port, the demand for building materials and labor, and many other factors. Also, the demand for labor, especially construction workers and skilled workers typically results in higher wages being paid. The FEIS has been revised to discuss these issues.

The Joint Guam Program Office (JGPO) has been working with and will continue to work with local and federal agencies to determine where funding can be supported. This has been and will continue to be an ongoing process and is exacerbated by the current worldwide economic crises. It is noted that, DoD funds are focused on the military and defense needs of the U.S., so JGPO may find that other funding alternatives must also be put into place to avoid and/or minimize impacts to the government of Guam. Where possible and appropriate, JGPO and/or DoD will support grants, loans, and other funds that focuses on improvements that are within the objectives of the sponsoring federal agency.

DEIS
REVIEW COMMENTS SHEET

J-012-007

13	I	16	13	16. 1-16	"2000 Census Housing Characteristics for Guam by Municipalities and Region." - The subject move for the small size of the island of Guam to use 10 years old information to make sound decision and/or picture of Guam's economy/ environment. This military buildup on Guam will bring both negative and positive socioeconomic impacts not only for Guam, but also for its small neighboring island nations, hence, a very careful planning process is in high demand. I agree with those requesting the push back of reviewing / commenting period of the EIS/OEIS documents. I would also want the the leaders to make a case for Guam to rush up the result of the needed housing and population information from the 2010 Housing & Population Census to be used to replace the 10 years old information used in the EIS/OEIS documents. The 2010 Census information must establish a yearly update on needed housing characteristics and other socioeconomic information to regularly monitor this no small military buildup move for daily/timely decision, policy making and planning process.	Tim Semuda	BSP (CMTF)
14	I	ES	ES-3	ES-2	"ES-2 OVERARCHING PURPOSE AND NEED" - "The need for the proposed actions is to meet the following criteria based on U.S. policy, international agreements, and treaties: a.) Position U.S. forces to defend the homeland including the U.S. Pacific territories." - With the proposed actions by DoD and the Navy, the territory of Guam and the neighboring islands will be considered a primary target for foreign military aggression. Although the DEIS proposed actions include an AMDTF (Army Air Missile Defense Task Force), the document in current form does not address any civil defense plans with the local government, as well as the development and construction of "hardened fallout shelters" in the event of nuclear attack. Unlike the U.S. mainland, the geographical location and limited land mass of a Pacific island precludes any sort of evacuation or relocation to " harbors of safety or safe havens". The U.S. Government and its military has a moral obligation to develop and provide Emergency evacuation plans and facilities for the general public and its' citizens to address the possibility of nuclear conflict/confrontation in the region.	Benny Pinaula	GHJRA
15	I	16	12	1.4.2	Housing Supply and Characteristics - "As of the 2000 Census there were approximately 48,000 housing units on Guam." - The DEIS source material is dated and obsolete. Utilizing the 2000 Census as a reference of information is not a true assessment of the current housing market. The Guam Comprehensive Housing Study 2009 was completed last year and provides the most current information on housing demands, trends and forecast for the housing market on Guam. We strongly recommend that the proponents of the DEIS, to fully incorporate the Guam Comprehensive Housing Study 2009 into the DEIS to insure current and accurate assessment of the proposed actions, and provide proper evaluation and mitigation in the FEIS.	Benny Pinaula	GHJRA

J-012-007

Thank you for your comment. The DoD carefully considered all requests to extend the length of the comment period beyond the 45-day minimum required by NEPA. In evaluating multiple options, DoD leadership determined that a 90-day comment period best balanced the need for sufficient time to review a complex document with the requirement to reach a timely decision regarding the proposed military buildup on Guam.

The most recent, available Census data is from the year 2000. The Final EIS has been updated to include some information from the 2009 Guam Comprehensive Housing Study.

It is noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts.

As of February 15, 2010				DEMPLOYING DIVISIONS' ASSESSMENT ON POTENTIAL EFFECTS ON LAND USE	
VOL.	REVIEWER	CHAPTER	SECTION	DEIS INTENT	DEMPLOYING DIVISIONS' ASSESSMENT ON POTENTIAL EFFECTS ON LAND USE
J-013-001		2	2.2.4.2	Naval Munitions Site Access Road Alternative will require RW acquisition (B-300) Ref: Alternative A= in reference to Alt B wherein hiking trail will not be improved	loss of cultural trail due to gated barrier appears to violate local law regarding blockage of RWs, easements, Traditional Rights-of-Ways, ways, etc. If gated the effect is the same as above.
J-013-002				In reference to RW acquisition	Information not specified as to whether GovGuam lands or private lands are being considered. If GovGuam lands, approval must be via legislation. Additionally, if GovGuam lands, are lands "registered" or unregistered.
J-013-003			2.6	Would increase demands on power, potable water and wastewater utilities - proposed action would affect the remaining life of the Solid Waste Facilities on Guam	To what extent and how soon? Is another landfill prudent, i.e., at Atantiao? Any new landfill if on GovGuam or private parcel(s) must first reviewed by the Land Use Commission
J-013-004			2.7	Reference Table 2.7.2 primary construction is in the north land aerial	Impact of groundwater and nitrogen aquifer: Table 2.7.5 shows potential for 22 new water wells under Alternative 1 & 31 new water wells under Alternative 2 = however, no specific location identified, and water rights is questionable (is it the people of Guam?) What role does GWA have? Will GovGuam be a customer to use these new water wells?
J-013-005				Reference Table 2.7.2 Refurbish NDWWTF	If GovGuam or in the context situation the private developer responsible for such refurbishment? Is the NDWWTF capable of accommodating the population increase given the fact that most major private development have been allowed to continue based on usage of this treatment facility? If the military were to construct sewer lines to the NDWWTF, will private development be able to benefit?
J-013-006				Reference Table 2.7.5 - Construction of sewer lines from Barrigada to the NDWWTF	Additional easements required? And if yes, is it on GovGuam or private lands? Are private individuals or developers allowed to use new lines?
J-013-007				2.7.1.4 - Construction Requirements - Per EIS, construction debris not recycled would be directed to GEPA approved landfills	Lagoon is the only landfill that will be in operation. Where are these GEPA approved landfills to be located? GLUC approval is required prior to use.
J-013-008				Reference Table 2.7.6 lists Primary Locations of Roadway Widening Project Construction	Table lists 8 major projects all being central to north. No mention or consideration on 2 major arterial RWs (Parcel J and K) abutting Route 3 and linking with Beach Road planned to be used or at least considered for improvement since it is strategically located in the major construction and vehicular traffic areas of operations
J-013-008				Reference 2.7.1.6 - Work Force Housing - states that there are 17 previously used H-2B housing facilities in Yigo, Dededo, Tamuning, Agat, Barrigada and Yona further states that those could be considered for refurbishing a re-approval	Per GLUC Resolution No. 2009-01, TWHF are only allowed in an "M" Zone and under a permitted Conditional Use Permit, which implies Land Use Commission review and approval. [There are 12 existing and approved TWHF of capacity to increase or any new modifications/changes anticipated for these facilities, re-approval by the Land Use Commission is mandatory. [The proposed Tumon Village Apartment complex, which in 2009 was being subjected under TWHF review has been sold with no authorization by the previous owner to convey "application permit and proposed renovation building plans" to the new owner. Since the Zoning designation of the complex is "R-10", any proposed TWHF is moot unless zone change to an "M" Zone. [Use of former military barracks in Tyan is a challenge and may have to be subjected to Land Use Commission review and approval. The challenge lies in the issue as to whether a zoning designation exists on the parcel wherein the structure is located. The view that contractors may not opt to utilize the planned TWHF presents a challenge for such contractors since TWHF can only be located in an "M" zone and must be subjected to Land Use Commission review and approval.

J-013-001

Thank you for your comment. DoD understands and recognizes the significance of access to cultural sites located on DoD property in Guam. Restricting access to certain areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to Mt. Jumullong Manglo (including the Mt. Lam Lam trail) consistent with safety and operational requirements. Final plans concerning access to Mt. Jumullong Manglo (as accessed by the Mt. Lam Lam trail) have not been developed, DoD looks forward to working with stakeholders including groups that use the area for traditional religious activities to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of this site.

J-013-002

Thank you for your comment. Information regarding the proposed land parcels were available in the Land and Submerged Land Use chapters of the DEIS. Additional information on the proposed non-DoD lands that are being considered for acquisition has been provided in the FEIS. DoD was required to determine whether military relocation requirements could be met by excess, underutilized or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action.

Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value. Where circumstances exist that require resolution of issues such as ownership or value,

VOL.	REVIEWER	CHAPTER	SECTION	DEB INTENT	DLN PLANNING DIVISION'S ASSESSMENT ON POTENTIAL EFFECTS ON LAND USE
J-013-009		2	2.7.2.1	2.7.2.1 - Aggregate Requirements - TRANSPORTATION - state that there are 4 sites from which Coal aggregate can be gathered	If these are new sites, it would be considered as "Mining/Quarry" operations that will require Land Use Commission review and approval
J-013-010			2.7.2.1	STOCKPILING - state that several areas maybe available such as Harmon Industrial Park and currently undeveloped areas in Yigo and Deseda	Undeveloped Areas not classified Potential for airborne dust flow into adjacent private properties -frequency & time of Access to/from site -noise generation from -vibrations and heavy equipment operations-potential for fuel leaks into the northern aquifer.
J-013-011		3	3.2.1	Summarizes required parcels for each main conformance alternative; each alternative has footprint in the Finagayan Flotage overlap- low as 599 acres to a high of 1,105 acres	While it is not the normal land use issue as it pertains to review before the Guam Land Use Commission; Nonetheless, it is a more larger Land Use Rights issue from the perspective of the Government as a whole and its private citizen constituents. It is ironic and rather bias that Fish & Wildlife would grant the military use of certain acreage within its refuge while denying the Jinsapan Landowners a grant of an "unimproved access road" easement to their land and look properties through the ridges refuge. This stewardship by the Fish & Wildlife has persisted for over a decade, if not more. As is typical in the treatment of "Champions", a second land alternative was made to provide an access road via AAFB. What was provided the landowners was for the construction of a bypass road to their landlocked properties through a \$3 million dollar FHWA funding. This bypass access road is supposedly plan to be built from Tansague Beach Cero to the first private property at Jinsapan; however, access to this new improve roadway is contingent and dictated by USAF Policies; e.g., permission must be granted to first gain access through AAFB front gate, contingent on whether there is an ongoing exercise, etc. if built, this new road begins and ends nowhere as is currently the case. This bypass road does not relieved the Jinsapan landowners from being landlocked. Our local law recognizes this situation and requires that "no land be landlocked", but the fact that private properties are landlocked is not a even a priority by the Military nor by the Federal Fish & Wildlife that it would grant an easement because it is the "RIGHT" under US law. It makes more sense to redevelop and reuse the Navy Golf Course into the required housing and other quality of life facilities; that will diminish the additional acreage that the military believes it needs and would not impact the taking of Gov/Guam or private lands
J-013-012			3.2.3	Alternative 3 - addresses the subject on "Conformant Sites"; identifies Navy Rangguas as containing 4500 acres & Air Force Rangguas 4000 acres and both have a site commonality in that while both are separated yet both about the Navy Golf Course;	This alternative identifies proposed site location as East of Anderson South on Non-000 Land - IMPACT: Unknown as to whether the acquisition or leased is GOV/GUAM or PRIVATE Lands; and if lands are registered lands or not; in either case, the "USE", as a Firing Range is not an outright permitted or permitted conditional use under our local Zoning Law; A "USE VARIANCE" must be obtained from the Guam Land Use Commission. Additionally, if built, how often, how long will it be in operation; and to what extent will it affect adjacent property owners?
J-013-013			3.2.3.1	Addresses Training Range Complex (Alternative A - Preferred)	This alternative would require realignment of a 1.7 mile stretch of Route 15. IMPACT: If GOV/GUAM is the owner of Route 15, then cooperation for acquisition of this 1.7 mile stretch must be followed through. Additionally, the current desire of the Guam Legislature is that if no GOV/GUAM Lands be condemned and as such, the acquisition of this 1.7 mile stretch of road coincide with the current passage of the Legislature's resolution that the Military exercise a "Good Faith" approach in land acquisition and usage.
J-013-014			3.2.3	Addresses Training Range Complex (Alternative A - Preferred)	

procedures exist under eminent domain authority to resolve those questions. Eminent domain requires reimbursement at fair market value.

J-013-003

Thank you for your comment. Please refer to Volume 6 chapters 2 and 3 for discussions on estimated solid waste generation from the proposed action and the estimated impact on the life of the new Gov Guam Layon Landfill.

J-013-004

Thank you for your comment. Potable water utility is discussed in detail in Volume 6 chapters 2 and 3. The expected location for the proposed wells is provided in Volume 6. These additional wells would be operated by DoD. The EIS does not discuss water rights issues as those are very involved and legally technical issues best left to the lawyers and courts. However, any new wells would be approved and permitted by GWA and GEPA. DoD is coordinating fully with GWA.

J-013-005

Thank you for your comment. Subsequent to issuing the DEIS, DoD and Guam Waterworks Authority (GWA) reached agreement in principle to establish a special private entity (SPE). This SPE would obtain a loan arranged by DoD to upgrade the North District Wastewater Treatment Plant (NDWWTP). The SPE would also operate the plant and pay back the loan with user fees. The DoD would pay user fees established by a customer service agreement with GWA that would enable the SPE to repay the loan. Future upgrades to add secondary treatment to the NDWWTP, if required, would be funded by the users based on their percentage of demand. The DoD would be one of the highest users would bear their fair share of that upgrade. This will be stated in the final EIS.

VOL.	REVIEWER	CHAPTER	SECTION	DESCRIPTION	DEVELOPER'S RESPONSE/ASSESSMENT/ON POTENTIAL EFFECTS ON LAND USE
J-013-015		3	3.2.5.1	Address Training Range Complex (Alternative A - Preferred)	If this 1.7 mile stretch is acquired, plans further calls for a major road construction activity. Proposed plans will require that this new realigned road will be graded at 10' (feet) below existing conditions. It is understood that a detailed ASR plan is not required at this point in time, yet, there could have been a conceptual plan or proposed address that may provide for mitigation measures such as its effects on adjacent non DoD lands; potential flooding, drainage, access to private or GOV/GUAM lands and other environmental issues. When relocated, who is the owner of this new right-of-way? and if owned by the military, will they impose their regulations on civilian drivers; will they close it during brown exercises, etc. If this will occur, it directly impacts the livelihood and quality of life for the civilian populace who live in the area; or simply, to exercise their freedom to travel.
J-013-016			3.2.5.2	Navel Munitions Site (Alternative A - Preferred) - Proposes to use the existing trail at .4 miles long totaling .8 acres of land that would be improved at 16' Feet wide	IMPACT: The type of improvement was not specified, e.g., paved, concrete, coral base compacted, etc. Plans also calls for section of a "UNMANAGED LOCATED SITE". This implies that there will be "NO ACCESS" by civilians other than military personnel. In the purpose of this existing trail use to gain access to a known historical or archaeological site or park? Is this existing trail deemed a "TRADITIONAL RIGHT-OF-WAY"? If yes, then the blockage (by gating) is in violation of Title 9 concerning the blockage, hindrance, destruction of POWs, roads, access, etc. REMARKS: For DEIS- (HQu) Housing- the preferred Alternative 1 all located at NGTSH- (HQu) Housing; Alternative 2 - proposes the HQu Housing be located at Navy Sanigada (not the preferred Alternative). IMPACT: Alternative 2 appears to be more appropriate given the fact that like organizations exists (AFNG and USAR both Army Organizations). The AMDTF is a compatible organization (Army). The co-location of like organizations can be beneficial for the AFNG and USAR units and vice versa in terms of sharing and conducting new tactics and training opportunities, coordination and integration of active duty and reserve units, sharing of intelligence, and other Army related issues and QOL. The proposed preferred Alternative 1 appears to segregate Active Army Units with local Army Units as is typical of current situation, e.g., DODEA and DOE educational facilities, etc.
J-013-017			3.4.2	Army Air and Missile Defense Task Force	The proposals under Alter natives 1 & 2 are similar but failed to mention the total tonnage of explosives for both what is existing and what the additional tonnage is. For example, the potential tonnage ranges from 300,000lbs to 500,000 lbs; however, the existing tonnage was not identified as well as the type, e.g., is all high explosives, etc. The potential detonation bursting radius of each munitions type was also not provided. The impact: while the MMS location is not adjacent to housing (both military and civilian), there exists private properties at the base of the cliff (the Jinsapan landowners) and the question is: What effects, if any, would it have on private property and landowners, should the explosives be detonated?
J-013-018			3.2.5.2	Ammunition Storage Site (NMS Preferred Alternative); Parsons Road	IMPACT: Ask Local civilian aircraft operators for fixed and rotary wing (helicopters) aircraft be informed of scheduled operations. Will military aircraft be totally restricted at all times from flying into and out of private properties located at Jinsapan? IMPACT: There is silence on radiation emissions generated by these radar equipment. Therefore, what effects does it have on land use of private properties at the base of the cliff and on private landowners? How far is its propagation ventilation?
J-013-018			3.3.5	Airspace - States that during Terminal High Altitude Area Defense (THAAD) radar operations, there is potential hazard to military and civilian aircraft. A Special Use Airspace) to be reserved over northwest coast of Guam	A proposed Power system location is identified along Harmon Loop Road. REMARKS: Location appears to be on Gov/Guam land (map is not specific, but base on the "Star" designation, zymology, location appears it may be near the Flea market; or on the Soccer Field; and may be on CLTC land. Again, if built, what effects will have on adjacent properties, businesses, and landowners. If to built in this area, Guam Land Use Commission approval is needed.
J-013-021			3.8.1	Power - Figure 3.6.1-4 Utilities	

The proposed DoD relief sewer from Finegayan (preferred cantonment Alternative 2) to NDWWTP would be sized for the DoD flow. If private development is initiated along this route, DoD would cooperate with the needs of this development in sizing and installing the proposed sewer.

Regarding capacity of the NDWWTP, please refer to Volume 6, chapters 2 and 3 for a detailed discussion of the capacity of the plant.

J-013-006

Thank you for your comment. Please refer to Volume 6 chapters 2 and 3 for a detailed discussion of solid waste. The new Layon Landfill is not permitted to accept construction and demolition waste. Reuse or recycling of as much of this waste as possible would be done. In addition, the Navy landfill at Apra Harbor would still have capacity and there are several private "hardfills" on island that could be utilized for appropriate construction and demolition waste.

J-013-007

Thank you for your comment. Roadway widening projects were identified to address anticipated congestion levels on major roadways.

J-013-008

Thank you for your comment. The Final EIS Section 2.7.1.6 clarifies that properties proposed for workforce housing must meet the zoning and a conditional use permit requirements.

J-013-009

Thank you for your comment. DoD would obtain all the local approvals needed for the implementation of the proposed military relocation program.

VOL.	REVIEWER	CHAPTER	SECTION	DEIS INTENT	DLM PLANNING DIVISION'S ASSESSMENT ON POTENTIAL EFFECTS ON LAND USE
J-013-022		3	3.6.1.5	Power (New Power Plant at Potts Junction)	[IMPACT]: Where located on Federal, GOVGUAM or PRIVATE lands? If on GOVGUAM or PRIVATE lands, the use must be approved by the Guam Land Use Commission. [DEIS Usage]: Use of this new Power Plant - will civilian customers be allowed? What effects will it generate on adjacent properties, e.g., noise, air emission, odor, etc.
	MARVIN	1		Purpose and need for action	Document Identification - N/A
		2		Proposed action & alternatives	Document Identification - N/A
		3		Geological / Soil Resources	Resource Identification - N/A
		4		Water Resources	Resource Identification - N/A
J-013-023		5		Air Quality	Resource Identification - further identifies air quality impacts due to Marines activities in Volume 7. High intensity uses to include live fire, air combat/support, and ground movements will generate substantial increases noise, changes to air quality, and quality use of air space. This could serve as a determining factor when consider future land use planning for adjacent and surrounding properties.
J-013-024		6		Noise	Resource Identification - further identifies air quality impacts due to Marines activities in Volume 7. High intensity uses to include live fire, air combat/support, and ground movements will generate substantial increases noise, changes to air quality, and quality use of air space. This could serve as a determining factor when consider future land use planning for adjacent and surrounding properties.
J-013-025		7		Air Space	Resource Identification - further identifies air quality impacts due to Marines activities in Volume 7. High intensity uses to include live fire, air combat/support, and ground movements will generate substantial increases noise, changes to air quality, and quality use of air space. This could serve as a determining factor when consider future land use planning for adjacent and surrounding properties.
J-013-026		9		Recreational Resources	Identifies off-base and on-base recreational facilities that are open to the public or restricted to installation personnel and guests only, respectively. DEIS identifies the restriction of public access to Pagat Caves when military takeover of surrounding lands for live fire training activities. Impacts include the loss of the historic/recreational site for the general public. No mitigation appears available. Anticipated usage of non-DoD lands by military personnel, contractors, and dependents should re-direct expansion and improvement planning efforts for recreational facilities (both natural and manmade).
J-013-027		12		Cultural Resources	Historic Properties in the Area of Potential Effect (APE) DLM differs to DPR-HPO. Otherwise, land use and development in or within areas of APE concern shall require appropriate building permit review and consideration through the DPW.
J-013-028		19	19.2.2.2		increase in need for low-cost housing may trigger subsequent increase in federal low-cost housing programs. This may ultimately lead to increased demand for government lands for subdivision development purposes once existing public housing assets have been exhausted.
J-013-029		19		DEIS identifies potential traffic increases to Route 3, Route 19 North of Route 32 to Route 6, Route 16 at its intersection with Route 10, Route 16, Routes 25, 29, and 28, development of these thoroughways to accommodate anticipated traffic increases.	Subsequent realignment of adjoined property subdivisions and re-assessments of zoning designation from predominant rural agricultural to more higher intensity uses reflectively conducive to anticipated increase in traffic operation.

J-013-010

Thank you for your comment. DoD intends to maximize use of the sites proposed for development as staging and stockpile areas. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short-term impacts of construction are managed effectively and that the long-term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-013-011

Thank you for your comment. The issues raised in your comment are important; however, they are not part of the proposed military relocation program and are not included in this EIS.

J-013-012

Thank you for your comment. DoD was required to determine whether military relocation requirements could be met by excess, underutilized, or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action. The Navy golf course was not addressed in the alternatives analysis because it is not large enough to make an appreciable difference in the amount of land required for the main cantonment. It is the firing ranges that require most of the land proposed for acquisition and the golf course does not provide sufficient acreage.

J-013-013

Thank you for your comment. The land acquired for training ranges would not be subject to GovGuam zoning laws. The ranges would

J-013-031

VOL.	REVIEWER	CHAPTER	SECTION	DEIS INTENT	DEIS PLANNING DIVISION'S ASSESSMENT ON POTENTIAL EFFECTS ON LAND USE
J-013-030	PERN	2	2.5.2.2	To establish an Aircraft Carrier Berthing Facility in order to conduct Aircraft Carrier (Carrier Strike Group) transient visits throughout the year, with cumulative of up to 63 visit days per year with an anticipated length of 21 days or less per visit.	Throughout this volume referenced to the number of personnel and its demand on wastewater, potable water, transportation and other relieving needs of the Carrier Strike Group (CSG) is based only on the Aircraft Carrier personnel and not the entire CSG. On this section it is noted that potable water supply is received solely from Forns reservoir - via the Tupo Tanco System which is adequate to supply all existing users (Navy, GWA customers) including the demand of an Aircraft Carrier (CVN 78) and in accordance with existing DOD directives and agreements with GWA, every effort would be made during periods of low rainfall and drought to ensure appropriate water conservation measures are implemented for on base demand at Naval Base Guam, including transient carrier demand.
J-013-032	PERN	5	3.2.3	Munitions Storage Alternatives	Any sites with munitions storage will need a safe explosion buffer zone and in the areas of both Navy and Air Force Barrigada are close proximity to civilian population. The proposed munitions storage will affect any proposed private residential and housing/subdivision development for possible explosion in the adjacent military property. Additional recommendation(s) Re: Impact of proposed activities to military & dependent housing and civilian population and land uses. That the Navy golf course operations be closed and relocate to either NCTAMS or Andersen AFB or other sites. That munitions storage/weapons emplacement be consolidated in the area within the vacated golf course site; and All housing units (Army, Navy, Marines) be consolidated and situated on the eastern sector within Air Force Barrigada near Route 15. The above recommendations will minimize explosion risks impacts to military housing and civilian population and land uses and future land use activities near the preferred site of munitions storage and weapons emplacement.
			3.2.4	Weapons Emplacement	Any sites with weapons emplacement will need a safe explosion buffer zone and in the areas of both Navy and Air Force Barrigada are close proximity to civilian population. The proposed weapons emplacement sites will affect any proposed private residential and housing/subdivision development for possible explosion in the adjacent military property.
			3.2.4	Weapons Emplacement	Additional recommendation(s) Re: Impact of proposed activities to military & dependent housing and civilian population and land uses. That the Navy golf course operations be closed and relocate to either NCTAMS or Andersen AFB or other sites. That munitions storage/weapons emplacement be consolidated in the area within the vacated golf course site; and All housing units (Army, Navy, Marines) be consolidated and situated on the eastern sector within Air Force Barrigada near Route 15. The above recommendations will minimize explosion risks impacts to military housing and civilian population and land uses and future land use activities near the preferred site of munitions storage and weapons emplacement.
J-013-033	PERN	1	1.2	Non-decision point actions	DEIS acknowledges direct & indirect impacts on island within this volume, however, emphasizes that control of the resources/utilities/facilities are not in DoD's control.
J-013-034			2.1	Interim Alternative 2 is a combination of reconditioning of existing permitted GPA facilities, an increase in operational hours for existing combustion turbines, and upgrades to existing T&O systems.	2 solutions - Interim and long-term - Interim 1 Preferred Alternative
			2.2	Potable Water	Basic Alternative 1 Preferred Alternative - develop raw water system for Marine Corps relocation ensuring Containment Alternatives 1 and 2, and install up to 22 new wells on DoD property

operate approximately 5 days per week, 45 weeks per year as presented in Volume 2, Table 11.2-5. Duration of federal use of lands acquired has not been determined.

J-013-014

Thank you for your comment. DoD acknowledges that the issue of land acquisition is a complex and sensitive issue, particularly related to prior acquisition of land in Guam by the federal government. Prior land acquisition policies and procedures are not reflective of current land acquisition laws and DoD policy.

DoD was required to determine whether military relocation requirements could be met by excess, underutilized or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action.

Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value. Where circumstances exist that require resolution of issues such as ownership or value, procedures exist under eminent domain authority to resolve those questions. Eminent domain requires reimbursement at fair market value.

J-013-015

Thank you for your comment. The Route 15 realignment would remain under GovGuam control. The proposed firing ranges would not impact

J-013-036	CHAPTER	SECTION	DEIS INTENT	DISPLANNING DIVISION'S ASSESSMENT ON POTENTIAL EFFECTS ON LAND USE
6	2	2.3	Wastewater	Basic Alternative 1 Preferred Alternative (1a supports Main Containment Alternatives 1 and 2; and 1b supports Main Containment Alternatives 3 & 5) combines upgrade to the existing primary treatment facilities and expansion to secondary treatment at the Marlowen District Wastewater Treatment Plant (NDWWTTP). The difference between Basic Alternatives 1a & 1b is a requirement for a new sewer line from Banigada housing to NDWWTTP for 1b.
J-013-037	10		Land and Submerged Land Use	The region of influence for land use is land and ocean in the Territory of Guam within 3 nmi (5.6 km) off shore.
J-013-038	11		Recreational Resources	Defer to DPH - See 21 GCA, Chapter 64 (Ocean Shores: Territory Beach Areas); Chapter 65 (Public Access to the Ocean Shore); Chapter 76 (Historical Objects and Sites); Chapter 77 (Department of Parks & Recreation)
J-013-039	12		Terrestrial Biological Resources	Provides for protection of special status species such as the Marianas fruit bat, Marianas crow and the Micronesian kingfisher with respect to power, water, sewer & roadways impacts. Defer to Department of Agriculture - See 5 GCA, Part 2, Chapter 60 (Department of Agriculture); 5 GCA, Part 2, Chapter 61 (Plants & Animals); 5 GCA, Part 2, Chapter 63 (Fish, Game, Forestry & Conservation); 5 GCA, Part 2, Chapter 65 (Land Conservation Act)
J-013-040	13		Marine Biological Resources	impacts only to Apra Harbor relative increase in activities due to relocation
J-013-041	14		Cultural Resources	Refers to National Historic Preservation Act (NHPA) and the Archaeological Resource Protection Act on cultural resources as it impacts utilities - nothing about living culture and its protection thereof.
J-013-042	CHAPTER	SECTION	DEIS INTENT	DISPLANNING DIVISION'S ASSESSMENT ON POTENTIAL EFFECTS ON LAND USE
	2	2.4.11	Traffic and Marine Transportation	Indication of degree of impact more closely related to the construction tempo, not the associated increase in population.
J-013-043	3	3.3.3.1	Summary of Preferred Alternatives' Impact	What is the basis for determination for a less than significant impact?
J-013-044		3.3.7	Land and Submerged Land Use	Indication of relocation, and land acquisition or long term lease for roadway improvements leads to possibly requiring new easements. Who would then be responsible for those easements?
J-013-045	3	3.3.7.3	Comparison of Preferred Alternatives to No Action	...The impacts of the proposed island-wide increase in federal land are being addressed in the Land Acquisition Impact Study portion of the Socioeconomic Impact Assessment Study that is being developed and would be available as part of the Final EIS. Realization of impact, however not able to determine the extent of such impacts.

access or traffic along Route 15. An underpass and an overpass are being considered for military traffic across Route 15. No detailed plans are available for inclusion in the EIS.

J-013-016

Thank you for your comment. DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access will be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

J-013-017

Thank you for your comment.

J-013-018

Thank you for your comment. The layout of the munition storage would be planned so as to not change the explosive safety arcs (zones) from the current situation.

J-013-019

Thank you for your comment. The proposed action and alternatives for Special Use Airspace (SUA) are covered in detail in the FEIS Volumes. Location, altitudes, and times of use would be coordinated with the Federal Aviation Agency (FAA). The FAA would also be responsible for approving and charting any SUA. This will require the FAA to follow

established procedures for Rule-Making actions, which involves public input for establishing new SUA to ensure there are minimal impacts to airspace. Under the proposed actions, Restricted Airspace would only be activated (in use) when required for training events and published on Enroute Aeronautical Charts and Notice to Airmen (NOTAMs), or during times of tactical use. When not activated, current use of the airspace would not change.

J-013-020

Thank you for your comment. Radiofrequency energy (RFE) emission sources are evaluated to determine relevant primary exposure limits to protect health and safety. Two types of exposure limits are considered: 1) occupational/controlled exposure limits in which persons are exposed as a consequence of their employment and are aware of the possible exposure, and 2) general population/uncontrolled exposures in which the general public may be exposed and are not aware of their potential exposure. Specific populations are not surveyed for RFE hazards.

J-013-021

Thank you for your comment. The proposed site for a new generating facility is only a programmatic long-term alternative subject to future NEPA review. A lot of study would be performed prior to such review, such as siting study, air quality modeling, etc. That is beyond the scope of the current EIS. For a detailed evaluation of power alternatives, please refer to Volume 6 chapters 2 and 3.

J-013-022

Thank you for your comment. This proposed new power generation facility is presented only at a programmatic level. If pursued, future NEPA review would be needed and would get into much more detail. The proposed new generating facilities would be owned by Guam Power Authority and provide power to the island wide power system. DoD

proposes to remain a customer of GPA for all their power needs, except for emergency power.

J-013-023

Thank you for your comment. Future land use planning should consider potential air quality impacts, as noted by the commenter.

J-013-024

Thank you for your comment. It is true that land use decisions around live-fire ranges should consider the appropriate compatible use relative to the noise levels in the area.

J-013-025

Thank you for your comment. Comment noted.

J-013-026

Thank you for your comment. At present, data for visitor use of recreational resources under the Government of Guam, Federal, or DoD (except for Andersen Air Force Base, which is included in the EIS) is not available. As a mitigation measure, it is suggested that a carrying-capacity study for recreational resources be conducted. With data obtained from such a study, a resource management plan would be developed.

J-013-027

Thank you for your comment. Plans and permits are discussed in Volume 8.

J-013-028

Thank you for your comment.

J-013-029

Thank you for your comment.

J-013-030

Thank you for your comment. DoD Wastewater flow from South Finegayan will be conveyed to NDWWTP via an independent relief sewer. There is no impact to GWA sewer and pump stations. There is an ongoing study to assess GWA sewer along route 3. The findings of the study have been included in FEIS. DoD will not operate and maintain NDWWTP or GWA sewer system. , DoD and GWA have reached agreement in principle that a special private entity will enter into a contract with GWA to obtain funding (facilitated by DoD), improve the NDWWTP, operate the plant, and repay the loan from user fees, however GWA is responsible for operation and maintenance of the collection system to eliminate all the overflow problems.

J-013-031

Thank you for your comment.

J-013-032

Thank you for your comment. Munitions storage facilities were sited in an area of Andersen AFB compatible with this military land use. Appropriate safety buffers are included in the proposed action.

J-013-033

Thank you for your comment. DoD is working with Guam utility authorities and other Government of Guam agencies to minimize any adverse impacts associated with implementation of the proposed military relocation program.

J-013-034

Thank you for your comment. Just to clarify, there are no preferred long-

term alternatives chosen. The long-term alternatives would be subject to future NEPA review at the project specific level. The long-term alternatives herein are presented only at a programmatic level.

J-013-035

Thank you for your comment.

J-013-036

Thank you for your comment.

J-013-037

Thank you for your comment. You have quoted the EIS text with no suggested edit.

J-013-038

Thank you for your comment.

J-013-039

Thank you for your comment.

J-013-040

Thank you for your comment.

Volume 6, Chapter 13 addresses impacts to Marine Biological Resources from Related Actions, Utilities, and Roadway Actions on Guam. Volume 2 and 4, Chapter 11, address impacts to Marine Biological Resources from the Marines relocation to Guam and CVN dredging in Apra Harbor, respectively. Volume 3, Chapter 11 addresses CNMI, Tinian.

J-013-041

Thank you for your comment. Impacts to modern culture on Guam is discussed in Chapter 16, Socioeconomics and General Services.

J-013-042

Thank you for your comment.

J-013-043

Thank you for your comment. Volume 7, Chapter 3 identifies the preferred alternatives' impacts as presented in Volumes 2 through 6. The analysis supporting these findings (SI, SI-M, LSI, or NI) is found in the previous volumes. The summary tables indicate the relevant volume in the title rows.

J-013-044

Thank you for your comment. All off-base roads would be owned and maintained by Guam Department of Public Works (DPW). Guam DPW would be responsible for the easement the public roads are on.

J-013-045

Thank you for your comment. Additional information from the LAIS is included in the FEIS.

BUREAU OF STATISTICS AND PLANS

(Bureau of Planning)

Government of Guam



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FEB 17 2010

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Pearl Harbor, Hawaii 96860-3134
Attention: GPMO

Hafa Adai:

Enclosed please find comments regarding the Draft Environmental Impact Statement (DEIS) for the re-location of the Marines from Okinawa to Guam, and the construction and dredging associated with increased aircraft carrier berthing. Specific comments referring to sections within the DEIS are enclosed along with specific recommendations accordingly. We urge you to consider addressing all of the major inconsistencies associated with the DEIS that impact proposed action alternatives. We recommend that alternatives previously dismissed (or not investigated at all) should be seriously considered. Guam is a relatively small island with high biological diversity, finite natural resources, and limited infrastructure. These considerations underpin many of the key points presented below.

J-014-001

1. Separate EIS Process

J-014-002

One of the Bureau's concerns is regarding the approach for this action. Each proposed action requires a separate EIS process for marine relocation, CVN Berthing, and Army Ballistic Missile Defense Task Force as they are significantly different projects, they do not appear to be interdependent, and do not appear to be restricted to the same timeframe. Combining all of these proposed actions into a single, massive DEIS document greatly limits the ability of government agencies and the public to review the document.

J-014-003

In addition, the Guam Coastal Management Program (GCMP) is requiring that DoD submit a Federal Consistency determination separately for each of the three proposed activities: 1) Relocation of Marines from Okinawa to Guam; 2) The construction and dredging associated with visiting Aircraft Carrier Berthing; and 3) Army Air and Missile Defense Task Force. The review documents should be submitted to the Bureau of Statistics and Plans, in compliance with the requirements of the Coastal Zone Management Act (CZMA), Federal Consistency regulations, 15 CFR Part 930, 16 USC, 1451 et seq.

The DEIS as referenced on Vol.8 chapter 2, page 2-1, Table 2.1-1 the Status of Compliance column pertaining to Coastal Zone Management Act (CZMA) must be corrected. *It is not true that "Consistency determination is prepared and submitted by Navy seeking concurrence from Guam Bureau of Statistics and Plans." The DOD/Navy*

J-014-001

Thank you for your comment. Volume 1 at Section 1.4 in the Draft EIS provides a Global Perspective Background, which explains the various international and military capability requirements that were considered for the realignment of military forces. Because this section of the Draft EIS explains the background analysis of strategic military capability locations within the Pacific, it will remain the same for the Final EIS. For instance, this section describes how several locations were considered throughout the Pacific region for the military relocation based upon 1) response times, 2) freedom of action (the ability of the U.S. to use bases and training facilities freely and without restriction at a particular locale), and 3) international treaties and agreements with Japan and other Western Pacific allies. The U.S. locations in the Pacific region considered for the military relocation were Hawaii, Alaska, California, and Guam. Non-U.S. locations considered included Korea, the Philippines, Singapore, Thailand, and Australia, because they are allies to the U.S. and are well situated for strategic force deployment. After analyzing the international and military capability requirements for each locale mentioned above, Guam was the only location for the relocation that met all the criteria.

DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-014-002

Thank you for your comment. The proposed actions are complex, inter-related, multi-service proposals and are not discrete individual actions of

J-014-003

has not submitted the mentioned consistency determination to the Bureau of Statistics and Plans. Federal agency is required to follow the required timeline for the Federal Consistency review, 15 CFR Part 930.39.

CZMA Regulations should indicate/include provision of 15 CFR 923.33(b) Federal consistency review requirement regarding excluded lands. Activities on federally controlled lands excluded from the coastal zone are also subject to BSP review if the Federal agency determines they will affect any coastal use or resource in the coastal zone (15 CFR Part 930.33). If it is found that such activities will not have an effect, the Federal agency may submit a negative determination to inform Guam of the proposed activity thus assuring Territory review of borderline cases, (15 CFR Section 930.35).

In addition, CZMA Regulations, Sec. 923.33 Excluded lands. (b) **The exclusion of Federal lands** does not remove Federal agencies from the obligation of complying with the consistency provisions of section 307 of the Act when Federal actions on these excluded lands have spillover impacts that affect any land or water use or natural resource of the coastal zone within the purview of a state's management program. In excluding Federal lands from a State's coastal zone for the purposes of this Act, a State does not impair any rights or authorities that it may have over Federal lands that exist separate from this program.

J-014-004

We are concerned that the extraordinarily large cumulative scope of the DEIS and the rapid timeline of the planned projects is unrealistic and inappropriate; it reduces the likelihood that the best possible information is integrated into the NEPA process and places an unreasonable burden on the already capacity-limited government agencies, other organizations/institutions, and the general public to conduct an adequate review within the given timeframe. The relocation of troops to Guam, and associated infrastructure demands, appear to be entirely separate from, and not dependent upon, the Army Air and Missile Defense Task Force, and the major construction and dredging operations required for the Carrier Vessel Nuclear (CVN). Consistent with our past position, we continue to strongly recommend that each of these projects be carried through the NEPA process separately, with separate EISs staggered in an order according to project priority.

It is unclear why the Army Air and Missile Defense Task Force and the Visiting Aircraft Carrier Berthing projects were included with the Marine Relocation in a single EIS document. While it is claimed that these activities - which seem capable of operating independently - collectively address treaty obligations with allied nations, the rationale for including all of these projects in a single EIS, and operating under a shared timeline, is not sufficient. Combining such large projects, each of which will have significant impacts to the island, into a single EIS document causes undue hardship for agencies and individuals reviewing the document and limits their ability to make well-informed, well-supported comments. The limited ability to provide substantive comments for the broad range of issues, especially given the large size, the information gaps, flawed data, errors and inconsistencies of the DEIS (likely a result, in part, of the rushed timeline for the DEIS preparers), greatly limits the effectiveness of the NEPA process and thus greatly

the different military services. The National Environmental Policy Act specifically prohibits segmentation of a large proposal into smaller actions for environmental analysis. As this EIS shows, the proposed and related actions are having effects on the same resource areas and must be considered together to determine the full potential for environmental effects. Further, a comprehensive analysis helps define the best mitigation and management practices to lessen adverse effects.

J-014-003

Thank you for your comment. The Coastal Zone Consistency Assessment for all proposed actions on Guam was submitted to the Bureau of Statistics and Plans after the Draft EIS was published. The Table in Volume 8 is correct in the Final EIS. The requirement for three separate assessments is being discussed with Bureau of Statistics and Plans. The assessment submitted meets the regulatory requirements listed in your comment.

J-014-004

Thank you for your comment. The proposed actions are complex, inter-related, multi-service proposals and are not discrete individual actions of the different military services. The National Environmental Policy Act specifically prohibits segmentation of a large proposal into smaller actions for environmental analysis. As this EIS shows, the proposed and related actions are having effects on the same resource areas and must be considered together to determine the full potential for environmental effects. Further, a comprehensive analysis helps define the best mitigation and management practices to lessen adverse effects.

J-014-004

increases the chances that the full impacts of the buildup will not be adequately addressed and the costs (monetary and otherwise) will be absorbed by the people of Guam instead of by the action proponent. Each project should be analyzed separately, being sure to include the expected impacts of each project in the cumulative impacts analysis section of each EIS. If this is not possible, we recommend reducing the current DEIS to a programmatic or Tier 1 EIS, providing enough detail to analyze the overall socioeconomic impacts of each activity without delving into details about exactly where each project would be located and exactly what impacts will result. Such an action would significantly reduce the overwhelming size and scope of a single document, would allow DoD to focus on the most time-sensitive elements first, would result in a more thorough analysis of buildup's impacts and ultimately in achieving the best possible outcome. If such an action is not viable, we recommend clarifying why the carrier berthing and ballistic missile task force projects must occur at the same time as marine relocation and why delaying these projects would violate the terms of any treaties. The immense burden placed on local and federal agencies, and the general lack of capacity for local agencies to carry out required mandates in a timely manner would demand that a delay in these projects be very seriously considered. This is especially relevant to the CVN project, the progress of which is already facing substantial challenges resulting from significant information gaps, flawed data, etc. and would benefit by an extended timeline not tied to the timeline dictated by the marine relocation.

J-014-005

2. Need for baseline water and ecological data

Need for a complete baseline water and ecological and sediment contaminant analyses for Guam (i.e., the entire island) upon which change can be detected as a result of build-up and construction activities. Guam's coastal zone is heavily relied upon for subsistence, tourism, and recreation, forming the backbone of life on Guam. Instead of waiting for the individual permitting process before these data are presented, a project of this magnitude necessitates that such an assessment and the associated recommendations be presented in the FEIS.

The existing data to characterize Guam's nearshore coastal waters and ecological assemblages provide a poor baseline upon which change can be detected. Because of the major increases in human population, land-based construction, training activities, and recreational uses, a quantitative study must be conducted to address the long-term impacts of the buildup and associated activities. We strongly recommend that the Department of Defense commit to supporting comprehensive, in-situ characterizations of ecological assemblages and sediment content characteristics around Guam, with adequate statistical power to detect change at the individual site-level.

Existing baseline data from NOAA habitat maps and NOAA Coral Reef Ecosystem Division datasets were not conducted with local-scale, site-specific questions in mind, and instead were designed to address pressing national and regional concerns. Further, Guam's local agencies are tasked with the continuation of their agency-specific data collection programs. Guam Division of Wildlife and Aquatic Resources currently monitors trends in ecological assemblages, namely fish, in the existing MPA's to examine their efficacy. They also conduct surveys of catch rates and composition to

J-014-005

Thank you for your comment. Requirements under NEPA are to use the best available scientific information, which has been used in the analysis of potential impacts presented in the EIS.

The Navy collected a robust data set to include coral distribution, benthic cover, fish biomass, and fish and invertebrate species abundance. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral aquatic resource functions, would ideally be used. However, functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. Further, the Compensatory Mitigation Rule recognizes the evolving nature of science on this issue and does not mandate any particular assessment methodology. The Navy assessment used a historically approved methodology followed by the USACE and NMFS for quantifying impacts to coral reef ecosystems. For well over 30 years, coral reef ecosystem monitoring and impact assessments have been based on percent coral cover. Due to the complexity of this ecosystem, percent coral cover has been identified as "the best current available science" standard (or proxy) to attempt capturing the thousands of elements that comprise a coral reef ecosystem. In light of the continued dispute on what parameters need to be collected to fully capture the impact to coral reefs, the Navy's assessment is currently under review by USACE. Upon completion of that in-depth review, if USACE feels additional information is warranted the Navy will seek additional data and revise its analysis appropriately.

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assist fisheries management. Currently, their program does not have the resources to expand monitoring efforts to include site-specific investigations pertaining to build-up activities that will rapidly change Guam's environment. Guam's Environmental Protection Agency (Guam EPA) conducts weekly water quality assessments at numerous beaches, as well as annual assessments of several streams. The coastal work conducted by Guam EPA is limited by financial and personnel resources and granting agency requirements. The Government of Guam has recently initiated a multi-agency, long-term coral reef monitoring program with funding through a NOAA Coral Reef Initiative Monitoring Grant, but the scale of the effort remains limited due to major funding and capacity limitations and is not sufficient for the needs discussed here.

Because of the magnitude and speed of the proposed build-up, a holistic ecological monitoring design appropriate to detect site-specific change is imperative. DoD must develop a monitoring program to address this concern. The notable difference for the purpose of the DEIS is the need to move from 'assessment' type work to 'monitoring'. It will form the basis of individual project permitting requirements and identify when/where/if mitigation is needed in the future. Typically, these discussions wait until the individual permitting procedure; however, given the unique magnitude and speed of the build-up, relevant baseline ecological data with sufficient replication and scale to answer questions regarding change over time must be included in the FEIS. At the very least, the FEIS should mention a specific process to ensure that such a program will be undertaken and identify funding, logistics, and key constituents. In addition, it is imperative for this ecological baseline of Guam's coral-and-reef-associated assemblages be conducted in cooperation with local expertise.

Examples of methods used for question-driven, site-specific monitoring can be found within English et al. (1994), Brown et al. (2004), and Houk and van Woelk (2006). Calculations from the existing marine survey data presented in Volume 4 indicate that the data provided are very low in statistical power. The statistical power to detect a 20% change in coral cover (one dominant benthos within Apra Harbor) over time on the coral-rich 'direct-slope' reefs is only 6% (using data from Volume 9, Appendix J, Table 3, following calculations of Houk and van Woelk 2006). Similarly, only 20% statistical power exists for detecting a change of 50% in coral cover. These are unacceptable foundations upon which change can be assessed and provide a near meaningless *in-situ* ecological baseline. The argument presented in the DEIS that statistical power cannot be calculated (Appendix J, CVN marine survey, methods section) due to high ecological zonation is not valid; the study must account for this zonation and provide a baseline to detect change over time.

3. Climate Change

Climate change is not mentioned once in the entire document. Shifting patterns of rainfall, air and sea temperature, storm events, and of many other events and processes will impact a multitude of resources upon which society depends. We strongly recommend that the FEIS include a section specifically addressing climate change, and that climate change be incorporated into the impact analyses of project alternatives for

J-014-006

J-014-006

Thank you for your comment. Regarding climate change, the Navy acknowledges there is potential for marine resources and aquifers to be affected by sea level rise, inundations from more extreme storm events and other consequences of climate change. The impacts may be both adverse and beneficial. The current level of scientific knowledge can predict trends in sea level rise based on historic data but there are no established methods for assessing and quantifying potential impacts on marine resources or aquifers.

The University of Guam provides analysis of the aquifer responses to sea level change and recharge in a November 2007 study. Climate change may impact the success of production wells in the future (e.g., the placement of the well screen may not be optimal if the sea level rises or falls). Given the uncertainty of climate models including lack of information that is directly applicable to northern Guam and lack of specificity regarding the time and degree of impacts to conditions that could impact the aquifer, the DoD wells would be installed based on current conditions and regulatory requirements. Monitoring would be conducted during well operation. If production or water quality declines over time, DoD would take actions to mitigate the impacted wells.

J-014-006

each of the proposed actions. Adaptive Management Plans must be developed to address impacts relating to climate change and sea level rise.

Clearly, the change in global climate resulting primarily from anthropogenic forcing provides for much uncertainty for future climate regime predictions at the global, regional, and local scales; shifting patterns of rainfall, air and sea temperature, storm events, and of many other events and processes will impact a multitude of resources upon which society depends (Tebaldi et al. 2005). We strongly recommend that the FEIS include a section specifically addressing climate change, that climate change be incorporated into the cumulative impacts analysis, and that climate change also be incorporated into the impact analyses of project alternatives for each of the proposed projects. We also strongly suggest that the precautionary principle be adopted when considering the impacts of climate change (and for other impacts). It is well-known that the prevention of impacts is much less costly than the restoration of lost resources – and that in some cases the lost resources cannot be restored within time frame relevant to human societies. Examples of climate change-influenced factors affecting the outcome of impact analyses, include, but are not limited to 1) decreased recovery times for coral reef resources that will be impacted by DEIS activities, 2) the potential for ecosystem collapse as a result of synergistic influences associated with acute dredging and construction disturbances (Baker et al. 2008), 3) fluctuations in Guam's freshwater resources as influenced by changing rainfall patterns and the increased dependence on the Northern Aquifer from the increased human population, and 4) increased dependence upon Guam's power grid, sewer lines, roads, and other infrastructure given increasing future uncertainties.

There is no analysis of the impacts of sea-level rise on the fresh water lens of the Northern Guam Aquifer. The possibility of sea-level rise is never mentioned. Much of the problem associated with the discussion of potable water supplies in this DEIS comes from the fact that there has never been a state of the art understanding of the aquifer itself. No 3D models have been constructed, which have been identified as necessary to understanding the dynamics and the potential of the aquifer. To increase Guam's population by 44% based on a less than adequate understanding of potable water capacities is irresponsible. DoD must work with appropriate Government of Guam agencies to conduct a comprehensive study of the capacity of the aquifer to meet the demands of both civilian and military communities.

J-014-007

4. Visiting Aircraft Carrier (CVN) Berthing

There are major concerns with how Volume 4, and most of the associated supporting studies summarized within, assess the potential marine resource impacts of the CVN Berthing project. An overarching concern is the apparently systematic bias towards a major underestimation of the impacts to marine resources. This bias is evident in the misinterpretation and misuse of scientific literature, the use of questionable data collected using inadequate survey methods, the inappropriate use of coral cover and the lack of coral size frequency data for use in the HEA, and the lack of data for significant areas of coral reef habitat. These concerns are as follows:

J-014-007

Thank you for your comment. The Navy collected a robust data set to include coral distribution, benthic cover, fish biomass, and fish and invertebrate species abundance. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral aquatic resource functions would ideally be used. However, functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. Further, the Compensatory Mitigation Rule recognizes the evolving nature of science on this issue and does not mandate any particular assessment methodology. The Navy assessment used a historically approved methodology followed by the USACE and NMFS for quantifying impacts to coral reef ecosystems. For well over 30 years, coral reef ecosystem monitoring and impact assessments have been based on percent coral cover. Due to the complexity of this ecosystem percent coral cover has been identified as "the best current available science" standard (or proxy) to attempt capturing the thousands of elements that comprise a coral reef ecosystem. In light of the continued dispute on what parameters need to be collected to fully capture the impact to coral reefs, the Navy's assessment is currently under review by USACE .

Upon completion of that in-depth review, if USACE feels additional information is warranted the Navy will seek additional data and revise its analysis appropriately. The HEA referred to (Volume 4, Chapter 11 and Volume 9, Appendix E) is a description of how mitigation could look. Through coordination with our regulatory partners the Navy will develop a compensatory mitigation package that will conform to the regulatory guidance provided by USACE. The 200 meter indirect zone used in the DEIS was based upon discussions with resource agencies, which indicated that indirect impacts would be contained within the shallow reef area, which is approximately 200 meters from the outside edge of any dredging footprint. Subsequent to discussions with the resource

- a. Apra Harbor is a unique coral reef environmental within US jurisdictional waters and the Mariana Archipelago, and possesses unique assemblages and unique species of flora and fauna. The potential loss of biodiversity is not considered.
- b. Artificial substrates have been found to host significantly larger populations of non-native, introduced fauna, than natural substrate, but the DEIS authors extol the benefits of increased artificial substrate associated with the deep-draft wharf and continue to support the use of artificial reefs as a preferred mitigation method. Artificial substrate should not be considered beneficial, and artificial reefs must not be considered as compensatory mitigation for these and other reasons cited below.
- c. A comprehensive invasive species monitoring and response plan is currently lacking for Apra Harbor; such a plan must be completed, reviewed, and included in the FEIS.
- d. The existing habitat equivalency analyses (HEA) is based solely upon coral cover data and a coarse-scale “rugosity” measurement; such an approach does not provide a meaningful measure of the various ecological functions and services provided by the coral reef communities within the project area. HEA calculations must take into account ecosystem functions and services provided by non-coral invertebrates, unoccupied reef substrate, soft-bottom sediments, and coral reefs below 60 ft. Additionally, the HEA must take into account the services lost by blocking ~50% of the entrance to Guam’s nearby Sasa Bay Marine Protected Area that holds unique biodiversity and is a no-take fish preserve.
- e. Dredge plume models were only run for 24 hours under assumptions of 90-100% sediment removal efficiency. Both parameters are unrealistic and provide inaccurate estimates of sediment production, removal, and transfer to adjacent reefs. The FEIS must rigorously account for cumulative sediment dispersal associated with longer term dredging, and with more realistic removal efficiencies that will be present as a result of curtain breaks/failure, sediment escape below and between curtains, uncontrollable weather events, anomalously large tidal cycles, and other weather patterns. Existing current studies only encompassed two field days, which is not nearly sufficient to characterize the impacts to the project area given the magnitude of proposed activities.

There are major flaws with Volume 4 of the DEIS, many of the associated studies and appendices, and the assumptions that informed the Habitat Equivalency Analyses (HEA). While numerous specific examples are enclosed to support the above statement, several main points are discussed here, along with specific recommendations.

Uniqueness of Apra Harbor marine environment

Apra Harbor is a unique coral reef environmental within U.S. jurisdictional waters and the Mariana Archipelago and possesses unique assemblages and unique species of flora

agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for 188 m buffer area. The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced. All mitigation options associated with the proposed CVN transient wharf, including the use of artificial reefs and watershed restoration, are being considered by the Navy. When the Navy develops its proposed compensatory mitigation plan, mitigation options contained within the plan will be evaluated by the USACE to determine compliance with the Compensatory Mitigation Rule. After further evaluation, upgrades to the NDWWTP as a proposed mitigation option associated with the proposed CVN transient wharf have been dropped from further consideration. Further studies on watershed models are ongoing.

J-014-007

and fauna. In a report to the Navy regarding the diversity of select marine invertebrate taxa within Apra Harbor, Paulay et al. (1997) state:

- *“A total of 60 species of sponges, 72 species of echinoderms and 47 species of ascidians were documented from the harbor. These represent 63% of the sponges, 37% of the echinoderms and 38% of the ascidians currently known on Guam. Thus the harbor has a thriving and rich marine biota, and is home to a large portion of Guam’s marine fauna. In addition to these selected taxa, 511 species of other invertebrates were also recorded from the harbor.”*
- *“About 80% of the sponges and 53% of the ascidians of Apra Harbor are not known outside the harbor on Guam, while only 18% of the echinoderms are so restricted.”*
- *“Three areas stood out in Apra Harbor for their especially diverse and unique biota: the central shoals and mounds, especially Sponge Mound, the Sasa Bay mangroves, and the mooring and navigational buoys.”*

Given the extremely high level of unique fauna not found elsewhere in the entire Mariana Archipelago, it becomes clear that the no action alternative should be very seriously considered, or that an alternative berthing (other than Guam) be investigated. No clear evidence is provided to support the oft-mentioned conclusion that the severe impacts to the large area of reef habitat within the project area will not have any significant impact on Essential Fish Habit, sea turtles, or other marine resources. Currently, the DEIS gives no consideration of biodiversity when calculation ecological functional losses, and rather focuses only upon coral cover and a crude measure of landscape rugosity. The information provided by Paulay et al. (1997) is not mentioned anywhere in the DEIS, despite the fact that it presents a great amount of biological knowledge specific to the harbor. The FEIS must account for the high degree of unique fauna that will be directly and indirectly removed, and mitigation measures must be presented in detail.

J-014-008

The “benefits of artificial substrate” and the impacts of non-native species

The findings of Paulay et al. (1997) indicate that a higher (statistically significant) prevalence of probable non-native species was found upon artificial substrates compared with natural reef substrate. Currently the DEIS provides no assessment of the potential damage of increased invasive species establishment due to increase man-made structure within the harbor, or increased vessel traffic as a result of the entire military build-up. Instead, the DEIS authors extol the benefits of increased artificial substrate associated with the deep-draft wharf and continue to support the use of artificial reefs as a preferred mitigation method. Artificial substrate should not be considered beneficial, and artificial reefs must not be considered as compensatory mitigation for these, and other reasons cited. The FEIS must include a full assessment of the impacts of the likely increase in non-native species introductions into Apra Harbor, a complete monitoring program description to detect changes in non-native species over time, and a complete response plan upon detection of potentially invasive non-native species. Further, the introduction of additional artificial substrata within the harbor should be minimized, as it represents a

J-014-008

Thank you for your comment. Understandably artificial reefs are not an ideal choice, but given the lack of other historical examples that would lead an action agency to determine success criteria, mitigation options are limited. Erosion rates have been studied and established; however, none of these studies tie a level of sediment reduction to a predicted area of coral restoration.

Unfortunately, there is very little mitigation information outside of artificial reefs that could be used to design a compensatory mitigation project. In future collaborations it would be helpful if those agencies could provide science-backed recommendations for viable, success criteria driven mitigation projects.

That being said, to compensate for the loss in ecological service provided by coral reef ecosystem, upland reforestation (to improve nearshore water quality), artificial reefs (to provide increased fish habitat), or a combination of these and other compensatory mitigation alternatives will be considered by the Navy to comply with federal laws that protect coral resources.

The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

As stated by the Department of the Army (17 Feb 2010 response to DEIS): “the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions,

J-014-008

key vector for the establishment of non-native species. The propensity of non-native species for artificial substrate is also another reason why artificial reefs should be removed from consideration as a potential compensatory mitigation alternative.

J-014-009

Significantly flawed Habitat Equivalency Analysis

There are several major flaws with the Habitat Equivalency Analyses (HEA) presented in the DEIS. As a result of these flaws, the scale of compensatory mitigation required to offset the impacts to the marine resources is vastly underestimated. One of the major flaws with the HEA presented in the DEIS is that assumption that only coral-reef structure with living coral should be considered. The living assemblages that reside upon these coral reefs (i.e., the geological structures) are extremely dynamic in nature. When the surveys were conducted, the impacts of past disturbance regimes were unknown and unreported in the DEIS. Consider if there was a large typhoon during the year(s) prior to the surveys, and less living coral was found just because of the unfortunate natural disturbance.

The logical conclusion of this assumption would be that less coral equates to less value. This is not appropriate and not supported by the scientific literature. Rather, these well-known ecological dynamics form the basis for metapopulation ecology (Hanski and Hanski 1999), used to successfully model how populations change over time given differential environmental scenarios. A general assumption of metapopulation ecology is that unoccupied patches of habitat that may be colonized at a later time are equally important as occupied patches. Indeed the metapopulation structure (of both occupied and unoccupied patches) is an essential component that can determine ecological recovery after disturbances (Lipcius et al. 2008); whereby an absence of unoccupied patches can hinder recovery following disturbance (i.e., hinder the persistence of populations). Thus, keeping unoccupied patches in a suitable state for colonization should be a top priority for management, and they deserve similar value as occupied patches with contemporary coral growth. Clearly there is a strong scientific basis for providing value to unoccupied patches of reef, however the DEIS does not consider any of this. Based upon the well-supported science surrounding population dynamics, it is recommended that all of the coral reef structures subject to impact must be considered in the HEA calculations for the FEIS. They are all of high ecological value, as certainly many of today's assemblages reside upon unoccupied patches of the past, and removal of unoccupied patches will alter the future of marine species populations and overall reef ecosystems within Apra Harbor.

In Volume 4, Appendix E (the Habitat Equivalency Analyses), and supporting studies, no value was given to reefs below 60 ft., to macroinvertebrates that will not be able to escape the project footprint, to soft-bottom habitat, or to fish assemblages. No clear logic is provided in the DEIS for their omission. For example, it is not clear why the study was limited to reef area shallower than 60 ft when the impacts of dredging will certainly extend to the harbor bottom. A preliminary spatial analysis indicates that approximately 25 acres of coral reef habitat that occurs at depths below 60 feet on the slopes of reefs planned for dredging; an additional 70 acres of deeper (>60 ft) reef occur on the slopes of reefs within the arbitrary 200 m indirect impacts buffer. When considering the totality of

as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available.

Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer Research and Development center (ERDC) to provide an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily, ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks."

J-014-009

Thank you for your comment. The Navy used a habitat indices in the Habitat Equivalency Analysis (HEA), which was developed off of percent coral cover and rugosity (3-dimensionality) as suggested by resource agencies. The Navy has worked with and coordinated meetings with the resource agencies over the last three years discussing (HEA) approach and methodologies. The Navy has invited them to perform surveys, and attended a USFWS hosted HEA workshop in 2008 (Guam agencies were unable to attend due to scheduling difficulties). The Navy has addressed ERDEIS and PDEIS comments and concerns, incorporating additional quantitative coral and finfish studies into the DEIS in attempts to alleviate some of these concerns.

As stated by the Department of the Army (17 Feb 2010 response to DEIS): "the employed survey methodology to assess coral reef resources within the proposed CVN wharf and dredge project area has been an extremely contentious subject. Functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. A

coral reef habitat (hard-bottom and softbottom, coral and non-coral areas) within the direct and indirect impact areas, an estimated 440 acres will be impacted to some degree or another. Deeper water coral assemblages are dismissed because of their sparse coverage in comparison to their shallow-water counterparts, and their natural adaptation to lower light and high sedimentation. However, no quantitative assessment is made of these coral assemblages and no support is given that the added sediment won't impact deeper assemblages, despite their inherent physiological adaptations. Deeper reefs have been shown to be very important refuges for coral populations around the world during times of stress (Riegl and Pillar 2003, Riegl et al. 2009); showing less impact from disturbance and assistance of shallow-water coral recovery. Further, their differing tolerances to natural conditions that exist at depth are irrelevant, as the percentage increase above typical ambient conditions (for deep and shallow reefs alike) is what will alter the physiological response of the adapted coral (Telesnicki and Goldberg 1995). Since data are not available for these areas, and because much of the data for shallower reef communities are flawed and unusable, we strongly recommend that a much more robust impact assessment be conducted for reef habitat (soft and hardbottom, coral and non-coral areas) at all depths utilizing a range of ecological parameters collected using the appropriate methods. The importance of these areas are clearly demonstrated by the scientific literature, and it is critical that data from these deeper reef communities be incorporated into the HEA model in order to ensure that a more appropriate level of compensatory mitigation is provided.

Similarly, it is not clear why macroinvertebrate and fish assemblages data were not included in the HEA, as they provide, among other functions, necessary ecological functions that are needed for coral populations to persist. There is well-accepted, published evidence to demonstrate the importance of grazing on coral reefs. Grazing rates are coupled with not only macroalgae dynamics (Mumby et al. 2006) but also with coral recruitment and growth following natural disturbance cycles (Mumby and Harborne, 2010). Removal of reefs that grazing sea urchins and herbivorous fish depend upon will certainly have consequences for the long-term population dynamics of these taxa within Apra Harbor. Fish and urchin density estimates must form the basis for valuing the key ecosystem services they provide, and for assessing the services that will be lost. Value must be assigned to these key coral-associated fauna in the HEA based upon the published literature describing their significant contribution to coral reef ecosystems, and the detrimental, long-term consequences of their reduction and/or absence.

Soft bottom sediments provide foraging grounds and support populations of fish that are comparable in biomass to topographically-complex, rock bottom and coral habitats (Gomelyuk, 2009), but differing in composition. It is not clear why the impacts to the infauna (i.e., the food for the fish that exist in these areas) are not considered in the DEIS. Clearly, fish represent a steady source of protein for island societies, and the removal of infaunal communities that support fish populations deserves consideration and value. Further, some of the dredging will replace soft-bottom with flat hard-bottom structure, and the soft bottom composition will likely change as a result of sediment re-suspension and eventual accumulation associated with dredging operations. An assessment of the

standard functional assessment technique that accurately characterized and quantifies losses and gains of coral reef aquatic resource functions, as would ideally be utilized for the proposed action for Section 10/404 compensatory mitigation purposes, is not currently available. Considering that our office will ultimately be responsible for determining compliance with federal regulations requiring an appropriate and practicable functional assessment, we have engaged our Engineer Research and Development center (ERDC) to provide an independent technical review of the adequacy of the employed methodology to date and recommendations for improvements, if necessary. Preliminarily, ERDC has determined that while the methodology is scientifically valid and statistically defensible, a more intensive level of data collection may be necessary to adequately measure habitat function for compensatory mitigation purposes. We expect a more specific and detailed accounting of their review in the coming weeks.”

The Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.

J-014-009

infauna assemblages in Apra, including identification of the dominant species, their population dynamics, and rates of recovery from disturbances must be provided in the FEIS. Value must also be assigned to these areas for use in the HEA.

J-014-010

With respect to fish assemblages, there is no mention of negative impacts to the efficacy of Guam's Marine Protected Area (MPA), Sasa Bay, and its proximity to the dredging footprint. Guam's MPA's have been established for over 10 years, and have been generally shown to provide for increased fish biomass compared to reference sites. Common goals of MPA's are to export larvae to surrounding reefs, and eventually provide for adult emigration to adjacent reefs. Obviously, the project footprint nearly surrounds the MPA, and during dredging activities will adversely impact the efficacy of the MPA in terms of adult migration and larvae transport. Kim and Grigalunas (2009) estimates costs to the fishing industry associated with dredging at \$40,000 per annum for a single, small sand-mining project in Korea. While costs remain un-estimated for tropical coral reef environments, such as Apra Harbor, it is clear that value needs to be assigned for the lost ecosystem services. Further, mangrove habitats are significantly linked with enhanced fish biomass on reefs that are several kilometers away (Mumby et al. 2004). The mangrove stand in Sasa Bay MPA represents the largest in the Marianas, and export of larvae will be impeded in the direct project footprint, adjacent to the MPA. The DEIS stated that the dredging would only provide limited impacts to the transfer of larvae and fish populations, and would not lead to long-term declines in larval export or adult populations. However, no scientific studies or quantitative modeling data were presented. Further, Amesbury (1981) shows significant 3-year declines in fish diversity and abundance within a footprint associated with airport-related dredging in Truk, Micronesia, where sediment accumulation was noted. It is imperative to note that the project footprint is adjacent to the Sasa Bay MPA, and covers approximately 50% of the entrance to the bay. It is essential that the final EIS provide a scientifically-defensible value for the compromised services of the Sasa Bay MPA during the dredging and recovery period.

J-014-011

There are valid concerns with respect to the use of models to assess indirect impacts associated with dredging activities, as reported in Volume 4, Section 4, Water Quality Resources. Typically, all pollutant discharge (inclusive of any local water quality standards violations) requires a zone of mixing calculation, and must gain approval through coordination with the local and federal Environmental Protection Agencies. This important, legal process was not described within the DEIS but will be required in the permitting. The permitting process needs to be addressed in the FEIS to ensure that costs can accurately be assessed.

In addition, the DEIS used extremely limited surface current data gathered on only 2 events, coupled with scientifically-unfounded assumptions to estimate indirect sediment discharge rates. Wolanski et al. (2003) used a combination of 1.5 years of current meter data and satellite-derived surface topography to model surface-current eddies around Guam to gain a perspective of events that may occur within a typical year. The DEIS uses only two days of current data and no satellite derived information to come to a conclusion that the project area is characterized by low-velocity conditions. This is

J-014-010

Thank you for your comment. Sasa Bay (and associated mangroves), and its importance as a nursery and proximity to the proposed action, is described in Volume 2 and 4, Chapter 11. Both Volume 2 and 4 also address potential effects on finfish species, and other associated EFH species, in regards to the Sasa Bay MPA and the proposed action in Apra Harbor.

In summary, Figure 11.2-3 in Volume 4, shows the dredged footprint and estimated limits of sediment accumulation. Sasa Bay ranges from 70 m to 280 m outside of the dredged footprint and the estimated sediment accumulation area. Sasa Bay's waters are generally extremely turbid because of rivers emptying fine sediments into the bay and flow is generally to the west. Turbidity levels in Sasa Bay from dredging activities are not anticipated to increase above existing conditions from in-water construction activities. Although some adverse effects to eggs and larva may be seen from at the surface, increased vessel traffic would be short-term and localized during construction and operations activities. A less than significant impact – no adverse effect on essential fish habitat – is expected based on the significance determination identified in Section 11.2.1.2.

J-014-011

Thank you for your comment. The permitting process is further described in the FEIS.

The three-dimensional circulation and transport model of the project area was developed using the Environmental Fluid Dynamics Code (EFDC). The model included wind and tide forcing, and fresh water inflow into the Inner Apra Harbor; the dredge plume was simulated by loading the water column with specified quantities of suspended sediment composed of 5 different grain sizes. The sediment grain distribution was determined from bottom samples taken in the project area. The model calculated

troubling, especially considering that the proposed action will require between 8 and 18 months of continuous dredging activity. There is a major discrepancy between the length of the construction activities that modeling needs to account for, and the temporal scale of the data that went into the model. We strongly recommend that surface current data be much more temporally-robust for modeling purposes, and that these data encompass a range of anomalous conditions that might occur during the course of a typical year in Apra Harbor.

Further, silt-curtain sediment retention efficiencies of 90-100% were used in all model calculations, and only unpublished literature was provided as supporting evidence. Unfortunately, the key study that was cited was unavailable to reviewers of the DEIS without access to Navy reports. We recommend that all cited literature be peer-reviewed and made available through libraries, or be made available to the agency reviewers. Without understanding the basis for the assumptions, the public and agencies can't assess the level of certainty associated with each assumption. It is possible that the technical reports cited may have little scientific merit, but the reviewers would never know. Silt curtain capture efficiencies between 90-100% assume extremely minimal tearing and low rates of failure. Regardless of the authors' opinions on the success of silt curtain use, models should be run assuming a wide range of sediment release rates and silt curtain efficiencies. In fact, there should be a 'null' model produced that shows expected sediment release given no intervention, upon which varying assumptions of silt curtain success can be measured. This information should be provided in the FEIS, and will enable reviewers to understand the potential benefits of successful management, and potential pitfalls if accidents happen. Clearly, EIS statements should include more realistic uncertainty factors, and the 90-100% efficiency of the curtains provides for little margin of error (i.e., breakage/failure of curtain, bad weather events, or poor curtain maintenance).

These retention rates do not seem to be supported by a number of anecdotal reports of silt curtain failure across several dredging projects, most notably the dredging of the Inner Apra Harbor Channel Mouth and the on-going dredging at Kilo Wharf. Multiple incidents of tearing have been reported and large sediment plumes extend well beyond the confines of the silt curtains. Recent discussions with a commercial operator that visits the reef area known as "Gagab II" revealed that the individual attests to a considerable decrease (~50% 0 in visibility since the beginning of dredging operations at Kilo Wharf. This reef is several hundred meters from Kilo Wharf and is well outside the area of influence predicted by models presented in the Kilo Wharf EIS. The GCMP Biologist has personally observed the significant accumulation of sediment at depths >10 m on the reef tract between Kilo Wharf and Finger Reef. Consistent with these observations was the observation of what appeared to be a deeper (> 10 m) sediment plume extended from the Kilo Wharf extension construction site to Finger Reef. Upon reaching Finger Reef, the plume appeared to be deflected northwards towards the center of the harbor. This plume was also observed by individuals from NOAA PIRO, USFWS-Honolulu, and Guam EPA.

transport, dispersion and deposition of the plume suspended sediments and was verified by comparing results for a simulation of December 15 to 17, 2007 trade wind conditions with the actual instrument measurements. Use of a silt curtain was simulated based on 145 days of TSS measurements inside and outside of the silt curtain deployed for the Alpha-Bravo dredging project in Inner Apra Harbor and model computed TSS levels compared well with the Alpha-Bravo measurements. Possible worst case conditions were simulated by approximating the highest 10% TSS levels recorded outside of the silt curtain during the Alpha-Bravo dredging project, during strong trade wind conditions. This worst case scenario data generated by the model is presented as a conservative estimate of conditions that would be observed during the dredging of Inner Apra Harbor. Actual conditions are expected to be less. Specific monitoring requirements would be identified and implemented following agency coordination and permitting.

J-014-011

These and other observations raise serious concerns about the high rate of effectiveness of silt curtains claimed by the DEIS authors. The escape of a large amount of sediment from silt curtains should not be surprising, as the curtains typically only extend to a depth of about 10 meters. At Kilo Wharf and in much of the area proposed for dredging associated with the CVN Berthing project, the deployment of silt curtains to a depth of 10 m would leave between 10 and 20 feet of unprotected water column between the bottom of the curtain and the seafloor. A tremendous amount of sediment can easily escape from this open area and be carried to nearby reef areas. In addition to running the sediment plume under a much larger range of efficiencies, these observations suggest that the assumed high rates of silt curtain effectiveness are not realistic, and that the actual rates are much lower. But beyond informing the sediment plume model, these observations highlight the need to explore more effective methods of sediment retention. A more accurate assessment of the indirect impacts of dredging on nearby marine resources, and the large, appropriately scaled compensatory mitigation for these impacts, may also make hydraulic dredging a more cost-effective option.

J-014-012

With specific regard to the proposed CVN berthing project, our analysis of the alternatives in the DEIS leads us to believe that other alternatives may have been foreclosed prematurely, without adequate explanation regarding their elimination from the range of alternatives analyzed in the DEIS. It appears as though a preferred alternative had been selected a priori, without regard to environmental consequences. While some explanation is provided for the elimination of some alternatives from consideration, the explanation does not appear to derive from a detailed analysis of such alternatives. This is especially troubling given the scale and severity of impacts to marine resources expected to result from either of the proposed action alternatives.

The Former SRF and Polaris Pt. alternatives are not sufficiently different from each other. It is difficult to accept that a proper analysis of all possible reasonable alternatives was conducted when we are left with essentially one action alternative. The scale and severity of the impacts of the highly similar Former SRF and Polaris Pt. alternatives demand that additional, sufficiently different, practicable alternatives be thoroughly investigated. Based on what appears to be a general consensus among the local and federal natural resources agencies, the assessment of impacts to marine resources associated with the two CVN berthing action alternatives significantly underestimates the value of the resources. As such, it is reasonable to assume that the cost to mitigate these impacts will likely be significantly greater than the costs estimated to date, as described in the DEIS. The cost-benefit analysis, even in purely economic terms, would surely require broadening the search for suitable berthing sites on Guam and perhaps on other islands in the region, instead of limiting the potential sites to those identified as preferred sites a priori, and before any impact assessments were conducted. It is also important to note that many residents of Guam would not limit their analysis of the impacts in only a fiscal sense, but would also place significant value on the traditional, historical, aesthetic, spiritual, and other aspects of the sites to be impacted, and the myriad resources, stories, and knowledge associated with these sites. The Navy's Environmental and Natural Resources Program Manual provides examples of the types of alternatives that should be included in an EIS, including 1) taking no action, 2) postponing action, and 3) selecting actions of a significantly different nature that would meet mission and project objectives

J-014-012

Thank you for your comment. As described in Chapter 2, Volume 4 of the EIS, the Navy reviewed several alternatives for wharf location, wharf alignment, turning basin location/radius, and channel alignment. After careful review of the alternatives based on selection criteria, Polaris Point, and the Former SRF were the only two locations that met the selection criteria as described in Section 2.3.1 of the EIS. The DoD undertook several measures to avoid environmental impacts, including choosing a channel alignment that avoided dredging of coral shoals, reducing the aircraft carrier turning basin radius, and choosing a parallel to shore wharf alignment with a reduced clearance for the aircraft carrier. Chapter 4, Volume 4 highlights the differences between these two alternatives in the LEDPA discussion. These alternatives may appear similar but they are different, as explained in Chapter 4. Many alternatives (including Kilo Wharf) could not be carried forward because they are not operationally feasible would result in security/force protection issues, or have logistics issues. Other locations in Guam and/or the Pacific were also ruled out as options for the reasons presented in Chapter 1 and 2, including not meeting the overall purpose and need. If a location did not meet the minimum criteria, conducting a cost benefit analysis, or moving forward with draft designs, is not logical nor warranted. Under NEPA, a cost benefit analysis is not required.

J-014-012

with different environmental impacts. We believe that the Former SRF and Polaris Pt. alternatives are not sufficiently different, leaving reviewers with essentially one action alternative (which, then, is not an “alternative” at all), and thus a range of reasonable alternatives is not offered for evaluation of environmental impacts. Alternatives should address alternate designs, site locations, etc. when establishing the selection criteria. DoD must fully evaluate other alternatives including existing facilities.

It seems as though the costs associated with including all of the reef areas (occupied and unoccupied coral reef habitat), macroinvertebrate and fish assemblages, reefs below 60 ft., and soft-bottom sediments, would likely lead to drastic increases in the cost to carry out appropriately-scaled compensatory mitigation. The required enhancement of current data used in the sediment plume model, and a more accurate assessment of indirect impacts would also likely result in significantly greater compensatory mitigation costs. It is therefore strongly recommended that the FEIS include a cost/benefit analysis for the entire scope of Volume 4 and that a longer transit, Hawaii-or-US-based alternative, the use of Kilo Wharf, or another location within the region be more seriously considered. The high costs of habitat offset and required science may be inhibitive for the proposed build-up in Apra Harbor. Regardless of the EIS conclusion, the cost/benefit analyses of the entire operation must be transparent to the reviewers, and not kept as an internal affair.

J-014-013

Additional Marine and Coral Reef related issues:

In addition to the technical issues related to the CVN project analysis, additional marine related issues are listed below with recommendations:

a. Guam Shipyard Facility.

Vol. 1, chap. 2, 2.2.3.3 suggests reducing the footprint of the Facility. While this may be possible and desirable, it misses an important point. With the additional shipping and Marine vessels operating out of Guam there is an opportunity for DoD to support increased use of this American facility. Possible increased use of (or reasons for not increasing use of) the Guam Shipyard Facility should be detailed in the FEIS.

b. Training Impacts.

Evidence is clear that the continued use of jet skis in shallow waters (Hagatna Bay) result in cumulative negative impacts on the corals and sea grasses beneath the activity. The Marines propose training with shallow water craft in Apra Harbor, but no reference has been made to studies as to the impacts of such use. FEIS should address possible impacts of Marine training craft on marine life. It also needs to detail coral avoidance/protection plans to be in place for use of LCACs and AAVs.

c. Green Sea Turtles.

While this report states that there are no Green Sea Turtle nesting sites at the proposed firing range facilities at Pagat, there are nesting areas north of that area. What are the impacts of 20lb. explosions on turtle nesting? Is this an activity that should be curtailed during nesting periods as a form of mitigation? This should be addressed clearly in the FEIS.

J-014-013

Thank you for your comment. Chapter 8, Volume 4 discusses impacts to the Guam Shipyard Facility. All training related to impacts within the marine environment are addressed in the MIRC EIS. The Navy is entering into formal Section 7 consultation with NMFS to ensure consideration for impacts to endangered species as required by federal law.

J-014-013

"As a measure to benefit long-term military mission planning, collection of key information on sea turtles is being considered" (volume 2, chap. 10, page 140). The study should include Guam Division of Aquatic and Wildlife Resources as they have responsibility for research, monitoring and enforcement for sea turtles.

The DEIS states in volume 4, chapter 4, 230.3 (page 34) that *"the Navy recognizes that there are many on-going and recent past studies on the subject of potential exposures to sea turtles and other marine species from pile driving actions"*, and then follows with, *"Further research and validation of these studies are necessary prior to being able to determine the applicability of the methodologies and results to the proposed action within this DEIS."* How many studies will it take? If further studies are needed, then there should be a delay in the actions proposed. This appears to be an attempt to cherry-pick studies until you find one that agrees with your desired action. FEIS should explain why current and past studies should be ignored.

J-014-014

d. Sediments.

Core samples taken in inner and outer Apra Harbor do not necessarily reflect the impacts that berthing will have. Samples should have been taken at Kilo Wharf, which has now been in operation for more than 20 years, including years (through the mid 90s) when TBT was being used as an anti-fouling paint. Samples taken there would better reflect the potential impacts at the new wharf. Bio-assays should also be taken at Kilo to understand the amount and impacts of pollutant up-taking that may occur. While TBT may have been phased out in use (as stated in Vol. 4, chap. 4, 4.2.2.2), the leachates from copper based ablating paints are still a concern as their potential for long-term buildup in defined areas has not been addressed. If samples taken at Kilo show a high concentration of metals or other vessel-related contaminants, then a mitigation for long-term impacts should include a regular schedule of sediment clean-up and disposal. FEIS needs to address this concern.

DEIS discusses sampling, but does not seem to correlate those findings to earlier sampling done by WERI in the 1990s, which showed some sampling sites with heavy metal concentrations. Research should be done to ensure all earlier sample analysis done with the Water and Energy Research Institute (UOG) is included. Additionally, the sources for the high levels of arsenic in inner Apra Harbor and elevated levels of nickel found in both inner and outer Apra Harbor were not adequately discussed, and there was no discussion on attempts to quell the leaching of those materials from their source.

"The modeling indicated that sedimentation exceeding 40mg/cm², a cited threshold for coral impacts..." (vol. 4, chap. 11, page 52). The sources they have been quoting (Rogers) in 1990 cited *"...moderate to severe sedimentation stress...as 10-50 mg/cm²/per day..."* (Life and Death of Coral Reefs, Birkland, et al. 1996, page 372, Chapman & Hall publishers). If there is a discrepancy it needs to be addressed.

J-014-014

Thank you for your comment. As described in the FEIS, the sampling results and associated sampling locations and depths were representative of the expected dredge material. Sediment samples were taken at depths to -52 feet MLLW, which translates into sediment core lengths of up to 43 feet. On average sediment cores were approximately 11 feet long. Information on sediment depths is included in the FEIS.

J-014-015

e. Corals.

Add to list of human induced damages to corals: (vol. 2, chap. 11, page 9, 5th paragraph). "additional damages are deliberate, such as dynamite fishing, chlorine fishing, destruction of corals in harvesting gastropods and some fishes, deliberate taking of corals and live rock for aquarium use. These activities have been undertaken by all segments of the community, including military personnel. Educational materials must be included in the solution."

Volume 4, chap. 11, 11.2.2.4, page 73: add sub-bullet to first bullet to include: avoid the use of artificial lighting on dredge equipment during summer full moon spawning events.

Table 11.1-3 in vol. 4, chap. 11 indicates the presence of fungia echinata. These corals can be removed and relocated by hand prior to dredging.

If the actions (dredging) are considered necessary for National Interest, as is anticipated, and impacts on coral reefs and coral reef ecosystems in the proposed dredge area cannot be avoided or fully mitigated, then compensation could include a greater role for DAWR in management responsibilities for reef areas in DoD submerged lands and recognition of the designated Marine Preserve in SaSa.

J-014-016

f. Dredging.

The discussion in volume 2, chapter 14, page 8, 14.2.2.6 is disingenuous at best. It separates out the dredging activities for the Marine use while ignoring the other major dredging component of this DEIS, the CVN berthing facility, which is anticipated to occur in the same period. Any assumptions about impacts must be based on maximum anticipated activities, not on individual activities in a vacuum. Cumulative impacts, in this case, would be the impacts from the combination of all anticipated activities.

J-014-017

Why is mechanical dredging chosen over hydraulic dredging? The only reason stated is that mechanical is normally used in Guam. There needs to be a qualitative analysis of the benefits/impacts from each method, and it should be in the FEIS. The statement in Vol. 4, chapter 2, page 23, 2.3.5.1 "*Mechanical dredging is assessed as the environmentally conservative method (maximum adverse impact) of dredging...*" is confusing. If this is the most damaging method, then it should be rejected.

Vol. 2, chap. 4, page 92, para. 4: "...during extended periods of intense rain, infiltration rates may be exceeded..." These conditions describe Guam for 6 months out of each year, and during periods of tropical storms and typhoons, which occur regularly. Containment of dredged materials at upland disposal sites will require better management practices than the state: "...temporary discharge of storm water may occur." BMPs must ensure they don't occur.

J-014-015

Thank you for your comment. Current Navy policy includes orientation programs on natural resource protection for all military personnel.

Under the Navy's standard dredging procedures, dredging does not occur during coral spawning events, as noted in Volume 4, Chapter 11.

Coral transplantation, in addition to other mitigation measures, is being reviewed as an option for coral mitigation.

J-014-016

Thank you for your comment. The combined impacts of the preferred alternative are presented in Volume 7, Chapter 3. This chapter, and the cumulative impacts assessment in Volume 7, Chapter 4 have been updated and revised following public and agency comments on the DEIS.

J-014-017

Thank you for your comments. Mechanical dredging was used for analysis because it represents the maximum potential adverse environmental effect to water quality. Volume 9, Appendix D contains additional information regarding dredging techniques and BMPs. Water generated from mechanically dredged material (i.e., effluent) placed in an upland placement facility would not discharge into sensitive surface waters because infiltration rates of the foundation soils at the upland placement sites are greater than any potential effluent discharge. In addition, runoff generated from rainfall would not be expected to exit the upland placement site due to high infiltration rates. Because dredged material placed in an upland placement facility would be finer and therefore, have lower infiltration rates than foundation soils, trenches would be constructed to allow water to reach foundation soils and facilitate rapid infiltration of runoff. There would be no discharge of

J-014-018

g. Artificial Reef.

Construction of an artificial reef, as suggested in Vol. 4, chap. 4, in no way is equal in resource or resource usage value to a natural coral reef, in the same way than an orchard of planted trees does not equal the value of a forest. The DEIS fails to address the findings that artificial reefs are the preferred habitat for introduced (alien) species. The Bureau does not support any artificial reefs as part of mitigation. An artificial reef is rejected as a mitigation or compensation for loss of natural reef. In addition, any mitigation approved to recover functionality of a lost reef should be accompanied by a commitment to support GovGuam agencies in conducting on-going, 50 year studies of the success or failure of the mitigation. The Bureau recommends using a watershed approach for selection of mitigation projects. DOD must work with local agencies in identifying priority watersheds. It is stated elsewhere in the DEIS that long-term monitoring of reef recovery efforts have not been undertaken or completed. This is an opportunity to begin such a monitoring effort in order to address changes as they occur and to observe recovery methods.

h. Other marine issues.

1) Vol. 2, chap. 11, page 54, 1st para, in discussing the use of the Pagat firing range suggests “...and periodic benthic clean up...”, but does not suggest any methods for such. As this involves a quality coral reef area, specifics on clean-up methods must be addressed in the FEIS.

2) In assessing the intensity of an impact, the consideration of “10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment” (Vol 4, chap. 11, page 43, 11.2.1.2), opens the door for introducing local law into the argument and analysis of actions without having to be connected to another process such as Federal Consistency.

J-014-019

3) Vol. 2, chap. 16, page 66, para. 7: “...there would be no impact from marine (ocean) based tourism.” This section ignores the fact that 8,600 military and their dependents would also be marine based tourists, with a significant amount taking up diving and snorkeling. Coral reefs and underwater man-made objects (sunken ships) are fragile and can easily be overwhelmed by the friendliest of human encounters. Just like water resources, food resources, job resources – there is a maximum carrying capacity for human interaction with ocean resources. A detailed analysis of the impact of the human equation of these projects should be accomplished and included in the FEIS.

J-014-020

4) Vol. 6, chapter 16, page 2, 16.2.2: “The annual number of vessels visiting the Port of Guam has decreased by 1,902 vessels over the period of 1995 to 2008. It is expected that the addition of up to 12 vessels per year transporting fuel for the power facilities above the average annual number of vessels visiting the Port of Guam would result in less than a significant impact on marine transportation in Apra Harbor”. That statement is misleading and disingenuous. It ignores the increase in Naval shipping to support the Marines, it ignores the CVN berthing

effluent associated with the upland placement at any of these five possible upland sites and therefore no mixing zones are necessary for this disposal option.

J-014-018

Thank you for your comment. All mitigation options associated with the proposed CVN transient wharf, including the use of artificial reefs and watershed restoration, are being considered by the Navy. When the Navy develops its proposed compensatory mitigation plan, mitigation options contained within the plan will be evaluated by the USACE to determine compliance with the Compensatory Mitigation Rule.

It is anticipated that munitions from use of the range would not affect the benthic environment. Text has been revised in the FEIS.

J-014-019

Thank you for your comment. Guam receives over a million tourists per year, many of which participate in marine based recreational activities including diving, deep-sea fishing, and snorkeling. The additional demand from 8,600 Marine Corps personnel and their dependants would not result in a significant increase in marine based recreational activities. Socioeconomic studies conducted during development of the EIS revealed no apparent shortages in marine based recreational carrying capacity.

J-014-020

Thank you for your comment. The number of vessels associated with the relocation of the Marines and their dependents is presented in Volume 2, Chapter 14. In particular, the number of containers to be handled by the Port of Guam during the period of 2008 through 2018 is presented in Table 14.2-1. For the peak year of containers to be handled (2015), there could be approximately 269 container ships visiting the Port of

J-014-020

activities, it ignores the additional commercial shipping needed to support a major population explosion (household goods, food, auto supplies and all other human needs that require shipping for Guam). The FEIS should not, as the DEIS does, break down every element to prove it is not a significant impact when put together to fit reality they do indeed create a significant impact.

Vol. 2, Chap. 14, page 7, 14.2.1.2 states: *“if the maximum annual number of vessels that would visit the harbor during the embarkation period exceeds the annual maximum since 1995, then a significant impact to marine transportation may occur. If the maximum annual number of vessels that would visit the harbor during the embarkation period is equal to or less than the annual maximum number of vessels since 1995, then there would be a less than significant impact to marine resources.”* There is a fallacy in this statement in that it assumes that there was no significant impact to marine resources in the maximum year of 1995 – without justifying that assumption. It also assumes that a continuous arrival rate equal to that maximum year is equal to that maximum year’s impacts. It ignores cumulative impacts.

J-014-021

5) The reasoning that the turning basin for the carrier berthing is necessary because “carriers can’t back up” would appear specious, given that the carriers will have to do some amount of backing up even with the plans in the DEIS.

J-014-022

6) FEIS should explain why total suspended solids was chosen over turbidity in analysis.

J-014-023

5. Firing Training Range

The DEIS must evaluate all of DOD’s land holdings and take into consideration joint basing for the live fire training facility. Any consideration of expanding DOD’s land holdings through the acquisition of additional private or Government of Guam land must be an option of last resort.

For example the alternative to locate the Firing Range for the Marines at the present Naval Facility at Finegayan on the west coast should be re-considered in the Draft Environmental Impact Statement analysis of this undertaking. This particular alternative was shown, and therefore considered, in the Guam Integrated Military Development Plan 2006. This alternative was taken out completely of the DEIS of November 2009. According to responses to the media by JGPO’s Bice and Jackson, that alternative was removed in response to the government of Guam’s concerns. However, the West Coast Pagat/Sasayan Firing Range alternatives were not presented to the government of Guam at that time. Because the previously proposed Firing Range at Finegayan on the west coast was an alternative that was considered in the planning process, this alternative should be further considered and compared to the now proposed Firing Range alternatives in the Pagat/Sasayan area of Guam’s east coast.

Because the Finegayan Range Alternative analysis was not included in the DEIS, we do not believe the DEIS is really looking at all reasonable alternatives to avoid adverse

Guam compared to 165 container ships in 2008. In 2015, if there are 269 container ships and 150 vessel trips by tugboats and scows to dispose of dredged material removed to support the berthing of the aircraft carrier in addition to the other commercial vessels visiting the Port of Guam, there would be about 1,500 fewer vessels than there were in 1995.

The arrival of commercial vessels to the Port of Guam is scheduled by the Port Authority of Guam to make sure that the port’s facilities can accommodate the ship as it arrives. The proposed improvements to the facilities of the Port of Guam (as presented in Volume 7) will provide the facilities to support the relocation of the Marines.

J-014-021

Thank you for your comment. A turning basin is needed to provide sufficient maneuver area for an aircraft carrier to be pivoted and then berthed on its starboard side. The tugboat assist accommodates a "pivot-in-place" action to turn the aircraft carrier, minimizing turning basin size. Without the tugboats the turning basin would be significantly larger to support the aircraft carrier turning on its own design radius. Because wind and waves exert uncontrolled additional forces on aircraft carrier movement in a harbor, tugboats are required to guide the aircraft carrier into a starboard position parallel to the wharf as well as assist during its departure.

J-014-022

Thank you for your comment. The Final EIS now reflects turbidity.

J-014-023

Thank you for your comment. The DEIS describes the intensive selection process that the DoD went through to select alternatives for the location of the firing range on Guam in Section 2.3.1. Specific reasons why the firing range could not be located on the west coast at Finegayan include

environmental impacts as required by the NEPA process. The adverse impacts of the Pagat/Sasayan Alternative may actually be more significant and not as able to be mitigated as the Finegayan alternative. Adverse impacts for the Pagat/Sasayan Firing Range Alternative include: 1. Increased traffic on local roads due to Marines having to travel to the training site from the main Marine Cantonment; 2. Loss of the Guam Raceway Park as a recreational area for the local population; 3. Denial of unimpeded public access to the Pagat Cultural Historic Site, and surrounding nature areas; and 4. The taking of Guam's public lands for a military activity.

The DEIS also did not present its analysis of all alternatives considered. This was noted in Volume 2, Pg. 2-61, Section 2.3.2.5 Firing General Military Skills Training Alternatives, Live Fire Training Range Complex. "The Step 2 site selection candidates for live-fire training ranges were initially limited to DoD lands and included NCTS Finegayan, expansion of Andersen AFB Tarague Beach Rifle Range to the west, Andersen South, NWF (Andersen AFB), Air Force Barrigada, Orote Peninsula, and NMS. All of these individual DoD candidate sites were dismissed due to not meeting feasibility criteria for compatibility with future missions. After the initial review of individual DoD parcels' capability for meeting firing range requirements, the analysis was expanded to include non-DoD lands on the west coast, east coast and a combination of east and west coasts. The East-West and the west coast alternatives described in Table 2.3-7 were eliminated following advice of the office of the Governor. The amount of submerged land that would be encumbered by the SDZs generated by the ranges on the west coast would have an unacceptable impact on recreational activities and traditional fishing areas, which are prevalent on the west coast. Step 2 site selection therefore identified only one feasible site for the live-fire Training Range Complex". DOD must provide the analysis of the alternatives considered and why they were not selected should be included in the DEIS for our review. How then can we evaluate if the analysis of alternatives was adequate and justified?

We know the Finegayan Firing Range Alternative will impact the fishing and charter boat community. However, this impact can possibly be mitigated to a Less Than Significant Impact (LSI) by measures such as scheduling of firing Range and redesign of layout trajectory. Rather it appears that in order to maintain a certain standard for housing and facilities for the main cantonment, standards that affect the quality of life for personnel and their families, the DOD will not consider siting the firing range training on DOD properties, as previously promised by JGPO representatives. However, the selection of the current alternatives in the DEIS will have a significant adverse effect on the quality of life and land holdings of local residents!

DOD must provide re-designing cantonment housing and facilities layout and design to reduce their footprints in order to accommodate the firing range. Housing units must be designed to accommodate multi-family units instead of single family housing to reduce footprint and need for additional land. Additionally, the analysis should also seriously consider the other alternatives that site the Army Air Missile Defense Task Force housing at Barrigada in order to leave more land for a firing range in Finegayan.

the following. There was concern that the amount and location of submerged land that would be encumbered by the SDZs generated by the ranges on the west coast would be an unacceptable impact on recreational activities and traditional fishing areas, which are prevalent on the west coast. Secondly, higher density civilian development in vicinity of ranges increases risk of encroachment. Discussion on the screening process associated with the firing ranges has been clarified in the FEIS.

J-014-023

The DEIS must evaluate all of DOD's land holdings and take into consideration joint basing for the live fire training facility. Any consideration of expanding DOD's land holdings through the acquisition of additional private or Government of Guam land must be an option of last resort. If additional land has to be acquired, then the DEIS must examine island-wide all potential areas and the scope of that examination must not be limited to lands within the central and northern portion of Guam that are readily suitable for future residential and commercial development. In light of Guam's small geographic size, travel time and development costs should not be a consideration in assessing and ranking potential non DOD properties for the live fire training facility's site.

J-014-024

6. Mitigation Issues

FEIS should provide assurances that mitigations will be comprehensive and sustainable. The DEIS is completely lacking in detail as to which mitigation techniques are preferred, or may be employed, which makes it virtually impossible for the relevant agencies to assess their effectiveness. There are two distinct areas in which mitigations will have to be undertaken; impacts on the natural environment and, impacts on the community. The approaches to each are distinct.

- 1) *Natural environment.* The goal of mitigation is to restore and protect the functions of the impacted environment or ecosystem. It means taking a watershed approach to restoring the conditions which will allow for a return of natural functionality.

There are three avenues for approaching mitigation; Permittee (DoD) responsible mitigation, mitigation accomplished through a Conservation Banking system and, in-lieu fee mitigation (where the permittee provides funding through a government or non-profit organization to ensure mitigation. There is currently not a conservation banking system in place for Guam, and the development of a legal framework necessary to create such a system is not realistically feasible to address the almost immediate impacts of the proposals in the DEIS.

Permittee responsible mitigation will certainly be necessary in some cases, but past actions by DoD (Orote and Haputo Ecological Reserves as mitigation for construction of Kilo Wharf), indicate a less than desirable outcome from this approach. The resources of Guam have sustained human communities for more than 4,000 years and DoD has shown, over the period of 112 years that their concerns for the island, its people and its resources, come and go with time. Impacts on natural resources as drastic as those envisioned by the DEIS require a long-term concern for mitigation. As Dr. Robert Richmond says, "A fifty year old coral cannot be replaced in less than 50 years." It is recommended that a watershed approach and off site projects be selected as appropriate mitigation projects.

The Bureau supports In-lieu fee mitigation as the preferred alternative for a majority of natural resource mitigation. This system would not only result in a holistic approach to function restoration mitigation, but would create an endowment for long term monitoring and management of the mitigation. This is, in fact, the only approach of the three that could produce a true and comprehensive mitigation for habitat damage. It can be argued

J-014-024

Thank you for your comment. Mitigation measures are proposed in the EIS. Mitigation measures committed to by DoD would be identified in the Record of Decision (ROD). Measures in the ROD would be implemented to reduce impacts associated with the proposed military relocation. Additional study of mitigation and compensation for impacts to coral reefs has been undertaken between the publication of the Draft and Final EIS. More information on watershed management mitigation is included in the Final EIS. This information is included in Volume 4 and Volume 9 (Appendix) of this Final EIS. As also indicated in the Draft EIS, support of an in-lieu fee is a viable option for compensation that DoD is considering to mitigate impacts on coral resulting from the proposed actions.

J-014-024

that there is not currently a system in place for this approach, but unlike conservation banking, an in-lieu fee system can be put in place rather quickly with existing resources. A regional NGO (Micronesia Conservation Trust) has close ties with The Nature Conservancy which has had experience over-seeing in-lieu fee mitigation projects within the United States. The Federal Government has had experience working with the Conservancy on such projects. The Trust would receive Federal monies to pass through to private sector and/or government entities to undertake the mitigation projects, and would be responsible for ensuring long term monitoring and management.

The DoD argument against this is that it would take time to certify the Trust and to get the system in place. At the same time, DoD is demanding that short cuts be taken in the permitting system for the projects they want. If DoD believes it deserves to be able to compress review times and permit times, then DoD should accede to the need for creating an in-lieu fee system to protect the long-term needs of Guam's natural resources.

In order to ensure mitigation is in fact assisting the natural resources in recovering, DoD should abide by Section 1704 (a) of the Organic Act of Guam. To wit: "Except as otherwise provided by law, the governments of the Virgin Islands, Guam, and American Samoa, shall have concurrent civil and criminal jurisdiction with the United States with regard to property owned, reserved, or controlled by the United States in the Virgin Islands, Guam, and American Samoa respectively." DoD has, at times, been a good partner in undertaking concurrent jurisdictional responsibilities. Too often they have not been a good partner, denying access to Government of Guam biologists, enforcement personnel and others with their own responsibilities for natural resources. It is well past time for those in charge of the military bases to begin behaving as if Guam were their *home* too, not simply a possession, and to understand that their being a good partner is essential to the health and well being of this American community.

J-014-025

- 2) **Community Impacts.** All of the infrastructure and social impacts described in the DEIS are questionable (particularly those that are judged to have no significant impacts) in part because of the use of straight-line projections to base their impacts on. The need for rapid development of all infrastructures, followed by a greatly reduced need for what was developed, cannot possible result in no-significant impacts. A great part of the cost of infrastructure development will be borne by the Government (people) of Guam with a reduced population base for repayment of bonds and other instruments after 2014.

The explosion in the numbers of military personnel, H-2b workers and other temporary residents associated with the construction period cannot possible have no significant impact on prostitution, social diseases, and crime rates beyond what is based on simple straight line projects resulting from numbers of people (rather than numbers of people and rate of population increase).

When a significant percentage of the civilian population is suddenly and perhaps permanently displaced and fenced off from their culture and history, straight line

J-014-025

Thank you for your comment. Socioeconomic issues are addressed in the socioeconomic chapters of the DEIS; a Socioeconomic Impact Assessment Study (SIAS) is also provided in the DEIS as Appendix F of Volume 9.

It should be noted that the approximate figure of 80,000 represents the maximal population increase over the existing baseline year. It occurs in 2014 when the construction workers from off-island are still there and the military and their dependents arrive. After 2014, the population from the proposed action decreases. By 2017, the increase population reflects the permanent military population, their dependents, civilian federal workers, and the induced (or indirect) population of about 33,000 people. Population density if averaged over the entire Guam land area is expected to increase as a result of the proposed action; however, population densities are likely to be greater in some areas (i.e., Finegayan) and lower in southern Guam.

DoD recognizes that the proposed military buildup would generate revenue to the government of Guam. However, the use of that money is not within DoD's purview. It is within the authority of the executive and legislative branches of Guam to determine and authorize funding for public health and safety. Public services and assistance required from Guam would primarily apply to the military civilian workers and their dependents and the induced population. These additional services, facilities, licenses, and schools, would be supported by the additional money collected by Guam from the new population. This money would come from taxes, licenses, permits, user fees, and other local fees that would go to the general revenue. If the services provided by Guam in the areas of utilities, infrastructures, social and health care, public schools, protective services, are inadequate (this is noted in the SIAS), the income (from the new population) will not be able to pay for all the required needs, especially any capital improvements.

J-014-025

projections on increased mental health problems cannot possibly reflect the truth of what is about to occur.

Other impacts can be resolved by DoD. For example; providing access to important cultural sites on a regular basis, and a strict enforcement against vandalism of the sites by on-base personnel, would go far in helping a culture retain its identity and its health.

Still other social impacts can only be resolved by money – and not in the form of a promised reimbursement that never occurs. The DEIS went out of its way to state that DoD could assist GovGuam in identifying impacts of the Compacts of Free Association with the neighboring sovereign island nations in order to be reimbursed more compact-impact funds. It is the impacts of Guam’s association with the United States that need the most immediate impact aide. The Federal Government should provide up front monies to the Government of Guam, not only for infrastructure development, but for the immediate hiring and training of personnel needs (nurses, doctors, teachers, permit/enforcement/monitoring personnel, etc) identified by the DEIS itself. Educational materials on Guam’s natural and cultural resources, on Guam’s community and laws, should be prepared by the people with the greatest knowledge. DOD should work with the Government of Guam to develop material.

The DEIS suggests several times that Guam could charge impact fees to developers. In this case, DoD is the developer, but volunteering to pay such fees was not mentioned.

DOD must provide in greater detail on activities and on preferred mitigations in the FEIS. The Bureau request that ROD not be issued until agreements, at least in principle but preferably in detail, have been reached for mitigations. These agreements should not wait for the permitting stage because, in some cases, the public would lose the right to review at that point.

Should these projects go forward, there are no guarantees that DoD will follow through with the mitigations necessary. Past history (development of Orote and Haputo Ecological Reserves) has shown a reluctance to follow the spirit of the agreements. At the least, the ROD should identify methods for assuring compliance to both the letter and the spirit of mitigation agreements.

J-014-026

7. Submerged Lands Issues

The proposed Surface Danger Zone and Special Use Airspace designations proposed for the Guam Territorial Waters adjacent to Pagat are not operated as National Defensive Sea Areas, as the Courts affirmed the U.S. retained rights to, and because they would prevent public uses of this public resource, must be considered as a taking.

Surface Danger Zone Overlay on Pagat submerged lands. The DEIS suggests that, with the use of Pagat lands for firing range activities, two restrictive overlays be placed on the submerged lands adjacent to the fast lands, and on the airspace above the lands and submerged properties. The submerged lands, from mean low water seaward to a distance of 3 nautical miles, are the property of the people of Guam through the Government of Guam. Should the DoD declare a Surface Danger Zone and Special Use Airspace

DoD’s ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

During the DEIS comment period many recommended mitigation measures were provided; the FEIS has been revised to include expanded discussions on mitigation measures.

J-014-026

Thank you for your comment. As described in Volume 2, Section 8.2.3, Surface Danger Zones (SDZs) over navigable waters are controlled by the Army Corps of Engineers, which would publish a rule in the Federal Register per CFR Title 33 Navigation and Navigable waters, Part 334, Establishment and Amendment Procedures in the Federal Register. In accordance with 33 CFR 334.4 , designated areas encompassing the SDZs are restricted to navigation during periods when the ranges are in use. A Notice to Mariners would be issued for every day the range is in use.

The Final EIS describes the impact of restricted access to submerged lands as significant. The Coastal Zone Consistency assessment that was submitted to the Bureau of Statistics and Plans, also describes the impact to land and submerged lands beyond the base boundaries. It is the intent of DoD to maintain public access to the submerged lands within the SDZ consistent with safety and operational requirements. At this time, there are no proposals to compensate Guam for the use of the submerged lands.

J-014-026

overlay as proposed, the action would be viewed as a taking without compensation. While the Organic Act gives the U.S. authority to declare such areas as National Defensive Sea Areas, such are used to control non-U.S. vessels within the area – not to close the areas to all non-DoD use.

Table 3.3-18 in Volume 7, chapter 3 of the DEIS indicates there is less than significant impact on non-DoD submerged lands resulting from the project. The inability of the residents and rightful owners of the submerged lands for innocent passage and the right to harvest resources within the submerged lands is a highly significant negative impact. For some, access to fishing is a source of income, for others a source of food, and for others a source of recreation and family gathering. Will the residents be compensated for that loss? Although the fast lands maybe leased by private owners or the Government of Guam, the submerged lands are under the jurisdiction of the local government.

There is at least a partial solution to this issue. Guam has a legal framework in place to lease submerged lands (E.O. 85-6).

Statements in the DEIS, reiterated several times, that: “Federal actions on federal lands/submerged lands are subject to Base Command approval, but are not required to conform with State land use plans/policies” are not only false, they are a reflection of the attitude that makes community support for DoD so difficult. All activities on federal lands which may have an effect beyond the borders of those properties are subject to a great many State policies, such as Federal Consistency and NEPA policies under state agency responsibilities. This is particularly true of actions on submerged lands where water columns move with regularity between federal and state water boundaries. The same is true for Wildlife Refuge Overlay lands. Again, Section 1704 (a) requires concurrent jurisdiction on Federal lands.

J-014-027

8. Cumulative Impact Analysis:

The cumulative impact analysis presented in Volume 7 is greatly inadequate. Rather than describing specific impacts of each project and how the additive impacts of multiple projects may affect a resource within a given area, a table summarizing all the on-going and proposed activities is provided. The cumulative impacts are never really analyzed at any level of detail, yet these impacts are of great significance for Guam’s biological diversity, ecosystem function, and social well-being. A thorough description of cumulative impacts and a commitment to mitigating these impacts must be presented in the FEIS.

Rather than describing impacts in detail, a simple table is provided summarizing the impacts of all proposed activities on a range of general resource categories. The cumulative impacts are of great significance for Guam’s biological diversity, social well-being, and ecosystem function, but this importance is evidently not shared by the DEIS authors. A thorough description of cumulative impacts and the required mitigation must be provided in the FEIS.

J-014-027

Thank you for your comment. The cumulative impact analysis contained in Volume 7, Chapter 4 of the Final EIS has been expanded in response to public and agency comments.

J-014-028

9. Population Issues:

The DEIS is inaccurate and does not fully describe the assumptions related to population projections especially regarding the FAS (Freely Associated States). Section 4.2.1.2: In reviewing the “Draft Socioeconomic Impact Assessment Study (SIAS)”, it is not evident from the report how the number of dependents such as school-age children were calculated based on the assumptions made. No information is shown on the number of households, families, and the family composition of in-migrants. In order to properly review the Draft SAIS, a technical documentation report showing how the numbers were derived is needed. The Draft report only describes the assumptions and the results, not how the assumptions are applied to reach the results.

A description of who will comprise the “indirect/induced workers” and what sort of jobs they represent is lacking. Also missing is an analysis of the relationship between the “indirect/induced workers” and the Government of Guam’s “outside the fence” population increase (primarily, non-construction workers with dependents who come to take advantage of economic opportunities). The Draft SAIS has the “indirect/induced workers” increasing, and then decreasing. This would suggest that they are not the “outside the fence” population increase due to economic opportunities following the buildup.

GENERAL ISSUES:

1. Lack of Quality in the information provided in the DEIS.

Given the amount of time the authors alleged they spent on Guam (example; claimed 7,000 hours of dive time), the dearth of information on Guam’s resources is disturbing.

- a. *“At the time of its listing as endangered in 1987, there were only two known native mature fire trees on Guam, located in limestone forest at Andersen AFB (Andersen AFB 2008a). In 2002, super typhoon Pongsona uprooted one mature tree. The second mature seed-bearing tree was above Ritidian Point in limestone forest on Andersen AFB. Subsequent to the typhoon, seedlings were observed around the felled tree, but it is currently unknown if any wild seedlings still exist. In 2000, 67 fire tree seedlings were planted in three locations: (1) Area 50, (2) the MSA, and (3) Tarague Beach. The number of outplanted seedlings that have survived is currently unknown (Andersen AFB 2008a).”*⁵ The tree in question is listed as endangered, it would seem imperative that its existence be verified before planning for the destruction of habitat.
- b. There is almost a complete absence of information relating to traditional medicinal plants within areas planned for clearing, construction or closure to the public. This glaring omission results in more than just poor information gathering, or an incomplete plant inventory, but highlights the lack of concern shown in the DEIS for the culture and traditions of the Chamorro people.

J-014-029

J-014-028

Thank you for your comment. The Socioeconomic Impact Assessment Study (SIAS) provides ranges of dependent ratios which are based on weighted averages of different dependent ratios relating to in-migrants from multiple origins. This resulted in two scenarios, the unconstrained and constrain conditions. This provides a likely range of populations given the construction and relocation timeframe. Please see Section 4.3.1.2 of the SIAS for information on probably sources of labor supply.

J-014-029

Thank you for your comment. Information on the known remaining Serianthes plants in forests on Guam has been updated in the FEIS. Regarding medicinal or otherwise culturally important plants, information on the use and locations of these plants can be found in Chapter 12, Cultural Resources. The FEIS has been updated to note that a salvage and re-use plan for plants would be developed or required of contractors before clearing began. In addition, the cultural resources section of the FEIS has been updated with an expanded description of culturally important plant species.

J-014-030

c. There was virtually no analysis done of the impacts on existing non-DoD recreational facilities (popular beaches, dive sites, hiking trails, etc) from the projected 44% population increase between 2010 and 2014, or the more permanent 19% directly induced population increase thereafter.

J-014-031

d. *"If the maximum annual number of vessels that would visit the harbor during the embarkation period exceeds the annual maximum since 1995, then a significant impact to marine transportation may occur. If the maximum annual number of vessels that would visit the harbor during the embarkation period is equal to or less than the annual maximum number of vessels since 1995, then there would be a less than significant impact to marine transportation."*⁶ This statement makes an assumption without defense, that the maximum vessel visits in 1995 did not create a harm to the marine environment. It also makes the assumption that a regular number of vessel visits at that maximum number would have the same impact as that one year activity had. It was difficult to find anywhere in this section where the DEIS accounted for additional shipping necessary to accommodate the needs of (first) 79,000 new residents and the indirect population growth that would accompany them, or the 34,000 more permanent residents and the indirect population growth associated with them (household goods shipments, additional food, automobile, etc. for the increased population).

J-014-032

2. Incomplete information in the document.

The Guam Buildup DEIS is an incomplete document, with significant information gaps, flawed data, errors, and inconsistencies. It is understood that there are on-going studies, the results of which did not make it into the DEIS. The document also contains information/statements based on data collected using flawed or inappropriate methods (see detailed comments below). It is unclear how the environmental impact of a full range of viable alternatives can be adequately assessed and a preferred alternative selected without the information collected in these studies, or with the poor quality data evident in certain volumes. The lack of detailed information for certain projects may have been intentional, as it is generally understood that the DEIS is supposed to be a hybrid document that approaches some projects at the programmatic level, while delves into more detail for "construction-ready" projects for which this detailed information is available. However, it is not at all clear which projects were intended to be approached programmatically. In some cases, however, such as with the CVN berthing project, it appears as though an effort was made to provide the level of detail necessary to implement the chosen course of action immediately after issuance of the Record of Decision (ROD). But as mentioned above, this level of detail was not successfully achieved within the rapid timeline and it appears that the selection of the preferred alternative was chosen in the absence of all relevant data, and aside from an analysis to determine the least environmentally-damaging alternative.

J-014-033

3. Action alternatives are not sufficiently different.

There is a general lack of alternatives for the proposed actions. The DEIS fails to examine a range of reasonable alternatives and does not provide an adequate explanation

J-014-030

Thank you for your comment. At the outset of the EIS, it was not believed that a carrying capacity study for the recreational resources was needed. As impacts were assessed, it became apparent that such a study should be conducted; therefore, a mitigation measure was included in the EIS for a carrying capacity study to be performed.

J-014-031

Thank you for your comment. Information on the number of container ships and break-bulk cargo projected for the Port of Guam through the year 2027 is presented in Section 4 (Cargo Forecasts) in the Jose D. Leon Guerrero Commercial Port of Guam Master Plan Update 2007 Report (dated April 2008) prepared by the Port Authority of Guam.

J-014-032

Thank you for your comment. In accordance with the National Environmental Policy Act, the EIS contains a comprehensive analysis of potential impacts of the proposed actions and alternatives. Additional studies have been completed following preparation of the Draft EIS; the Final EIS has been updated with this information. Furthermore, revisions have been made to the EIS based on comments from agencies and the public. In addition, a chapter has been added to Volume 1 (Chapter 4) summarizing changes made to the Final EIS. Consequently, the Final EIS contains sufficient information for the decision maker to make an informed decision.

J-014-033

Thank you for your comment. The alternatives selection process in Volume 4 for the CVN berthing and for the live fire range in Volume 2 have been expanded to include more information on why certain alternatives did not meet the purpose and need for the action. Both

J-014-033

as to why other alternatives were eliminated from full consideration. As such, we believe the DEIS does not fulfill the requirement to “rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated (40 CFR §1502.14).”

Three of the preferred alternatives need further justification. 1) the choice of developing the carrier wharf at Polaris Point rather than the SRF site was not well justified, in that the SRF site would result in a lesser degree of damage to corals. 2) location of the firing range. If the only justification for not choosing the Finegayen site is the footprint of the Surface Danger Zone, then further discussions on why the layout couldn't be altered to configure the danger zone away from shipping lanes should be discussed. Other sites at Andersen should also be investigated and analyzed. 3) configuration of the cantonment area. Option 1 would require less total property, and less destruction of the wildlife refuge overlay. The inconvenience caused by separating functions onto different properties should not be adequate justification for the negative impacts caused by the preferred alternative. This last point is of particular concern because the preferred alternative does not appear to be the least environmentally damaging alternative. Clean Water Act guidelines state: *The applicant bears the burden of clearly demonstrating that the preferred alternative is the least environmentally damaging practicable alternative (LEDPA) that achieves the overall project purpose, avoids impacts to the aquatic environment, and does not cause or contribute to significant degradation of waters of the U.S. [404(b) (1)].* (emphasis added).

J-014-034

4. Consistent, systematic bias towards underestimating impacts

The sum of a variety of inaccurate or unsubstantiated statements, methodological decisions, missing data, and other aspects of the manner in which the DEIS addresses impacts to marine resources are systematically underestimated. Ultimately, the consistent underestimation of the value of these resources translates into an egregiously inappropriate scaling of compensatory mitigation. This bias is most evident in the discussion of impacts as a result of dredging associated with the dredging of the CVN wharf and turning basing (volume 4, Ch. 11), but it also affects the level of impacts assessed for other proposed activities. Specific examples of this bias, which are explained in further detail in the specific comments section, are as follows:

- a. Exclusion of all reef area deeper than 60 ft from any consideration
- b. Exclusion of all non-coral habitat in HEA calculation
- c. Exclusion of macroinvertebrate communities in HEA calculation
- d. Exclusion of reef fish communities in HEA calculation
- e. Claimed of benefits of artificial substrate
- f. Claimed of benefits of non-native species (e.g., increases biodiversity)
- g. Significant underestimation of indirect impacts
- h. Misrepresentation of literature to minimize indirect impacts
- i. Flawed sediment plume model (e.g., data from only two days, model was run for maximum of 24 hours, cumulative impacts were extrapolated)
- j. Uniqueness of marine community within CVN Berthing impact is not recognized

volumes also include discussions of the Least Environmentally Damaging Practicable Alternatives.

J-014-034

Thank you for your comment. The Navy does not agree that data collection and analysis was biased. The Navy collected a robust data set to include coral distribution, benthic cover, fish biomass, and fish and invertebrate species abundance. A standard functional assessment technique that accurately characterized and quantifies losses and gains of coral aquatic resource functions, would ideally be used. However, functional assessment methodologies are an evolving science and the adequacies of existing methodologies are heavily debated in the scientific community. Resource agencies have conceded that the Navy's methodology is valid, but not their preferred method.

Responses to the specific comments mentioned are addressed in various comment responses throughout this Volume.

J-014-034

- k. Marine biodiversity is not adequately assessed and is significantly undervalued
- l. Cumulative impacts analysis is extraordinarily weak
- m. The anticipated impacts of climate change are not at all considered
- n. Unsubstantiated, and overly-optimistic reef recovery rates are used
- o. Older studies from Guam or those from other locations are used to support assumptions (e.g., recovery rates) rather than more recent work conducted on Guam
- p. Impacts (increased harvesting pressure, increased recreational impacts) to reef resources occurring off DoD property as a result of the massive population increase are not at all considered

J-014-035

These and other failings must be addressed in the FEIS. It is our belief that cost to collect the required scientific data and the cost to adequately mitigate for the lost function of the impacted reef resources will increase the project's costs by an order of magnitude or more. Thus, alternatives not currently under consideration should be thoroughly investigated, and a cost-benefit analysis be presented transparently in the FEIS.

J-014-036

5. Impacts are too easily dismissed as being not significant.

It is remarkable that, given the scale of actions suggested by this DEIS, that virtually every impact is excused as being not significant because they will be mitigated (by mitigations never discussed or hinted at, other than to say DoD will use BMPs).

- a. Road improvements are planned for that would not provide mitigation for an expanded impervious surface. Newly paved shoulders are not, in the opinion of DoD, a widening of the road, and would therefore not require storm water controls. The fact that they will create additional storm water runoff over the existing roads does not seem understandable to the authors of the DEIS. The definition of widening is: *to increase the width, scope, or extent of <widen a road> (Merriam-Webster Dictionary)*. By adding shoulder you are widening the road.
- b. Many of the impacts identified throughout the DEIS (including the need for more professionals in many areas, or the costs of infrastructure), are defined as having no significant impact because there would be a flow of new money into the economy to pay for the impact. This attitude is particularly common in the discussions of social impacts. In fact, some of the anticipated problems may occur *because* there is a flow of new money (prostitution, crime, etc.).
- c. One of the impacts of the population increase that will occur, primarily in the northern portion of the island, directly attributable to the military build-up, is that the villages will surpass the population limitations for some USDA rural grants. These villages cannot make up those grant monies through property taxes, as may be the case in the U.S., because property taxes are collected on an island wide basis, while the rural grants are applied directly to the

J-014-037

J-014-035

Thank you for your comment. Information on additional studies and discussion on impacts to coral resources and potential mitigation has been updated in the Final EIS. This information is included within Volume 4. Additionally, DoD would commit to a compensatory mitigation program for coral loss during the permit phase under Section 404 of the Clean Water Act.

J-014-036

Thank you for your comment. To address potential impacts of all project types, roadway-specific BMPs would be included in the planning, design, and construction for all proposed projects, regardless of project types. This includes projects that involve addition of shoulders. To start construction, regulations set forth by GEPA require a grading permit and a stockpiling permit to be obtained from the Guam DPW. The permits require development of an Erosion and Sediment Control Plan required for clearing, grading, grubbing, embankment or filling, excavation, or other earth-moving operations. This plan would also describe construction site BMPs to be used during construction to minimize the impacts of construction and construction-related activities on the watershed. These include, but are not limited to, temporary soil stabilization, temporary sediment control, scheduling, waste management, materials handling, and other non-stormwater BMPs. During construction, work within or adjacent to floodplains would be equipped with appropriate stormwater control BMPs to prevent spills from occurring within the waterways, debris from entering the waterway, and erosion from occurring within the streambed. Water would be diverted away from any construction activities using appropriate water diversion BMPs.

J-014-037

Thank you for your comment. Please see Section 4.4.1 of the Socioeconomic Impact Assessment Study (SIAS), which is Appendix F,

J-014-037

receiving community. The DEIS should include a listing of all federal grants or other monies impacted by the actions proposed, including new monies which may become available because of the actions. This requires federal inter-agency cooperation in compiling the material.

J-014-038

d. In discussing the impacts of lights for dredging, the DEIS completely ignores the impacts of lights during coral spawning periods (it addresses dredge equipment lighting in relation to turtle nesting periods), and it completely ignores the impacts or potential impacts of shore based light pollution during these periods.

J-014-039

e. The whole listing of problems created by the presence of the Marines on Okinawa, (Vol. 2, Chapter 16, Section 16.1.6.1), will apply equally to their presence on Guam, yet the DEIS makes the assumption that those problems will disappear with the relocation of the Marines from Okinawa to Guam.

These problems include:

- 1) **Hindering regional economic development.** This is a problem Guam experienced with the military from 1898 thru 1962. With additional constraints on land, sea and airspace promised in the DEIS (Pagat project in particular), this promises to remain a problem as economic development will occur in reaction to military plans, not public plans.
- 2) **Noise pollution.** It is impossible to understand how the addition of Cobra, Huey, Super Stallion and Osprey rotary aircraft could not increase the noise contours in the northern section of Guam, particularly those private residences close to the base.
- 3) **Environmental damage has also been cited.** *Reports claim that highly carcinogenic materials (fuels, oils, solvents, and heavy metals) are regularly released (Okinawa Prefecture 2004). Training exercises using live ammunition have caused forest fires, soil erosion, earth tremors, and accidents. Among the results, soil runoff has polluted the coral reef.*

It is true they will disappear for the people of Okinawa, but that is only transference of the problem. If the DEIS had addressed those problems more forthrightly, rather than just hoping them away, a great deal of the concerns could have been resolved.

J-014-040

6. Attitude toward cultural/historic properties. Throughout the DEIS there is an underestimation of the importance of culture, cultural properties and historic sites on Guam. The brief, one line statement about the use of medicinal plants by suruhanas does nothing to address the impact of the loss of access to, or destruction of traditional medicinal plants on the culture.

The declaration in Volume 4 (8.2.1.1) that "Other owners who do not want to sell their property (or relocate) would be likely to consider the forced sale or relocation as an adverse impact even though they are properly compensated", is an indication of the lack of knowledge regarding land-use and culture on Guam. For many Chamorros, including

Volume 9 of the DEIS for information on the expected impacts the proposed action would have on the government of Guam's (agencies) staffing requirements. The analysis in the SIAS includes both direct and indirect impacts including those who move to Guam for work related to the proposed action. Another study, funded by DoD's Office of Economic Adjustment is underway, this is the Fiscal Impact Assessment that identifies the needs of the government of Guam and where the money to fund the needs could come from.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-014-038

Thank you for your comment. Under standard Navy dredging procedures in Guam, dredging would not occur during peak coral spawning periods. It is anticipated that this would be proposed as a special condition under the Section 404(b) CWA USACE permit for dredging in Apra Harbor.

There is no data to support that artificial light influences coral spawning.

J-014-039

Thank you for your comment. There are many reasons why the Marines (about half) are being moved from Okinawa. This discussion is provided in section 3.5.2 of the Socioeconomic Impact Assessment Study (SIAS) that is in Appendix F, Volume 9 of the Draft EIS. Serious crimes by military personnel in Okinawa are committed at a lower rate than the overall civilian population in Okinawa, despite reports to the contrary.

the owners of Pagat, the land is more than just an investment to be cashed in (as is the case in western societies). Many of these families have been on that land for many hundreds, if not thousands of years. There is no proper or just compensation which could be made in taking these properties.

In volume 5 (9.2.2.1), the statement that Haputo and Guam National Wildlife Refuge would be off-limits to non DoD affiliated persons and their dependents, is a much stronger statement than seen anywhere else in the document. There are cultural sites within these areas that are of importance to the Chamorro people and to deny access to the real owners of these sites while opening them to groups with no stake in them and (as stated repeatedly within the DEIS) would increase vandalism of the sites, demonstrates a lack of understanding and care for local people.

Volume 6 (6.2.3.1) states that the cave and pool systems along the northern shoreline "may be considered jurisdictional waters of the United States." If those caves are landward of the mean low water line, and there is any connection between water supplies in those caves and water supplies within the aquifer itself, then by virtue of the Organic Act GovGuam has, at least, cooperative jurisdictional rights. Additionally, many of those caves contain human or human related artifacts that are culturally sensitive and should be properly managed to protect those resources.

Throughout the document there are statements to the fact that cultural and historic sites would be placed off-limits to non-DoD personnel and their dependents, while admitting that there will be increased vandalism. Part of the problem is that the cooperative management agreements between Guam Historic Preservation Office and DoD that are called for in the Organic Act are not being honored. If those properties are to be placed off limits to the culture they belong to, then they should also be placed off limits to DoD personnel and their dependents. In addition, no matter what happens with access by the culture, professional staff from Guam HPO must be allowed access in order to inventory, assess, document and protect the resources.

DOD must provide a development of an historic/cultural plan for those resources within DoD lands, to include a method of access to the most important sites (Pagat caves, others), a protection plan, and a plan for a cooperative monitoring, management, recordation system which includes both Guam HPO and DoD HPO.

Vol. 8, chapter 5, 5.10.2 reiterates DoDs assertion that they will require "long term restriction from potential traditional cultural properties as a result of training and safety requirements". DoD must, as partial mitigation for this intrusion on the rights of the indigenous people, develop a system whereby those properties identified as significant can be visited on a scheduled basis. If not, then those sites should also be placed off limits to the military and their families in order to prevent the vandalism the DEIS assumes will occur from that group. In any case, Guam historic preservation experts within Department of Parks and Recreation should have access to these sites for data collection, preservation and other site related responsibilities.

Many serious crimes are based on singular incidents that are reported multiple times so that it appears to be multiple incidents.

The impacts of crimes on Guam are discussed in Volume 2 of the FEIS. As noted in the SIAS: "A critical distinction when analyzing crime impacts is between the total numbers of crimes ("volume of crime") and the actual crime rate (numbers divided by population). Population increases always bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely to commit crimes."

The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by a proportionate increase in crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct and enforce laws to protect the citizens of Guam and our military personnel.

J-014-040

Thank you for your comment. Additional information on culturally important plants and their locations on Guam is included in Chapter 12, in Volume 9, and Appendix G. DoD will make every effort to allow access to culturally important plants when it is safe for the public to do so.

J-014-040

The DEIS continued to err throughout the document in equating cultural sites with historic sites, as if they were interchangeable. That may be adequate for stateside consideration in homogenous areas (off Native American properties), but for Guam there is still a living culture that continues an affinity with sites beyond those listed on the NRHP. Such sites include the Fena Massacre Site and all other sites where WWII atrocities occurred. If access to these sites is not granted in some way, then a finding of significant adverse impact must be made in the FEIS.

AREAS OF CONCERN:

J-014-041

1. Erosion Control.

This is one of the most important issues associated with the proposals, as it is one of the primary causes for coral reef damage and destruction.

- a. *"While silty soils are prone to erosion, the lack of slope lessens erosion hazards."* (DEIS vol. 2, chapter 3, 3.1.4.1) Lessens does not equate to eliminates. In the tropics extremely heavy rainfalls can be expected throughout the year, and the rain and winds associated with tropical storms and typhoons can result in devastating effects on cleared soils. Erosion can be controlled through 1) judicious clearing, grading and grubbing, to include only those lands which will be built upon within a reasonably short period of time. 2) covering cleared and graded property with mulch immediately. 3) schedule development activities to reduce the amount of cleared soil required at any time, to avoid the rainy season. 4). Respond with mitigation (covering) of bared soils prior to any anticipated tropical storm or typhoon.
- b. Adherence to Guam's Section 319 Non-Point Source Pollution Regulations is essential, and should be addressed in the FEIS.
- c. Adherence to Guam EPA's Soil Erosion and Sediment Control Regulations is essential, and should be addressed in the FEIS, particularly detailing conformance to Section 10105, parts. B9, 10 and 11 in particular.
- d. Adherence to U.S. EPA's December 2009 Storm Water Control Guidance is essential, and should be addressed in the FEIS.

J-014-042

2. Waste Water/Storm Water.

- a. In a restricted, small island environment every impact on the environment is magnified, as are the mitigations. While it has been deemed unnecessary to meet mitigation needs for this particular set of projects, it still may be worthwhile to develop a cost/benefit analysis of upgrading the Agana and Northern District sewer treatment plants to tertiary level.
- b. Volume 6, Chapter 10, 10.2.4.1 states that "no new uses in submerged lands are proposed." While that may be true, there will be an increase in the effluent produced by an increased population and discharged into near coastal

J-014-041

Thank you for your comment.

1.a. Volume 7 of the EIS contains a description of BMPs that will be used to prevent the erosion this comment discusses from occurring.

1.b, c, d. All of Guam's applicable permits will be obtained and all applicable requirements will be adhered to.

J-014-042

Thank you for your comment.

DoD is proposing to upgrade to the Northern District Waste Water Treatment Plant (NDWWTP) from Primary to Secondary Treatment. This action alone will assist GWA in meeting its coastal water quality standards, providing benefit to the sea life and people of Guam. Tertiary treatment is not needed in order to meet current water quality standards.

The impacts of increased effluent on marine resources are appropriately described under the Marine Resources Chapter 13 in Volume 6. In general, the *enterococcus* and ammonia levels, after initial treatment as identified in Table 13.2-4, are lower than current ambient conditions (i.e. no action alternative) found in coast waters associated with the NDWWTP. And as identified above, with DoDs assistance with future upgrades to secondary treatment, water quality values will be lower than GWQS.

J-014-042

waters. Volume 6 tries to address this issue, but states (in chapter 13, page 16): "Enterococcus and ammonia in the surfacing plume will exceed the GWQS. These anticipated constituent concentrations are based on the modeling results and do not take into account the degradation of constituents, die-off of organisms, or uptake of the pollutants by existing aquatic life.

If enterococcus is taken up by existing aquatic life, is there a cumulative build up in that organism? Is it taken up further on the food chain? At the Agana outfall, spinner dolphins have been observed in the past, swimming in the area where the effluent plume was rising. What was the impact on those mammals?

J-014-043

- c. There is little indication (to the positive) that the road improvements offered will address storm water retention and management. DoD seems to be arguing that by adding an impervious surface as shoulder does not constitute road widening.

All road improvements should address storm water management.

- d. Section 438 of the Energy Independence and Security Act of 2007 reads as follows: Section 438. Storm water runoff requirements for federal development projects. The sponsor of any development or redevelopment project involving a federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.

The guidance goes on to state that management must include policies and practices to manage the 95% rainfall and to (attempt to) achieve a zero loss/zero gain stormwater flow into surface waters, as well as to return to the extent possible to the evapotranspiration and recharge rates previous to the disturbance.

It is important that adherence to the 2009 guidance be addressed and ensured in the FEIS.

J-014-044

3. Solid Waste.

- a. Figure 2.4-1 on page 90, Vol.6, chapter 2 indicates a total amount of solid waste that would be generated by both DoD and the non-DoD communities, and which will be disposed of at the Layon facility. The use of Layon solid waste facility by DoD will result in significant extra traffic from large trucks on a daily basis.

At the estimated amount of solid waste that will be generated by DoD over a 10 year period, 506,954 tons, or 1,013,908 cubic yards (this is using a figure of 1,000 pounds per cubic yard as calculated by Heil Inc. – the largest manufacturer of garbage trucks, rather than the 1,200 pounds per cubic yard

J-014-043

Thank you for your comment. To address potential impacts of all project types, roadway-specific BMPs would be included in the planning, design, and construction for all proposed projects, regardless of project types. These BMPs would adhere to both (1) conditions set forth by GEPA for obtaining grading and stockpiling permits, and (2) the 2009 USEPA guidance entitled: "Technical Guidance on Implementing Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act." This guidance was not available at the time of the DEIS release, however, the text in Volume 6 Chapter 6 (Water Resources) and Volume 7 Chapter 2 and other locations in the FEIS that discuss BMPs and mitigation efforts was updated to include adherence to the 2009 USEPA guidance that implements Section 438 of the Energy Independence and Security Act of 2007.

J-014-044

Thank you for your comment.

The estimated additional truck traffic to Layon landfill will not cause traffic congestion or any sudden degradation to the pavement. When considering impacts to pavement conditions or structural capacity, it is measured in equivalent single load axles (ESALs). Using your calculation of 12 truck loads per day, five days a week for 10 years results in roughly 100,000 ESALs. In general, pavements are designed for several million ESALs. Route 4 improvements to accommodate the trucks going to the new landfill is part of Guam DPW's transportation improvement program.

The statement that Marines would begin moving in 2010 is accurate; please refer to page ES-7 of the Executive Summary that provides an overview of the military buildup and schedule. The Layon Landfill has been designed to accommodate the potential military buildup and use of

used in the DEIS), a minimum of 22 trucks, each carrying 18 cubic yards of trash, would be required per day, five days per week just for DoD solid waste. Using Heil's largest truck, the Heil 5000 which carries up to 32 cubic yards (to minimize the number of loads per day), at least 12 loads per day would be required. For even the smaller truck that equates to more than 18,000 pounds per load.

According to the figures given on table 2.4-1, DoD's solid waste output will exceed non-DoD output by more than 30%.

There is no mention of the impacts on roadways from this operation. Route 4, which would carry the loads for some distance, is not in the road hardening plans. Additionally, the increased traffic along route 4, which is close to sea level and near the shore, would result in increased oil, rubber and other pollutants on the roadways, which would be transported onto near shore reefs.

The impacts of the solid waste trucks on Guam's roadways (in particular Route 4) must be addressed in the FEIS in detail. This must include methods for managing non-point source pollutions that would result from the increased heavy traffic.

- b. The DEIS states that the Navy landfill at Apra Harbor could have its life extended by 27 years if they installed a liner, *"however, a new liner system would require approximately 3 years for design, permitting, and construction (assuming that the Navy would hire contractors to do this work) and therefore would not be ready by 2010 when the Marine Corps would begin to relocate."* (vol. 6, chap. 2, page 96). The Marines would not actually begin arrival until 2014.

FEIS must explain why this option cannot be selected. By selecting it, the life of the Layon landfill will be substantially increased. Where possible, DoD should resolve its own waste problems on its own lands.

- c. "Continued use of the Navy Sanitary Landfill under the Preferred Alternative would further contribute to the potential contamination of the underlying groundwater. However, the landfill is located over aquifers not used for supplying drinking water, thus any leachate that might percolate into the aquifer would not affect regional groundwater drinking quality or quantities" This statement, (found in vol. 6, chapter 6, page 19) is based on two fallacies. First; since it had been stated earlier that a liner could be installed at the Navy landfill, the problem of contamination would be resolved. Second; the lack of concern for the aquifer in that area is short-sighted at best. The water in that aquifer may be brackish as stated (one long-term solution for potable water listed in the DEIS is desalinization of brackish water), and may not be needed at present time, but that is not an excuse to continue to pollute the waters.

the Layon Landfill will help to achieve an economy of scale by sharing solid waste disposal costs with GovGuam. Current projections indicate the Layon Landfill will have capacity for 33 years. The Navy is preparing a Recycling and Solid Waste Diversion Study for DoD Bases, Guam that has established a diversion goal of 50 percent, not including construction and demolition debris. The Study is considering the following alternatives: 1) DoD would construct two refuse transfer facilities, one in northern Guam and one in Southern Guam; 2) DoD would implement a source separation recycling program at all facilities; 3) DoD would construct recycling center(s); and 4) DoD would construct a materials resource recovery facility.

As described in Volume 6, Chapter 2, Section 2.4.1.1 and presented in Table 2.4.3, adding a liner to the Navy Sanitary Landfill was an alternative considered but eliminated from analysis in the EIS. The Final EIS includes a discussion of potential impacts to the underlying groundwater. Studies are currently under way to assess whether or not the underlying groundwater has been affected by leachate. Based on the conclusions of these studies, further action may be required.

- d. While there will be considerable demolition of existing structures for this project, there is not mention of the possibility of asbestos. There is an asbestos "landfill" at Andersen, but with new methods of disposal this site should no longer be used.

If asbestos is found during these projects, then it should be removed from Guam and disposed of through vitrification in an electrical glass melting furnace (or it may be preferable to place an oven on Guam to dispose of all of the asbestos – taking it out of the "permanent storage" facilities).

- e. *"NAVFAC Marianas has initiated an effort to "partner" with Andersen AFB in its recycling efforts. By collecting and transferring recyclable waste from Navy facilities to the Andersen AFB recycling center, the Navy hopes to reduce the flow of waste into the Navy landfill and increase the profitability of the Air Force's investment into its recycling equipment by adding volume of recyclable waste. However, the current volume of recyclable waste generated by the Navy is likely well below the amount needed to construct and operate a dedicated Navy recycling center that is capable of supporting itself in terms of cost."* (Vol. 6, Chap. 3, page 25).

Because recycling is an "economy of scale" effort, an opportunity would exist to allow for collection points for recyclable materials from the general public as well, thus helping to reduce the solid waste load at Layon.

"GovGuam has been consulting with the military for several years regarding the potential consolidation of their individual solid waste programs or components of these programs (e.g., recycling facilities)." (vol. 6, chap. 3, page 28). The FEIS should address this approach.

4. Educational Materials.

a. Because the island, its people and its resources will be overwhelmed by an immediate 40% population increase, and an immediate development of between 1.5-2.5% of the land total, involving nearly 80,000 people who have no firsthand knowledge of the fragility of the island and its community, it is imperative that an immediate and thorough educational campaign be undertaken for the following:

- 1) Construction companies, supervisors, and lead personnel.
- 2) H2b workers
- 3) Military personnel
- 4) Dependents of military personnel.

Written brochures and DVD's should be aimed at their particular audience and must include information about the history of Guam and its people, information on the native flora and fauna, an introduction to the aquatic resources of Guam, including corals, gastropods, fishes and other marine life, and the laws that apply to Guam. The objective of the educational materials should be to give the

J-014-045

Thank you for your comment. The new Layon Landfill is designed to accommodate municipal solid waste from all current and future DoD sources as well as civilian and commercial sources. Based on conservative waste generation rates, the new landfill will reach capacity in approximately 33 years. The DoD will be implementing diversion and recycling programs that will significantly reduce solid waste generation and will help to extend the life of the landfill. Details of these programs have been added to Volume 6, Chapter 2.

The Navy has prepared a Recycling and Solid Waste Diversion Study for DoD Bases, Guam that has established a diversion goal of 50 percent, not including construction and demolition debris. The Study considers the following alternatives: 1) DoD would construct two refuse transfer facilities, one in northern Guam and one in Southern Guam; 2) DoD would implement a source separation recycling program at all facilities; 3) DoD would construct recycling center(s); and 4) DoD would construct a materials resource recovery facility.

Additionally, the Navy has prepared a Construction and Demolition (C&D) Debris Reuse and Diversion Study for DOD Bases, Guam that addresses waste characterization, processing, recycling and disposal of construction debris. Information from this study has been used to update the FEIS.

The C&D study considers the following alternatives: 1) Contractors would continue to process all C&D debris, and DoD would construct a composting facility to process green waste and 2) DoD would construct a C&D debris central processing facility and a composting facility to process green waste.

Through project specific contractual requirements, DoD contractors would be required to process and divert 50% of C&D debris that is

J-014-046

audience an appreciation for Guam’s uniqueness, an understanding of the dangers man faces in the sea and the dangers the sea faces from man, an appreciation for the fragility of Guam’s resources and, a knowledge of how to avoid negative impacts.

In order to create the best possible products, these educational materials should be a cooperative effort between DoD and the Government of Guam. Funding should be provided by DoD as the build-up is a DoD project, with expertise from the various GovGuam agencies providing the information and format.

J-014-047

b. Volume 2, chap. 11, page 58 suggests that, in order to take measures to protect Haputo from being overwhelmed recreationally, a short video and access pass, similar to the process at Hanauma Bay in Hawaii should be instituted.

While that is a good idea it is not enough. Hanauma Bay has shown that there also needs to be a limitation on the people allowed to access the property, and therefore, it is important that limitations on the daily/weekly/monthly visitors to Haputo Ecological Reserve (particularly the beach area) be instituted, using a strict reservation system. Guam Department of Aquatic and Wildlife Resources should develop the numbers for this.

c. Volume 5, Chapter 9, 9.2.2.1 states that Haputo and Guam National Wildlife Refuge would be off-limits to non-DoD affiliated persons. This is much stricter language than appears in previous volumes. These areas are part of Guam’s heritage and some form of access should be accommodated.

DoD should work with GovGuam to develop an access plan that would satisfy security needs as well as access rights.

J-014-048

5. Roads and Transportation issues.

a. The impacts of traffic on Guam public roads, while unavoidable with increased personnel, could be mitigated by staggering working hour starts, particularly during construction phase. I.E., one third of day workers start at 6am, one third at 7am and one third at 8 am. FEIS should consider this as a mitigation.

b. Vol. 6, chap 4. It may help to reduce time or eliminate some v/c F times to designate inside lane for mass transit or vehicles with 3 or more passengers only, which may also increase mass transit ridership. In some areas the creation of a convertible lane may also be possible. While these options would normally be the responsibility of GovGuam for designation, the severity of the impacts created by DoD actions would suggest that a DoD/GovGuam cooperative effort be made to find creative solutions to anticipated congestion.

J-014-049

6. Noise.

a. Marine aircraft to be added include 12 each MV-22 osprey and 4 each CH 53E Super Stallion helicopters, in addition to occasional visits by carrier based F-18

generated on each project. Another alternative would be for the DoD to construct a central processing facility that would be used to recover and reuse or recycle scrap metal, concrete (without lead-based paint), asphalt concrete, and untreated wood. Asbestos waste will continue to be disposed at the Navy Sanitary Landfill at Apra Harbor. Contractors would be required to haul C&D to this facility. Based on the C&D debris composition assumed in the study, the Navy will be able to achieve a C&D debris waste diversion goal of greater than 50% by the end of fiscal year 2015. A site for the central processing facility is currently being evaluated but will most likely be located in northern Guam. Disposal of C&D debris that is not divertible or recyclable will be disposed at the Navy Hardfill at Apra Harbor. The study also evaluates the construction of a composting facility to handle green waste generated by land clearing activities required for new development.

J-014-046

Thank you for your comment. Your mitigation recommendation has been taken under consideration. Expanded mitigation discussion is available in Volume 7 of the FEIS.

J-014-047

Thank you for your comment. One of the mitigation measures proposed is for a recreational resource carrying capacity study and resource management plan to be conducted. Data gathered for the carrying capacity study would be used to form a baseline (i.e., capacity for a recreational resource) and appropriate mitigation measures would be determined in the resource management plan.

Another mitigation measure proposed in the EIS is for DoD to collaborate with the Guam Department of Aquatic and Wildlife Resources (GDAWR) to establish outreach programs for the existing five marine reserves. The EIS has been revised to reflect that the Ritidian Unit, which is owned

J-014-049

Super Hornets, all of which are substantially more noisy than the Seahawk helicopters presently assigned to 25th squadron at Andersen. Additionally, while Navy helicopters rarely fly multiple craft formations, the Marines do routinely. It doesn't appear that full analysis of anticipated noise impacts on off-base residential lands has been completed.

b. Vol. 2, chap. 6, page 23, 6.2.1.2: *"Threshold levels of significant impact for supplemental noise metrics have not been established and there is no accepted methodology for aggregating these values into a cumulative impact description."* However, an analysis is still needed to be done.

c. While this study states that *"...noise impacts due to construction noise are expected to exceed limits to off-base receptors..."* but then concludes that no mitigation is required since noise levels are temporary. Within reasonable limits, the noise nuisance factor can be reduced by ensuring that all construction take place within reasonable hours, particularly in those areas where construction is adjacent to non-DoD properties.

J-014-050

7. Potable Water Resources.

a. The potential impacts of climate change, particularly sea level rise, must be addressed in calculating the carrying capacity of the sole source aquifer. There is a range of widely accepted scenarios for sea level over the next 20-50 years, and those should be addressed.

b. The DEIS uses "current usage of sustainable resources" as a static number over which they add anticipated use by DoD. The normal civilian population growth and water demands have not been included, nor estimations of projected increases in tourism usage.

c. Vol. 2, chap.4, page 28: *"An analysis of chloride concentrations in Andersen AFB water supply wells at Andersen South indicates that chloride is increasing in approximately half of the wells and concentrations in several wells exceed the secondary MCL"*. FEIS needs to explain how this problem relate to/impact on or define problems in other wells drawing from the aquifer and define the state of the basal lens water in the aquifer?

d. Vol. 6, chap. 2, page 5: *The Navy transient personnel are all shipboard, and the ships would not require support services during the interim period (i.e., would not initially contribute to demands on public utilities).*" They would also place a demand on solid waste disposal and on potable water supplies. This needs to be addressed in the FEIS.

e. Why does the anticipated potable water needs rise in 2019 over 2014 and 2015 levels when DoD related population increases actually fall over that time period? (Vol. 6, chap. 2, table 2.2-2).

by the Fish and Wildlife Services, will continue to be open to the general public.

J-014-048

Thank you for your comment. As indicated in Volume 6, Chapter 4, page 4-87, a proposed mitigation for impacts to traffic from the military build-up is the development and implementation of a Traffic Management Plan, which includes among other measures, staggered work hours, flextime, and compressed work weeks. The Traffic Management Plan would be a cooperative effort to be developed by the FHWA/DPW and the DoD, particularly during construction of the military facilities.

J-014-049

Thank you for your comment. This comment covers two pages, please see comment J-014-050 for the remainder of the comment. The response for both pages is provided here.

a) All of the aircraft listed in this comment were included in the noise analyses for Andersen AFB. Also included were the occasional other aircraft that would be using Andersen AFB associated with the proposed action. The analyses also include the types of formations the USMC uses. See Volume 2, Chapter 6 for the noise analyses and Chapter 8 for the land uses within the noise contours.

b) Although there are no specified threshold levels and no methodology for aggregating supplemental noise metrics, analyses using these supplemental metrics are often more applicable than day-night noise levels or other more traditional metrics. For example, even using logarithmic addition, an SEL of 80 dBA does not aggregately combine with a day-night level (DNL) of 80 dBA. Often referring to a single overflight, an SEL metric may be more applicable. For cumulative analyses, a more qualitative approach is necessary. Please refer to Volume 7, Chapter 4.

J-014-050

f. Vol 6, chap 2, 2.2.3.2) *"there is sufficient water supply to meet the anticipated non-DoD water demand, provided that the proposed system expansion is operation in time to meet the increased demand."* Given the financial state of affairs of the Government of Guam, and the fact that much of the civilian demand is directly related to the DoD build up, it is important that DoD contribute up-front costs for GWA to undertake expansion of their system.

g. Vol. 6, chap. 3, page 52, 3.2.3.1: *"GovGuam may charge development impact fees that could enhance financing options that could go toward acceleration of projects to improve the GWA water system"*. This is not a feasible option, as GovGuam attempted to impose development impact fees in the past, with little legal success. Federal courts in North Carolina recently ruled against developer impact fees. If DoD (as the developer) is willing to pay up front impact fees, GovGuam would probably accept.

h. Vol. 6, chap. 2, page 41: wouldn't desalinization wastes also include any chemicals leached into the soil from higher grounds, such as fertilizers, pesticides, herbicides, etc? If so, direct ocean dumping should not be considered a viable option for removal.

8. Other Land Issues.

J-014-051

a. **Ecological Reserve Area.** If these are to be created or expanded as a form of mitigation, DOD should include a significant management partnership with GovGuam (DAWR).

J-014-052

b. **Recreation.** Vol. 5, chap. 9, page 3 states, *"The sole recreational resource at Navy Barrigada features one of two golf courses available to installation personnel and guests on Guam, the Admiral Nimitz Golf Course"*. This statement is false in two ways. First; installation personnel have the same access to all golf courses on Guam that other residents have. Second, the public does play at Admiral Nimitz Golf Course, however green fees are higher at these courses.

J-014-053

c. **Wildlife.** Vol. 5, chap 10, 10.2.3.1 (as an example) states: *"However, long-term, permanent impacts to populations of such species would not result because the species known to be present are abundant in surrounding areas, and would rapidly repopulate suitable portions of the affected area."* This statement has been repeated throughout the DEIS and, while it might find truth in selected areas, the statement ignores the impact of diminished total populations. In natural settings wildlife tends to occupy the maximum land space it can (or attain a maximum population density for the land available). Any wildlife displaced from an area to adjacent lands would expand that species population beyond the sustainability levels of the habitat. Natural levels would result over time, but the overall long term impact is that total species populations would decline because total habitat area had declined.

c) Mitigation measures such as those described would be implemented to reduce the noise in adjacent non-DoD properties. Mitigation measures such as those described would be implemented to reduce the noise in adjacent non-DoD properties.

J-014-050

Thank you for your comment.

a. Impacts of climate change on the NGLA will be assessed in the USGS study of the NGLA which is planned for completion in 3 years. Preliminary results from the study will be incorporated in the plans and specification for the water system. There is also an assessment of impacts from climate change to the aquifer in Volume 7.

b. The water demand estimates in the Final EIS include the baseline population, baseline growth, civilian workers for the new base, and construction workers. Water demand for tourists is included in the current GWA water production value that is used as the current demand, but it is assumed that the number of tourists does not increase over baseline levels.

c. McDonald and Jensen (2003) suggest that there has been a distinct chloride increase over time, which they interpreted as being indicative of overpumping. Their conclusion was drawn from an analysis of wells through the NGLA, not an analysis of the Andersen AFB wells. The sentence in Vol 2 will be corrected.

d. The Final EIS addresses all necessary dockside utility requirements for the visiting ships.

e. Table 2.2-2 presents the estimated water demand for DoD only. Water demand for populations related to the USMC relocation were

J-014-053

...they are fenced off from public entry, the Guam National Wildlife Refuge is not considered an accessible "publicly owned" wildlife refuge; therefore, it is not determined to be subject to the protective provisions of Section 4(f)." (vol. 6, chap. 21, 21.3.2). This statement ignores the purpose of the refuge and overlay areas. It is intended not just to protect habitat, but the wildlife that moves in and out of the refuge and that depend on the refuge. Because wildlife move freely from DoD to publicly owned land, the public also has a stake in the habitat that sustains the wildlife's ability to survive. To dismiss the public's rights over their own living resources is, at best, arrogant. In addition, the DEIS has not shown that it is necessary to destroy the refuge as their actions would surely do, they have only demonstrated that it would be convenient for them to do so. **FEIS must demonstrate that there is no practicable alternative to their intrusion on the wildlife refuge and the agreement they made to protect it.**

J-014-054

9. Hazardous Waste.

a. Beginning with table 17.2-1 (vol. 2, chap. 17), and extending to all the following tables in this section, it is inadequate to state "no mitigation measures are identified". At the very least there must be a statement that BMPs and site specific plans will be adopted or updated and that mitigation training for response to those plans will be conducted. That is alluded to in text, but the language of these tables brings that into question.

b. It is impossible to assess the potential impacts of hazardous materials, waste, spillage, etc., because of the generality of the information. For example; it was stated in passing that pesticides and herbicides were included. What are these exact products and in what quantity would they be used? With that information suggestions could be made for alternative chemicals, or for a non-chemical replacement. FEIS should address hazardous material usage in greater detail.

J-014-055

10. Air Issues.

Vol. 5, chap. 5, 5.2.1.2 states: "The potential effects of CO² and other greenhouse gas emissions are by nature global and are based on cumulative impacts. Individual sources are not large enough to have an appreciable effect on climate change." This may be the most ludicrous statement in the DEIS. Cumulative means that it is the result of many actions, and so all those many actions must be addressed for cumulative impact (on a global scale in this case). In addition, USEPA recently announced new regulatory authority over CO² greenhouse gases because of their harm to humans. President Obama made commitments on greenhouses gases at the Copenhagen Climate Change Conference, to include CO². The release of greenhouse gases as a (indirect) result of these proposed actions must be addressed in the FEIS.

J-014-056

11. Social Impacts.

There are a range of social impacts discussed in the DEIS which will be covered here.

a. **Housing:** While it is positive that empty rental units may be occupied (during the construction period), it is also possible that the impact on the

presented in Table 2.2-4 of the DEIS for the off-base demands.

J-014-051

Thank you for your comment. DoD will continue to work with Government of Guam agencies on these important natural resource protection issues.

J-014-052

Thank you for your comment. The statement on Page 3 was referring to recreational resource existing specifically at the Navy Barrigada property. Your comment regarding green fees is noted.

J-014-053

Thank you for your comment. It is recognized that total population number could be reduced, however these are not significant impacts if a large population still remains.

J-014-054

Thank you for your comment. The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, nuclear materials, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD

ability of current residents to continue to rent may be negative. The military provides their personnel with substantial housing allowances, which tend to raise rental prices. Should the non – H2b workers also receive substantial rental allowances the problem will just be exacerbated.

The DEIS estimates that there are currently some 2,800 vacant rental and for sale units available, and almost 9,500 new units will be needed by 2014, which then drops to only 3,000 units just three years later.

There will be an excess of renters during the construction phase, followed by a glut of empty rental units. The DEIS suggests that all military personnel and their dependents will be housed on-base. The military could reduce their built footprint in the cantonment area and relieve the excess housing problem they caused through their actions off-base, by long-term leasing of empty units off-base to house their personnel.

- b. Personnel needs:** It is difficult to accept the numbers projected for police, fire, teachers, public health, permitting and enforcement. They were arrived at using straight line projections, which are always questionable. With the minimum drinking age on Guam to be 18 (the lowest in the nation), there will certainly have to be an increase in drinking related problems with the Marines from 18-20 years of age (DUI, fights, accidents), the report suggests that GPD needs will increase by 117 officers up to 2014, and then need to be reduced by 62 officers thereafter (table 16.2-46, volume 2). The figure (like the figures for all projected personnel needs), fails to address the fact that most of these positions are currently under-filled due to fiscal restraints.

Similar fallacies occur throughout this section. The DEIS projects that no new students will enroll in GPSS schools because they will have DoD schools available to them. DoD schools will require new teaching staff and that will probably come from the pool of GPSS teachers, as was the case when the DoD schools first opened.

The DEIS review of the Bureau of Family Health and Nursing Services points out the overall current shortfall in personnel as stated above. “...the inability for BFHNS to meet these needs. Because of staffing and supply shortfalls, ...” (volume 2, page 16-23).

The fire department needs are interesting in that the military has firefighting equipment and staff, including trained use in helicopter water drops for fire fighting, but DoD policies are to deny the use of such assistance off DoD properties, even if DoD was responsible for the fire. A change in this policy alone would go a long way in meeting the additional fire fighting needs due to these proposals.

has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered “mitigation measures” because these actions are being done as part of existing laws and regulations and not as part of new “mitigation”. However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the environment from adverse impacts associated with the use of hazardous substances. Regarding waste volume and waste type details, this data was obtained directly from DRMO databases in Okinawa and Guam. The waste Tables in

J-014-056

In summary, all of the figures given for housing and personnel needs are questionable, and fail to answer the bigger question; what do you do with the excess housing and staffing that would be realized after 2014. The four to five years that the bulk of the personnel would be needed (2010 – 2014) is too long for limited term hire, or even for contractual hire.

DoD should recalculate the personnel needs using other than straight line projections, and should work closely with the Government of Guam in helping to find and recruit the personnel needed to meet the impacts of their developments. DoD suggests throughout the document that GovGuam should impose “development impact fees” in order to pay for DoD impacts. The assistance suggested here, and all other up-front assistance suggested could be considered a development impact fee, which DoD is on record as supporting.

J-014-057

- c. **Population:** The proposed activities will result in a change in the ethnic make-up of the population, and could have consequences on voting patterns, which have over the years allowed the native population (Chamorros) to retain a political majority on their own island. While not all military/dependents/non DoD workers register to vote on Guam, it is possible that a significant number may because that would absolve them from having to pay both Federal and State income taxes while they are on Guam. The result may be a shift in ethnic make-up of the fifteen members of the Guam Legislature, reducing the Chamorro majority, and may have social consequences beyond the political process.

Given the figures presented in Volume 2, table 16.2-34, the Chamorro’s currently make up 42% of the population. During the construction period that percentage will fall to 29% and only rise to 36% after 2014. There may be no mitigation possible for this issue, but it will require a greater sensitivity on the part of DoD.

J-014-058

- d. There was little to no discussion on the impacts to marine resources due to the induced population growth.

J-014-059

In conclusion, we have received many comments on the intimidating nature of the DEIS document, mainly attributed to its extraordinary length and the abundance of technical jargon, redundant material, and complex, sometimes confusing, explanations. According to 40 CFR §1502.8, environmental impact statements must be written in “plain language.” It is clear that this document does not meet the requirements of this regulatory requirement.

We believe that the FEIS is not the appropriate document to include large amounts of new (or corrected) information, as the 30-day FEIS review period does not require comments by agencies, organizations, or private citizens (or if they do comment, that their comments will be incorporated into the ROD). Instead, we strongly recommend the

Volume 2, Chapter 17 provide as much specific information regarding the specific wastes types as was discernable within the DRMO databases. However, potential impacts associated with hazardous substances have been identified in Volume 2, Chapter 17.

J-014-055

Thank you for your comment. The change in climate conditions caused by the burning of fossil fuels is a global effect, and requires that the greenhouse gas emissions analysis be assessed on a global or regional scale, not at the local scale of a city or an island. The proposed alternatives mostly involve the relocation of the military operations already occurring in the West Pacific region, therefore fossil fuel burning activities in the region are unlikely to change significantly. Overall global greenhouse gas emissions are likely to remain near the current levels on a regional or global scale, resulting in an insignificant impact to current global climate change trends. A more detailed discussion of climate change, inclusive of recent EPA regulations, is included in the FEIS. Although it is still an appropriate assessment statement, the sentence "Individual sources are not large enough to have an appreciable effect on climate change" will be removed. Volume 7 of the FEIS contains the discussion of climate change.

J-014-056

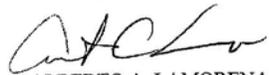
Thank you for your comment. Please see Section Section 4.3.2 of the Socioeconomic Impact Assessment Study for further information on expected impacts to civilian housing.

The FEIS anticipates that military housing will be built within the main cantonment area. It is anticipated that the majority of Marine families would rent units in the military housing and generally not compete with Guam residents for available housing units. It is likely that housing prices and rent will increase in the short term. After the construction

release of a supplemental document (with public comment period) prior to the release of the FEIS. Such a recommendation is supported by CFR 1502.9(c), which states, "If an agency has made a substantial change in a proposed action that is relevant to environmental concerns, or if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, a supplemental EIS must be prepared for an old EIS so that the agency has the best possible information to make any necessary substantive changes in its decisions regarding the proposal." It is extremely important that this be considered, given the large-scale, long-term impacts the buildup will have on the people of Guam and the natural resources on which they depend. We are requesting that an extension of sixty (60) days be given for the review of the Final Environmental Impact Statement (FEIS) to fully and accurately review the document.

Detailed comments by volume and chapter are also enclosed with appropriate recommendations. The Bureau is also concerned with issues identified in the enclosure. Thank you for the opportunity to comment. If you have any questions, please feel free to contact me at 472-4201/2/3.

Sincerely,



ALBERTO A. LAMORENA V
Director

Enclosures

period, housing and rental prices could decline because the construction labor force (not including the H2B workers who will live in dormitory type quarters) would leave Guam. Civilian military workers may vie for Guam housing; however, residential housing needed for these long-term workers would likely be about 3,200 units (maximal) by 2020 (SIAS, Table ES-3, page v).

Relating to crimes and the disparity of the drinking age in Guam (18 years) and on the base (21 years). The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by an increase in overall crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct and enforce laws to protect the citizens of Guam and our military personnel.

The impacts on the Guam public school system are discussed in subsection 4.4.2, page 4-42 of the SIAS. Table 4.4-4 in the SIAS provides the potential increase (maximal) of student population in the Guam Public School System from 2010 to 2020. Providing a brief summary, at the peak population year (2014), a total of 7,937 students could attend the public school system; by 2017, when the operational (long-term) conditions occur, the students generated could be 909. This is based on the direct and indirect (induced) populations resulting from the military relocation. The military dependents would be educated in the DoD school system and should not affect the public school system. Money generated through taxes from the increased population and federal payments to schools

(based on student populations) should provide revenue to fund resources for the public schools.

Please refer to our previous responses relating to DoD funding. Text has been added to the Final EIS to include other possible mitigation measures such as having agreements for mutual aid during emergencies (such as fires).

J-014-057

Thank you for your comment. The changes due to the population increases (the DEIS used maximal population increase numbers) were discussed in the DEIS and the SIAS. Voting impacts were also discussed in the SIAS (Chapter 4).

Chamorros, although considered a minority population in comparison to the U.S. as a whole, represented over 40% of Guam's population in the 2000 U.S. Census. More information on the minority of the Chamorros is provided in the Environmental Justice and the Protection of Children chapters of the DEIS, specifically, chapters 19 in volumes 2, 3, 4, 5, and chapter 20 in volume 6, and under cumulative impacts (chapter 4) of Volume 7.

The DEIS identifies that there is a potential for the incoming population to have the ability to vote (almost all the military population would be U.S. citizens) like other Guam residents. Additional discussion on this issue is on page 4-130 of the SIAS. Given the opportunity to vote in local elections, there is a possibility that new candidates may choose to run for office and persuade the new population to vote for different leadership or causes. On the other hand, off-island U.S. construction workers, military and their dependents may choose not to vote in local elections, especially given their typically short tenure on the island. There was no attempt to state this as a probability, but only a possibility.

To be eligible to vote in Guam's elections, individuals must meet the following requirements:

- Not confined to a mental institution, nor judicially declared insane;
- Not serving a sentence of imprisonment;
- Citizen of the United States;
- Legal resident of Guam; and
- Eighteen (18) years of age by Election Day.

In the Guam 2008 elections there were nearly 50,000 registered voters.

J-014-058

Thank you for your comment. More detail and impact analysis is presented in Volumes 2 through 6. Potentially significant impacts to recreational resources (including reefs) were identified under the recreation resource sections in each volume. For the Marine Corps relocation, the impact analysis is presented in Volume 2, Chapter 9. The impact analysis was based on best available information provided through review of written plans, and interviews with commercial recreation business managers and the Fisherman's CO-OP. The type of information collected was largely qualitative; therefore, the impact analysis was also qualitative. Mitigation proposed included preparation and implementation of a Recreational Carrying Capacity Management Plan that addresses recreational user use, demand, preference, conflicts, and conditions. Other mitigation includes education of workers, and military personnel and their dependents on natural resources. Ultimately, it will be the GovGuam's responsibility to manage the off-base coastal resources. The federal government would work with GovGuam to obtain grants to assist in this responsibility.

J-014-059

Thank you for your comment. A supplemental document is not required. Please see Chapter 4 of Volume 1 where any substantive changes between the Draft EIS and Final EIS are addressed.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-001	1	2	11	11-1	BSP/GCMP	Burdick	The DEIS authors define marine biological resources as "marine-related organisms, their behaviors, and interactions with the environment that may be directly or indirectly affected by the proposed action within the established marine region of influence" which, in turn, is defined arbitrarily as the nearshore waters of Guam out to the 164 foot isobaths; however, the analysis is restricted to waters offshore of Finegayan, offshore of the Rt. 15 lands, and all waters of Apra Harbor. There will clearly be impacts to marine resources beyond those areas. Many of these impacts, particularly those associated with the large population increase (increased harvesting pressure, increased recreational impacts) would probably be considered "secondary." These impacts should be addressed in the appropriate sections.
J-015-002	2	2	11		BSP/GCMP	Burdick	Off-base impacts to natural resources, particularly those associated with the massive population increase (e.g., increased harvesting pressure, recreational impacts, user conflicts, deforestation, loss of critical habitat, runoff, etc.) are not adequately addressed (and sometimes not at all); no mitigation is offered for impacts to marine resources off-base, which would not occur but for the military buildup. Mitigation must occur, regardless of whether the impacts occur on or off-base, and must be an integral part of the project and must be clearly identified in the funding request/application.

J-015-001

Thank you for your comment. More detail and impact analysis is presented in Volumes 2 through 6. Potentially significant impacts to recreational resources (including reefs) were identified under the recreation resource sections in each volume. For the Marine Corps relocation, the impact analysis is presented in Volume 2, Chapter 9. The impact analysis was based on best available information provided through review of written plans, and interviews with commercial recreation business managers and the Fisherman's CO-OP. The type of information collected was largely qualitative; therefore, the impact analysis was also qualitative. Mitigation proposed included preparation and implementation of a Recreational Carrying Capacity Management Plan that addresses recreational user use, demand, preference, conflicts, and conditions. Other mitigation includes education of workers, and military personnel and their dependents on natural resources. Ultimately, it will be the GovGuam's responsibility to manage the off-base coastal resources. The federal government would work with GovGuam to obtain grants to assist in this responsibility.

J-015-002

Thank you for your comment. Off-Base impacts to terrestrial natural resources is not addressed because of the uncertainty of specific impacts which would be dependent on a whole host of other factors, many of which cannot be controlled by the military (e.g. Guam laws and regulations and level of enforcement). These increases in use should be approached from the standpoint of the overall buildup and requirements for infrastructure, etc. Our cumulative effects analysis is based on the information presented in Volume 7, Chapter 4 of the Draft EIS and represents future State, tribal, local or private actions that are reasonably certain to occur in the action area.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-003							
	3	2	3	3-30	Para. 4	BSP/GCMP	Tallague
							Referring to applicable regulatory standards "The United States (U.S.) Environmental Protection Agency (USEPA) Region 9 gives the Guam Environmental Protection Agency (GEPA) the authority to enforce portions of federal statutes via a Memorandum of Agreement." Guam's procedures for federal consistency respond to the requirements of the Coastal Zone Management Act (CZMA) of 1972. Pursuant to the CZMA of 1972 (P.L. 92-583) as amended (P.L. 94-370), the Bureau of Statistics and Plans(BSP), as the lead agency of the Guam Coastal Management Program (GCMP), is responsible for conducting federal consistency review for 1) Federal Activities; 2) Activities Requiring a Federal License or Permit; and 3) Federal Assistance to Local Governments. Federal activities state the following: "Any federal agency proposing to conduct or support an activity which will directly affect Guam's coastal zone is required to do so in a manner consistent with the Coastal Management Program to the maximum extent practicable. (Subsection 307(c)(1), National CZM Act). A federal agency activity is any function performed by or on behalf of a Federal agency in the exercise of its statutory responsibilities. (15 Code of Federal Regulations, Section 930.31). Since this definition encompasses an extremely broad range of Federal actions, early consultation with the BSP is recommended to resolve any questions regarding the application of the Federal consistency review process to a specific type of activity." Consequently, the GCMP Federal Consistency review must be included as an applicable regulatory standard.

J-015-003

Thank you for your comment. Federal consistency review is included in Chapter 3 of Volume 8 as an applicable regulatory standard, with Coastal Resource Management Program and Guam Bureau of Statistics and Plans as the permitting authority.

Vol	Ch	Pg	Line, Tol, Fig	Org	Commenter (last name)	Comment
J-015-004						
4	2	3	3-32 Last para.	BSP/GCMP	Tallague	Referring to the statement: "Soil types that could be disturbed would not be agriculturally productive soils. Soil erosion is primarily a concern for discharge into surface or nearshore waters that are not located near the proposed construction. Construction SOPs would be followed to prevent soil erosion. Therefore, Alternative 1 would not result in significant impacts to geologic resources or result in significant soil erosion or loss of agriculturally productive soil." Andersen AFB is located above Guam's main aquifer, which provides potable water to over 80% of the island population. Because the coastal limestone is extremely permeable in the north, rainfall quickly soaks into the ground and recharges three main aquifer areas. Therefore, any construction activity will generate an impact - small or great. Regardless of the types of soils identified for each proposed site, exposed soils will lead to erosion; and the primary concern is that pollutants will infiltrate Guam's fresh water aquifer. Implement best management practices (BMPs) and low impact development (LID) techniques. As stated in the CNMI Guam Stormwater Management Manual, "along with development comes an increased amount of impervious surfaces, precluding the natural infiltration of rainwater into the underlying groundwater system. As a result, the groundwater "lens" (which serves as the principle drinking water source) is depleted. Or, in the instances where stormwater is infiltrated without adequate pre-treatment, groundwater quality is degraded." Therefore, Alternative 1 will result in impacts to Guam's natural resources including the aquifer and nearshore waters.

J-015-004

Thank you for your comment. DoD and regulatory agencies are equally concerned about preventing contamination of surface waters and groundwater (particularly drinking water aquifers). The EIS describes numerous programs and actions that will be taken to protect surface waters and groundwater from stormwater runoff. Construction of new facilities will use Low Impact Development (LID) principles to the extent practical. LID is a design philosophy that seeks to reduce the impact to the environment from new construction projects through the reduction of impervious surfaces. LID's principles incorporate the design of facilities with the use of native vegetation, pervious (porous) surfaces to reduce storm water runoff and encourage recharge of groundwater, and water conservation. DoD is currently conducting a LID study that will identify specific types of alternative designs that can be incorporated into the construction of facilities associated with the buildup. DoD is also preparing a stormwater pollution prevention plan (SWPPP) and will apply for permits that regulate stormwater discharges during construction. The permit and plan is focused on reducing the amount of earth and soil that is exposed to stormwater during earth-disturbing activities (such as land clearing and grading), providing stabilization of soils during construction through the use of ground covers, and sediment ponds and traps/screens to reduce pollutants getting into storm runoff and from percolating into the ground. These plans also have specific requirements for containment of potential pollutants at construction sites (such as storage areas for equipment fuel). Lastly, DoD is developing a construction and demolition (C&D) waste management plan in consort with the stormwater construction plan that calls for the use of mulch on exposed soils, mulch that will be generated during the clearing of trees and low growth during land clearing activities. Once construction is complete, a SWPPP will be developed to control stormwater runoff and infiltration from base operations. This is being done on a regional DoD Guam-wide scale, and has the involvement of Guam EPA.

J-015-005

Thank you for your comment.

J-015-005

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
5	2	3	3-41	Para. 5	BSP/GCMP	Taitague	Referring to the last sentence in paragraph 5 for the construction of the kennel and clinic, "Alternative 1 would not result in significant impacts..." Any type of construction will pose the threat of erosion; thus the project will result in an impact, minimal or significant. While "the soil types that could be disturbed would not be agriculturally productive soils," the proposed projects to construct a Military Working Dog Kennel and a medical clinic clearly is not an agricultural activity. Any construction activity will generate an impact - small or great. Regardless of the types of soils identified for each proposed site, exposed soils in poorly managed sites will lead to erosion, and the primary concern is that pollutants will infiltrate Guam's water sources. Therefore, the construction of a military working dog kennel and a medical clinic is an impact to Guam's natural resources including nearshore waters; and best management practices must be in place to prevent erosion.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-006							"Soil types that could be disturbed would not be agriculturally productive soils. Soil erosion is primarily a concern for discharge into surface or nearshore waters that are not located near the proposed construction, except for at Apra Harbor, where BMPs would be used to prevent significant soil erosion." This statement is misleading. Regardless of the project location, it is advised to implement best management practices (BMPs) and low impact development (LID) techniques to control runoff from impervious surfaces and prevent pollutants from entering Guam's waters – ground and surface. Some BMPs and LID practices include the use of permeable pavers for driveways and parking lots, installation of rain gardens or bioretention areas, vegetated swales, buffers and strips, and tree preservation to name a few. As stated in the CNMI Guam Stormwater Management Manual, "along with development comes an increased amount of impervious surfaces, precluding the natural infiltration of rainwater into the underlying groundwater system. As a result, the groundwater "lens" (which serves as the principle drinking water source) is depleted. Or, in the instances where stormwater is infiltrated without adequate pre-treatment, groundwater quality is degraded." The construction activities and military trainings proposed in Alternative 1 will clearly generate erosion and runoff. Any construction activity will generate impacts, minimal or significant. BMPs should not only be implemented at Apra Harbor, it must be applied to any and all construction activities regardless of the level of impact. The primary concern is that pollutants will infiltrate Guam's water sources. Therefore, Alternative 1 will result in impacts – minimal or significant, to Guam's natural resources including the aquifer and nearshore waters.
	6	2	3	3-43	3.2.2.5 Para. 4	BSP/GCMP	Tallague
J-015-007	2	2	30	1	BSP/GCMP	Caseres	earlier in the document, it was stated that 29% of the overlay refuge would be developed for alternative no. 1, here it states 25%. . . .dod must reconcile the percentages.
	8	2	33	1	BSP/GCMP	Caseres	earlier in the document, it was stated that 53% of the overlay refuge would be developed for alternative no. 2, here it states 41%. . . .dod must reconcile the percentages.
	9	2	33	15	BSP/GCMP	Caseres	earlier in the document, it was stated that 53% of the overlay refuge would be developed for alternative no. 3, here it states 41%. . . .dod must reconcile the percentages.
	10	2	33	38	BSP/GCMP	Caseres	earlier in the document, it was stated that 29% of the overlay refuge would be developed for alternative no. 8, here it states 24%. . . .dod must reconcile the percentages.

J-015-006

Thank you for your comment. Please see the response to J-015-004.

J-015-007

Thank you for your comment. As is stated in Section 2.2.3 in Volume 2 Alternatives 1, 2, 3, and 8 would affect 25%, 41%, 41%, and 24% of the Overlay Refuge in the construction of the Main Cantonment.

Percentages elsewhere in the document has been revised in the FEIS.

	Vol	Ch	Pg	Line, Table, Fig	Org	Commenter (last name)	Comments	
J-015-008	2	2	49	6	BSP/GCMP	Caseres	with regard to the decontamination training, the chemical to be used should not be hazardous to the environment. If water is involved, the water run off should be treated prior to going back into the ground.	
J-015-009	12	2	2	50	line 5, table 2.3-2	BSP/GCMP	Caseres	the terrain flights at its lowest which is 50 feet above ground level will have detrimental effects to residents as well as aquatics and wildlife in its path especially if this is to be done day and night. dod should coordinate with the division of aquatics and wildlife resources to determine measures to mitigate the adverse effects. with regard to the citizens that may be affected, it is recommended that dod should reduce and maintain the noise levels to an acceptable standard to maintain quality of life.
J-015-010	13	2	2	52	10	BSP/GCMP	Caseres	the proposed landing zones at andersen south and naval magazine may have an affect on flora and fauna in the vicinity. dod should do a study as well as coordinate with the division of aquatics and wildlife resources, department of agriculture to determine a mitigation plan if it is found that there are negative effects.
	14	2	2	61	16	BSP/GCMP	Caseres	dod should permanently place good friday in their schedule so that they will not disrupt this annual event with any of their training?
J-015-011	2	2	61	25	BSP/GCMP	Caseres	alternative b requires no improvements to the trail. however, dod should install erosion control measures along the trail to prevent further erosion.	
J-015-012	2	2	61	34	BSP/GCMP	Caseres	instead of may be amenable to adaptive management strategies, it should be more positive that it will be done. dod should do the adaptive management strategies.	
J-015-013	17	2	2	62	table 2.3-7	BSP/GCMP	Caseres	please clarify why was the west coast option completely dismissed as an alternative.
	18	2	2	64	table 2.3-8	BSP/GCMP	Caseres	please clarify what is meant by incompatible with future mission.
	19	2	2	74	36	BSP/GCMP	Caseres	stormwater management should be implemented throughout the length of the alignment.
J-015-014	2	2	82	2	BSP/GCMP	Caseres	The lcac uses lift fans to create a cushion of air between the hull and the water surface or hard substrate such as coral. A lot of the substrate if not all would consist of corals. dod should provide for mitigation if coral is negatively affected.	

J-015-008

Thank you for your comment. DoD would adhere to all applicable regulations and best management practices to control the use of hazardous materials and impacts from stormwater.

J-015-009

Thank you for your comment.

J-015-010

Thank you for your comment. DoD would provide all best management practices and mitigation measures, where appropriate, to protect sensitive environmental features.

Also, DoD understands and recognizes the significance of access to cultural sites located on DoD property in Guam. Restricting access to certain areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to Mt. Jumullong Manglo (including the Mt. Lam Lam trail) consistent with safety and operational requirements. Final plans concerning access to Mt. Jumullong Manglo (as accessed by the Mt. Lam Lam trail) have not been developed, DoD looks forward to working with stakeholders including groups that use the area for traditional religious activities to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of this site.

J-015-011

Thank you for your comment. DoD would implement appropriate best management practices to avoid any increase in erosion potential along the subject trail.

J-015-012

	Vol	Ch	Pg	Line /b/ Fig	Org	Commenter (last name)	Comments	
J-015-016								
	21	2	8	1-52	BSP/GCMP	Caseres	"noise can have deleterious effects on physical and psychological health, affect workplace productivity, and degrade quality of life" according to this chapter, there will be no significant impacts in any of the alternatives. was post traumatic disorder taken into consideration? guam has a high rate of people that joined the military. the increase of air traffic and the noise they will generate might have an effect on people with this illness. furthermore, how can one measure that a certain noise level is insignificant. it may not be to some but may have adverse effects on others. dod should take this aspect of the noise into consideration and provide medical assistance to those affected by the increase in noise.	
J-015-017								
	22	2	8	5	41	BSP/GCMP	Caseres	federal submerged lands overlap with the sasa bay and piti bomb holes marine preserves. the federal government does not acknowledge that federal submerged lands can be designated govguam marine preserve and is not bound to comply with land use constraints associated with the preserves. dod should establish rules and regulations comparable to the guam's preserves to ensure that the resources are protected in those boundaries as well.
	23	2	8	7	13	BSP/GCMP	Caseres	please clarify where are these specific geographic areas for the additional training facilities.
	24	2	8	7	48	BSP/GCMP	Caseres	please clarify why isn't guam included in the marianas trench marine national monument.
	25	2	8	9	23	BSP/GCMP	Caseres	if the dos amantes planning area is not adopted by the legislature, how would this affect the deis document and the mission?
	26	2	8	13	32	BSP/GCMP	Caseres	this sentence appears twice.
	27	2	8	13	37	BSP/GCMP	Caseres	should the source of the north and central guam land use plan be the bureau of statistics and plans 2009 instead of the bureau of labor and statistics 2009?
	28	2	8	14	1	BSP/GCMP	Caseres	there are farmland activities on govguam federal and private lands that do not necessarily correspond to land use planning maps and usda prime and important farmland designations. this sentence seems to be repeated from the previous page. is this an error?

Thank you for your comment. The discussion of adaptive management has been revised in the FEIS.

J-015-013

Thank you for your comment. The DEIS describes the intensive selection process that the DoD went through to select alternatives for the location of the firing range on Guam in Section 2.3.1. Specific reasons why the firing range could not be located on the west coast at Finegayan include the following. There was concern that the amount and location of submerged land that would be encumbered by the SDZs generated by the ranges on the west coast would be an unacceptable impact on recreational activities and traditional fishing areas, which are prevalent on the west coast. Secondly, higher density civilian development in vicinity of ranges increases risk of encroachment.

The phrase, "incompatible with future missions" indicates that the area has been identified for other purposes by the installation.

J-015-014

Thank you for your comment. Proposed actions would be completed in accordance with applicable stormwater management regulations. Both construction stormwater permits and operating permits will be obtained. A Stormwater Pollution Prevention Plan (SWPPP) is being prepared for the construction permit, and a SWPPP will be prepared for the operating permit once facilities are constructed. These SWPPPs include best management practices to control pollutants in runoff, and effluent limits for pollutants found in stormwater. Additionally, a Low Impact Development (LID) study has been prepared that makes recommendations for designing facilities that reduce things like stormwater runoff from impervious (paved) surfaces in an effort to reduce environmental impacts.

	Vol	Ch	Pg	Line (tbl) Fig	Org	Commenter (last name)	Comment	
J-015-018	29	2	8	13-33		BSP/GCMP	Caseres	it seems like this section is trying to show the contradictions of the north and central guam land use plan's designations of agricultural lands to other plans such as the usda prime lands designations. Throughout these pages, it seems to mention how what is identified as prime agricultural lands. ie. "the north and central land use plan (bureau of statistics and plans 2009) does not designate agricultural land uses in the important farmlands area." please clarify why it was worded in this manner.
	30	2	8	31	1	BSP/GCMP	Caseres	(bureau of figurestatistics ans plans 2009) should read (bureau of statistics and plans 2009)
J-015-019	31	2	8	33	10	BSP/GCMP	Caseres	route 4 should be included for improvements because it was mentioned earlier that the new land fill will be used by dod. to get to the landfill, route 4 needs to be accessed, and therefore needs to be improved or reinforced to accommodate the extra load proposed to be hauled over it.
	32	2	8	36	11	BSP/GCMP	Caseres	"route 10 runs north and south, connecting routes 4, 18, and 8." perhaps route 18 should be 15, because route 18 is in the municipality of santa rita.
J-015-020	33	2	6	1-52		BSP/GCMP	Caseres	"noise can have deleterious effects on physical and psychological health, affect workplace productivity, and degrade quality of life" according to this chapter, there will be no significant impacts in any of the alternatives. post traumatic disorder should be taken into consideration because guam has a high rate of people that joined the military and may be suffering from this illness. the increase of air traffic and the noise they will generate might have an effect on people with this illness. furthermore, how can one measure that a certain noise level is insignificant. it may not be to some but may have adverse affects on others.
J-015-021	34	2	8	55	14	BSP/GCMP	Caseres	measuring significant impact to resources based proposed land uses or zone does not seem to be the right way to determine impact. does this mean that if a property is for heavy industrial activities, that if an activity is proposed that has the potential to contaminate the environment, it is considered insignificant because it is in an area where the area is most likely to be contaminated or zoned for activities that have the potential to do that? dod must re-evaluate how significance is determined.

J-015-015

Thank you for your comment. Military training including the use of LCAC training is covered under the MIRC EIS. Because of coral depth, it is not anticipated that LCAC operations will impact coral substrate. Further, designated training areas within Apra Harbor have been designed to avoid impacts to coral substrate.

J-015-016

Thank you for your comment. Noise impacts to persons with post traumatic stress disorder were not specifically investigated. While there are concerns regarding people who suffer from this disorder, the noise levels that can trigger a reaction vary among people with the disorder and predictive methods are not available.

J-015-017

Thank you for your comment.

22. DoD effectively manages natural resources on federally-controlled land and complies with Sikes Act requirements.

23. Figure 8.1-6 shows training areas at Andersen AFB. Figure 8.1-9 shows training areas at NCTS Finegayan. Figure 8.1-11 calls out training areas at Andersen South. Figure 8.1-14 shows training sites at Apra Harbor. Figure 8.1-18 shows training areas at Naval Munitions Site.

24. The Marianas Trench designation is unrelated to the EIS and is not within DoD jurisdiction. We cannot provide a substantive response to your comment.

25. The Dos Amantes zoning was approved February 28, 2008 by the Guam Land Use Commission. The Final EIS includes additional information on the Dos Amantes zoning with no impact on land use impact analysis conclusions.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-022							
35	2	8	55	34	BSP/GCMP	Caseros	"pockets of civilian land use within a dod installation is an adverse impact on military land use." seems like this is a self-imposed impact. the dod solution should not be to acquire the private land there/fore eliminating a land use impact and making a contiguous base. however, if this is done, the landowner should have a choice if to sell or lease the land and should be on an area for area basis.
J-015-023							
36	2	8	58	28	BSP/GCMP	Caseros	"no new access restrictions would be generated by the use of these exiting federal parcels." should the word be existing rather than "existing"?
37	2	8	58	30	BSP/GCMP	Caseros	"the existing small arms range and associated sidz would be eliminated. this represents a beneficial impact to submerged land use and public access." would this "beneficial impact" be at the western coast where the new range is proposed? dod needs to clarify if this also applies to the proposed range in the eastern coast.
38	2	8	59	3	BSP/GCMP	Caseros	"south finegayan is used for military family housing and under alternative 1, it would continue to be used for family housing. there would be more family housing units developed on land than was historically used for housing." because of the intensity of land use, dod should implement stormwater management. if it is not already considered such as stormwater treatment and erosion and sediment control for construction sites as well as bioretention.
39	2	8	61	6	BSP/GCMP	Caseros	"any agricultural leases that remain at the time of construction would be terminated by the air force. this would not be a significant impact because there are other lands available for agriculture." the air force should offer the lessee other federal lands to lease elsewhere and not leave them out in the cold to find another land to continue their activities.
40	2	8	8-1		BSP/GCMP	De Leon	Chap 8 Land and Submerged Land Use must be corrected to indicate that Aside from the 3 nautical miles approved jurisdiction of GCMP, by Presidential Proclamation 5030 of March 10, 1983, Guam Public Law 15-114 proclaimed, for Guam, Jurisdictional Rights over the waters surrounding the 200-mile Exclusive Economic zone and redifined jurisdictional control including pollution control, and terms of all scientific research, management, exploration and exploitation of all ocean resources and all sources of energy and prevention within and outside the zone that poses a threat within the zone. E.O. 88-29 designated the (Bureau of Planning) BSP as the lead agency for EEZ matters for Guam.

26. The Final EIS does not have redundant sentences.

27. The Final EIS identifies Bureau of Statistics and Plans as the author.

28. The sentence is deleted in Final EIS. We concur farming is not restricted to prime and important farmlands. The North and Central Guam Land Use Plan identified areas planned for agriculture. This was the basis for the impact analysis on farming. No maps of subsistence farming locations were available for use.

J-015-018

Thank you for your comment. The intent was to present the best available information that happened to be contradictory. The prime farmland soils classification is important from a regulatory point of view when discussing Farmland Protection Policy Act (FPPA). The EIS text acknowledges that the prime farmland soils classification is not necessarily related to actual farming use. The EIS analysis of potential impacts to agricultural land use relies more on the North and Central Guam Land Use Plan. Although the plan is not adopted, it represents the community vision for agricultural land uses. The plan represents the best available information for assessing impacts to land use and prime soils map represents the best available information for assessing impacts to FPPA.

The correction to "Bureau of Statistics and Plans" is made in the Final EIS.

J-015-019

Thank you for your comment. The traffic impacts due to the build-up are minimal on Route 4 and was therefor not included as part of the study. The improvements needed for Route 4 to accomodate the extra loads going to the new landfill are the Guam DPW's responsibility.

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-024	2	8	8-5		BSP/GCMP	De Leon	Marine Protected Areas. The DEIS indicated "The federal government does not acknowledge that the federal submerged lands can be designated GovGuam marine preserves and is not bound to comply with land use constraints associated with the preserves." This statement is debatable and should be addressed by the Atty. General.
	42	2	8	8-12	BSP/GCMP	De Leon	Land use info in the DEIS is based on the proposed Land Use Plan 2009 which was not yet officially approved by the Legislature. The DEIS recognized that the 1986 land use plan for Guam, however we are unsure if DoD/Navy can reasonably speculate on preliminary proposals that are still under development and that may not presently be capable of meaningful analysis. The DEIS must be changed if in case the proposed new land use plan is disapproved to be legally enforceable.
J-015-025	2	18	18-2	18.1.2.1.	BSP/GCMP	De Leon	AAFB Constraints on community, APZ at either end of the runway extends into civilian land uses is incompatible with land use within the APZ. This situation must be mitigated, since the structures and other development were already existing previous to the APZ. The Flight path must be redirected toward unpopulated areas.
J-015-026	2	9			BSP/GCMP	De Leon	Recreational sites must be opened for use for both the Military and citizens of Guam, specially for Chamorros.
	45	2	9		BSP/GCMP	De Leon	Need to mitigate the proposed closing of access to cultural sites to local chamorros and citizens
J-015-027	2	10			BSP/GCMP	De Leon	Impacts of climate change, sea level rise to the sole source aquifer on Guam must be should be discussed/addressed
J-015-028	2	12			BSP/GCMP	De Leon	Mitigation for possible impact of increased Military activity on access and cultural resources should be addressed/discussed most especially the proposed target range.
J-015-029	2	18	18-1	18.1.2.1	BSP/GCMP	De Leon	DEIS indicated "Designation of safety zones around airfields and restriction of incompatible land uses reduces the public's exposure to safety hazards." However, since developments were already implaced prior to the designation of safety zones, ways to mitigate the impacts must be addressed in the DEIS.
	49	2	18	18.2.2.7	BSP/GCMP	De Leon	How to resolve traffic impact to community must be discussed and addressed not only within the section of non-DOD land due to increase in the number of vehicle must also be assessed in the Final EIS.
	50	2	19		BSP/GCMP	De Leon	Impeding use of Guam's right to fish on land adjacent to land proposed to be leased must be mitigated.

Yes, it should be Route 15 instead of Route 18 and has been changed in the FEIS.

J-015-020

Thank you for your comment. Noise impacts to persons with post traumatic stress disorder were not specifically investigated. While there are concerns regarding people who suffer from this disorder, the noise levels that can trigger a reaction vary among people with the disorder and predictive methods are not available.

J-015-021

Thank you for your comment. The methodology and criteria used to assess potential impacts to land and submerged lands are based on 2 basic criteria: 1) changes in ownership and 2) compatibility and consistency with land use at the site and adjacent. This is an acceptable approach and the Final EIS is not modified. In your example, if an industrial facility is planned in an area zoned for or consistent with industrial land uses, the impact to land use would be less than significant. The impacts to groundwater, hazardous waste management or other EIS resource area would be addressed under those respective EIS chapters and significant impacts may be identified independent of the land use consistency analysis.

J-015-022

Thank you for your comment. The pockets of civilian use within DoD property is essentially self-imposed as you mention. The issue for DoD tends to be anti-terrorism force protection and separation distances are maintained. The DEIS identifies one example relevant to the proposed action. The Guam Shipyard is a commercial land use within a military base. This is a service that the Navy depends on being in proximity to the Navy waterfront facilities. The Navy land was historically used for

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-030	2	9	3	Table 9.1-2	BSP/GCMP	BSP/GCMP	Land area at Haputo and Sharks Hole. Aren't there still squatters living there with military's knowledge?
J-015-031	2	9			BSP/GCMP	BSP/GCMP	Quality of life amenities are designed to segregate the communities (civilian/military)? Federally funded activities should not unfairly compete with civilian activities. Military operations, by their nature, deny the civilian population the use of their own cultural and recreational resources (Fena Massacre Site) - by denying the community the right to the economic benefits that in small part may compensate, in an American setting, is troubling.
J-015-032	2	9	32	9.2.7	BSP/GCMP	BSP/GCMP	the idea that the military, their family and guests should not have to compete with civilians for recreational usage is an affront to the people who's lands and homes and culture have been most affected by federal actions. The idea that it is alright for civilians and tourists to compete for water use or beach use or hiking trails or cultural resources, but the families of military should not have to, is reminiscent of the policies of "separate but equal" of the past. The result of this policy would be that the military, their families and guests would have access to ALL recreational/cultural facilities on Guam while the resident population would only have access to some.
J-015-033	2	10	14	10.1.1.3	BSP/GCMP	BSP/GCMP	"Guam Rail only exists in captivity"
	2	10	28		BSP/GCMP	BSP/GCMP	would be a major impact.
	2	10		general	BSP/GCMP	BSP/GCMP	there is no discussion of the introduced monitor lizard. They have historically been found in forests at Haputo and other areas around Guam (both DOD and non-DOD lands). The same applies to Guam Blind Snake.
J-015-034	2	10		general	BSP/GCMP	BSP/GCMP	While this reports states that there is no green sea turtle nesting at the site designated for the live-fire ranges, there are nesting areas north of that area. What are the impacts of 20 lb. explosions on turtle nesting? Is this an activity that should be curtailed during nesting periods as a form of mitigation?
	2	10	62		BSP/GCMP	BSP/GCMP	aren't mangrove crabs also found in the Apra area, in addition to hermit crabs and coconut crabs?

ship repair and the land was available for similar use when the Navy ship repair facility closed. The lease is subject to negotiation and both parties could modify the agreement to better serve their interests. The pocket of land within the base is beneficial to both parties.

Also, the military secures its bases and property primarily to protect its facilities, personnel, and other assets; this is typical of military bases everywhere, including the U.S. mainland. If public safety and security are not at stake, access to and through military property would be provided and, in many cases access, is allowed to use or visit recreational and cultural resources.

J-015-023

Thank you for your comment.

36. The text has been revised to read "existing".

37. The direct benefit would be to the submerged land uses on the western coast that are currently constrained by the firing range activities. The new ranges are proposed on the eastern coast. The beneficial impact on the west coast has no direct relationship to the proposed east coast ranges.

38. DoD and regulatory agencies are equally concerned about preventing contamination of surface waters and groundwater (particularly drinking water aquifers). The EIS describes numerous programs and actions that will be taken to protect surface waters and groundwater from stormwater runoff. Construction of new facilities will use Low Impact Development (LID) principles to the extent practical. LID is a design philosophy that seeks to reduce the impact to the environment from new construction projects through the reduction of impervious surfaces. LIDs principles incorporate the design of facilities with the use of native vegetation, pervious (porous) surfaces to reduce storm water runoff and

	Vol	Ch	Pg	Line, Tbl Fig	Org	Commenter (last name)	Comment	
J-015-035								
	59	2	10	81	10.2.2.1	BSP/GCMP	BSP/GCMP	I am confused by this section. It lists secondary limestone forest to be disturbed, with Ochrosia mariannensis; Vitex Paviflora or Vitex sparse canopy. These are all listed as introduced weeds in other studies, and are therefore not native species. Yet the report, at this point, states that their removal would result in a significant impact. parviflora
J-015-036								
		2	10	100	last para.	BSP/GCMP	BSP/GCMP	All pets brought into Guam should be spayed or neutered. This would lessen their impact should they become feral, and would help reduce the number of pups or kittens that are dumped.
J-015-037								
		2				BSP/GCMP	BSP/GCMP	General note: a significant amount of negative impact on the environment is caused because of lack of knowledge. A one day class on Guam's environment for all in-coming military personnel and their dependents would go a long way in lessening the impacts. DOD and GovGuam could also produce simple brochures on the do's and don'ts for reef flats, forests, and beaches.
J-015-038								
		2	10	140	4th para.	BSP/GCMP	BSP/GCMP	Ecological Reserve Areas, if they are to be created or expanded, should include significant management partnerships between DOD and GovGuam (DAWR). All of Guam's environment is a single environment and best management comes from treating it as such.
	63	2	10	140	para.'s 6 & 8	BSP/GCMP	BSP/GCMP	proposed study should include participation by DAWR, as they have responsibilities in research, monitoring and enforcement for sea turtles.
	64	2	10	141	2nd para.	BSP/GCMP	BSP/GCMP	these appear to be positive measures and should be pursued.
J-015-039								
J-015-040								
		2	11	9	5th para.	BSP/GCMP	BSP/GCMP	additional damages are deliberate, such as dynamite fishing, chlorine fishing, destruction of corals in harvesting gastropods or some fishes, deliberate taking of corals and live rock for aquarium use. These activities have been undertaken by all segments of the community, including military personnel. Education is the key to mitigation.
	66	2	11	43	2nd para.	BSP/GCMP	BSP/GCMP	This paragraph states that Hawksbill turtles are in high concentrations in Sasa Bay - elsewhere, throughout these documents - the death of Hawksbills has been touted.
	67	2	11	54	1st para.	BSP/GCMP	BSP/GCMP	"...and periodic benthic clean-up..."
	68	2	11	69	4th para.	BSP/GCMP	BSP/GCMP	"(A short video and access pass before entry)."

encourage recharge of groundwater, and water conservation. DoD is currently conducting a LID study that will identify specific types of alternative designs that can be incorporated into the construction of facilities associated with the buildup. DoD is also preparing a stormwater pollution prevention plan (SWPPP) and will apply for permits that regulate stormwater discharges during construction. The permit and plan is focused on reducing the amount of earth and soil that is exposed to stormwater during earth-disturbing activities (such as land clearing and grading), providing stabilization of soils during construction through the use of ground covers, and sediment ponds and traps/screens to reduce pollutants getting into storm runoff and from percolating into the ground. These plans also have specific requirements for containment of potential pollutants at construction sites (such as storage areas for equipment fuel). Lastly, DoD is developing a construction and demolition (C&D) waste management plan in consort with the stormwater construction plan that calls for the use of mulch on exposed soils, mulch that will be generated during the clearing of trees and low growth during land clearing activities. Once construction is complete, a SWPPP will be developed to control stormwater runoff and infiltration from base operations. This is being done on a regional DoD Guam-wide scale, and has the involvement of Guam EPA.

39. The lease agreements are short-term and there is no commitment to relocate them.

40. The region of impact for the land and submerged land use analysis is 3 nm. According to the proclamation you mention, the area within 3 nm is referred to as the territorial sea. Territorial jurisdiction was extended by proclamation to 200 nm. The Final EIS wording is modified to refer to the territorial sea, not territorial jurisdiction.

J-015-024

Thank you for your comment.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-041	2	11	70	Table 11.2-6	BSP/GCMP	BSP/GCMP	Table recognizes the summer coral spawning, but report states later that no significant long term impacts of dredging will occur, though the only mitigation to dredging mentioned to this point has been silt screens. Mitigation should include complete cessation of activities during coral spawning, and absolute restriction on lighting of dredge or dredging area during night at those periods.
J-015-042	2				BSP/GCMP	BSP/GCMP	General note: what are current capacities available for sewer, water in those areas where DOD development is proposed (particularly Marine confinement area)
J-015-043	2	12			BSP/GCMP	BSP/GCMP	where practicable, compensation for increased activity by DOD, and increased impacts on cultural resources, increased access to the more important cultural sites should be developed (Fena Massacre Site, etc.). There would be a large, negative public impact on development of the Route 15 firing range(s), in that all access to historic or cultural sites that currently exists in that area would be lost.
J-015-044	2	12	85	table 12.2-6	BSP/GCMP	BSP/GCMP	why don't options 2 and 8 include cultural resource education of Marines (and their dependents)?
	2	12			BSP/GCMP	BSP/GCMP	It would appear that preferred option 2 would result in most serious impacts on cultural and historic resources.
J-015-045	2	13	66	figure 13.2-4	BSP/GCMP	BSP/GCMP	planting of tall shrubs or low growing trees inside the fence line would help to improve the visual quality and would benefit both drivers and personnel in the housing.
	2	13	73	figure 13.2-9	BSP/GCMP	BSP/GCMP	again, landscape screening would mitigate the poor visual quality.
J-015-046	2	14	7	14.2.1.2	BSP/GCMP	BSP/GCMP	"If the maximum annual number of vessels that would visit the harbor during the embarkation period exceeds the annual maximum since 1995, then a significant impact to marine transportation may occur. If the maximum annual number of vessels that would visit the harbor during the embarkation period is equal to or less than the annual maximum number of vessels since 1995, then there would be a less than significant impact to marine transportation."

41. DoD acknowledges Bureau of Statistics and Plans position, but is not consulting with Attorney General's office.

42. The EIS acknowledges that the land use plan is not adopted. Since there was an extensive public involvement component during the development of the plan, it represents the community vision for land use. It is the best available up-to-date information at the time of EIS preparation, even if it is not adopted.

J-015-025

Thank you for your comment. The accident potential zones are not modified under the proposed action. These are pre-existing encroachment conditions that are disclosed as baseline conditions.

J-015-026

Thank you for your comment. DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access will be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

J-015-027

Thank you for your comment. The Navy acknowledges there is potential for marine resources and aquifers to be affected by sea level rise, inundations from more extreme storm events and other consequences of

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-047	2	14	8	14.2.2.4	BSP/GCMP	BSP/GCMP	Utilizing only the numbers of current visits plus the visits barge visits to address impacts is disingenuous at best, as it is anticipated that dredging for other Navy purposes (Carrier berthing and associated needs) would be occurring at the same time. Any assumptions about impacts must be based on maximum anticipated activities, not on individual activities in a vacuum. Cumulative impacts, in this case, would be the impacts from separate but simultaneous activities.
	2	14	10	14.2.2.6	BSP/GCMP	BSP/GCMP	Do these figures include the additional container arrivals based on the normal non-DOD related shipping needs of families and marines for private needs?
J-015-048	2	16	33	16.1.6.1	BSP/GCMP	BSP/GCMP	Do these figures include the additional container arrivals based on the normal non-DOD related shipping needs of families and marines for private needs?
	2	16	33	16.1.6.1	BSP/GCMP	BSP/GCMP	Do these figures include the additional container arrivals based on the normal non-DOD related shipping needs of families and marines for private needs?
J-015-049	2	16			BSP/GCMP	BSP/GCMP	General note: the change in ethnic make-up of the population on Guam will have consequences on voting patterns, which have over the years allowed the native population (Chamorros) to retain a political majority on their own island. While not all military/families/non-DOD workers register to vote on Guam, it is possible that a significant number will, with a probable result of reducing Chamorro's in the political arena to a minority role in their own homeland. This would have social consequences far beyond the election process.
	2	16			BSP/GCMP	BSP/GCMP	General note: the change in ethnic make-up of the population on Guam will have consequences on voting patterns, which have over the years allowed the native population (Chamorros) to retain a political majority on their own island. While not all military/families/non-DOD workers register to vote on Guam, it is possible that a significant number will, with a probable result of reducing Chamorro's in the political arena to a minority role in their own homeland. This would have social consequences far beyond the election process.
J-015-050	2	16			BSP/GCMP	BSP/GCMP	General note: What would be the estimated increase in Section 30 funds that would be returned to GovGuam? Would H-2b workers have taxes withheld and would those taxes be part of Section 30 funds, or in some other way returned to Guam?
	2	16	54	Para. 3	BSP/GCMP	BSP/GCMP	While it is true that some new jobs offered would be filled by Guam residents and therefore help to reduce unemployment, it is also true that, historically, DOD personnel and their dependents compete for existing civilian jobs as part time workers, thus decreasing the availability of jobs for local residents.
	2	16	66	para. 7	BSP/GCMP	BSP/GCMP	"...there would be no impact from marine based tourism". This section ignores the fact that 8,600 marines and their dependents would also be marine (ocean) based tourists, with a significant amount taking up diving. Coral reefs and underwater man-made objects are fragile and can easily be overwhelmed by even the friendliest of human encounters.

climate change. The impacts may be both adverse and beneficial. The current level of scientific knowledge can predict trends in sea level rise based on historic data but there are no established methods for assessing and quantifying potential impacts on marine resources or aquifers.

The University of Guam provides analysis of the aquifer responses to sea level change and recharge in a November 2007 study. Climate change may impact the success of production wells in the future (e.g., the placement of the well screen may not be optimal if the sea level rises or falls). Given the uncertainty of climate models including lack of information that is directly applicable to northern Guam and lack of specificity regarding the time and degree of impacts to conditions that could impact the aquifer, the DoD wells would be installed based on current conditions. Monitoring would be conducted during well operation. If production or water quality declines over time, DoD would take actions to mitigate the impacted wells.

A quantitative assessment of the additive or cumulative impact of climate change on the proposed action and natural resources, including aquifers, is not practical.

J-015-028

Thank you for your comment. Please see response to J-015-026.

J-015-029

Thank you for your comment. Safety zones are already designated around the Andersen AFB airfield. As discussed under mitigation in Volume 2, Section 8.2, in the event businesses and/or residences are required to be relocated, the land owners would receive financial compensation for the move.

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comments
J-015-051	2	16	85	table 16.2-51	BSP/GCMP	BSP/GCMP	The necessary increases for FTE's in GovGuam would create a problem in that, after six month, these positions become permanent, yet the need for maximum numbers is for 3-5 years with significantly reduced need thereafter. As a reality, it is very very difficult to reduce GovGuam FTEs except through not filling them once they become vacant positions for other reasons.
	85	2	18	99	table 16.2-53	BSP/GCMP	BSP/GCMP
	2	16	85+	16.2.2.4	BSP/GCMP	BSP/GCMP	In so far as the issues which were raised by Okinawa residents, and addressed in this section, none of the responses given here are adequate. Each section appears to excuse its lack of conclusion and lack of mitigation response on the fact that no studies have shown a problem to exist. Federal cooperation is one factor that could be explored. Immigration and Naturalization Service should be brought more into the process, as prostitutes have regularly been brought into the area as "entertainment workers" under temporary work visas. This should be a signal to INS to enable them to deny entry or to red flag the establishments for which they are being hired. Table 18.1-10 in chapter 18, page 7 of this document supports the need to address the likely rise in both prostitution and increased incidents of STDs resulting from that rise. Similarly, in this section, the idea that the problems associated with conflicts with FAS personnel will sort itself out over time has not proven to be true, as the problems now have been on-going since the compacts have allowed free entry into Guam. This section requires a great deal more work.
J-015-052	87	2	17	para. 5	BSP/GCMP	BSP/GCMP	Navy ships produce hazardous waste as a result of TBT losses in port. Reference was made in previous chapters to Tributyltin, but only in passing. Given the history of anti-fouling paints in Navy ports (particularly Pearl Harbor), what is the anticipated load of TBT or any other fouling paint in the submerged lands of either inner or outer Apra Harbor as a result of the added ship calls?
	88	2			BSP/GCMP	BSP/GCMP	A decade ago, at NCTS (nearby the old MARS station, there were 55 gallon drums stored in the open in a forested area. Those barrels appeared very old and rusted, and they were removed and the concrete pad they were on was cleaned, and then new barrels were put on the pad, with the tangalangang left to grow around the area (it was also fenced). Did these barrels contain any hazardous materials? If so, are they still in place?

J-015-030

Thank you for your comment. The items identified in this comment are not part of the proposed action and are therefore not addressed in the EIS.

J-015-031

Thank you for your comment. The military secures its bases and property primarily to protect its facilities, personnel, and other assets; this is typical of military bases everywhere, including the U.S. mainland. Access to and through military property would be provided and in many cases access is allowed to use or visit recreational and cultural resources. These issues on base security, public health and safety, and access will be emphasized in the Final Environmental Impact Statement (FEIS).

The military base, in itself, is a community. It includes military personnel, housing for the military and their dependents, medical and dental facilities, discount stores, recreational areas, and schools. These are provided for the benefit of the military personnel and their dependents on bases throughout the U.S. The cohesion of the military base, like any social group, is based on the similarity of their jobs and duties, objectives, age, situation, and other military affiliation. Subsequently, their similarities and benefits within the base are not the principal reasons for what appears to be "a separation from the local community." Logistically, having housing within a contiguous base allows military personnel to be available should an emergency situation arise and immediate military action is required.

DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work to ensure that the short term impacts of construction are managed effectively and that the long term

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comments	
J-015-053	89	2	17	Table 17.2-1	BSP/GCMP	BSP/GCMP	Beginning with this table, and extending to all the following tables in this section, it is inadequate to state "No mitigation measures are identified". At the very least there should be a statement in these tables that BMPs and site specific plans will be adopted or updated and that mitigation training for response to those plans will be conducted. That is alluded to in text, but the language of these tables brings that into question.	
	90	2	17	general	BSP/GCMP	BSP/GCMP	It is impossible to assess the potential impacts of hazardous materials, waste, spillage, etc because of the generality of the information. For example; it was stated in passing (one sentence) that pesticides and herbicides were included. What are these exact products and in what quantity would they be used? With that information suggestions could be made for alternative chemicals, or for a non-chemical replacement.	
J-015-054	92	2	18	2	18.2.1.1	BSP/GCMP	BSP/GCMP	Class A mishaps have changed since this writing. They are now defined as having at least \$3 million in damages.
	92	2	18	9	18.1.7	BSP/GCMP	BSP/GCMP	There was UXO deliberately stored at Camel Rock in AsanPiti area as late as the 1980s. Have those been removed? The presence of such where the community at large is likely to encounter them presents a problem that should be resolved.
	93	2	18	18	18.2.2.3	BSP/GCMP	BSP/GCMP	Are military personnel punished, or in any way negatively impacted in their career by reporting they have STDs? If so, then they may try to find treatment in the civilian sector, which would impact on medical availability to non-DOD personnel.
	94	2	18	19	18.2.2.5	BSP/GCMP	BSP/GCMP	Bureau of Plans and Statistics Library had a study on sites where uxo was "dumped" at the end of WWII. If the book is still in the library, it should be studied for impacts on the proposed developments and actions.
J-015-055	2	18	19	18.2.2.7	BSP/GCMP	BSP/GCMP	The impacts of traffic on Guam public roads, while unavoidable with increased personnel, could be lessened by staggering working hour starts, particularly during construction phase. I.E., one third of day workers start at 6, one third at 7 and one third at 8am.	
J-015-056	96	2	19	16	Land Acq.	BSP/GCMP	BSP/GCMP	Whether or not the private land owners are compensated for the land, will they be compensated for the loss of fishing resources at that site. For low income families on Guam, particularly those that live next to the shoreline, fishing and ocean harvesting make up a substantial part of their diet and, for some, their livelihood. In addition, the same resources (near shore) that are used by many islanders will now be reduced, putting greater burdens on other areas. This should be addressed in compensation/mitigation.

effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-015-032

Thank you for your comment. The military secures its bases and property primarily to protect its facilities, personnel, and other assets; this is typical of military bases everywhere, including the U.S. mainland. Access to and through military property would be and will be provided; in many cases access is allowed to use or visit recreational and cultural resources. These issues on base security, public health and safety, and access are discussed in the Final Environmental Impact Statement (FEIS).

J-015-033

Thank you for your comment. Monitor lizards and the blind snake are discussed briefly as non-native wildlife on page 10-21 of Volume 2 and monitor lizards are mentioned as present in discussions of several of the project areas. Predator-proof fencing is discussed as potential mitigation and monitor lizards would be one species considered for fencing options.

J-015-034

Thank you for your comment. There are no nesting beaches along the east coast of Guam north of the proposed firing ranges based on documentation and general observations while hiking portions of this coast, therefore there was no need for an evaluation of potential impacts.

J-015-035

Thank you for your comment. There is an error in the description of the limestone forest areas that would be impacted. The second sentence under Vegetation should say "Some primary limestone forest would be removed as well as some disturbed limestone forest. The disturbed limestone forest areas that would be removed are classified as

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-057							The Firing Range Alternatives The DEIS must evaluate all of DOD's land holdings and take into consideration joint basing for the live fire training facility. Any consideration of expanding DOD's land holdings through the acquisition of additional private or Government of Guam land must be an option of last resort. For example the alternative to locate the Firing Range for the Marines at the present Naval Facility at Finegayan on the west coast should be re-considered in the Draft Environmental Impact Statement analysis of this undertaking. This particular alternative was shown, and therefore considered, in the Guam Integrated Military Development Plan 2006. This alternative was taken out completely of the DEIS of November 2009. According to responses to the media by JGPO's Bize and Jackson, that alternative was removed in response to the government of Guam's concerns (see quotation below) However, the West Coast Pagat/Sasayan Firing Range alternatives were not presented to the government of Guam at that time. Because the previously proposed Firing Range at Finegayan on the west coast was an alternative that was considered in the planning process, this alternative should be further considered and compared to the now
	97	2			BSP/GCMP	Torres	
							The Buildup DEIS shows 2 firing range alternatives. They are both located in the same Pagat/Sasayan area on the east coast of Guam. The boundaries of the alternatives appear to be the same (Vol 2, pg 2-46 – 2-47). However, the designs of the ranges differ (Vol 2, pg. 2-63) and as a result the Surface Danger Zone (SDZ) differ in size significantly. Why then don't the boundaries of the proposed alternatives change to reflect the change in size? Is this an error or does DOD intend to occupy all the land including private property?
	98	2	2	46-47	BSP/GCMP	Torres	
J-015-058							More specific vegetation and occurrence of species surveys digital GIS coverage files should be shared with GovGuam.
	99	2	10	16,17,19, 20	BSP/GCMP	Torres	
J-015-059							50 meter isobathy line is inaccurate. The line obviously goes over shallower reefs.
J-015-060							The narrative mentions "sailing and other Marine activities. However, the table should include mention of sailing (Marianas Yacht Club) and surfing (Magandes on Luminao Reef) in Apra Harbor as the sites in the Harbor area for those sports are some of its most significant sites on Guam. Failing to mention them here is significant in its omission. The DEIS also fails to mention the Hagatna Boast Basin and Rick's Reef as surfing sites in the central area.
	100	2	11	3	BSP/GCMP	Torres	
	101	2	9	9.9	BSP/GCMP	Torres	

secondary mixed limestone forest, *Ochrosia* edge (*Ochrosia mariannensis*; langiti), *Vitex*-closed canopy (*Vitex parviflora*), or *Vitex*-sparse canopy." *Ochrosia mariannensis* is a native species but often grows at edges where there has been some disturbance. The significant impact, as defined in this EIS, would come from the removal of the primary limestone forest, not the secondary limestone forest.

J-015-036

Thank you for your comment. The U.S. Marine Corps has a written policy for all pets. All dogs and cats must be registered and implanted with a microchip so they can be tracked and controlled. These measures will prevent dumping unwanted animals.

J-015-037

Thank you for your comment. DoD will continue to work closely with the Government of Guam agencies to minimize the effects of the proposed military relocation program.

J-015-038

Thank you for your comment. A management partnership for the proposed Ecological Reserve Areas exists between DoD and the Government of Guam through the Integrated Natural Resources Management Plan.

J-015-039

Thank you for your comment.

J-015-040

Thank you for your comment. These comments are from the PDEIS comment period and were sufficiently addressed at that time. Text has been revised as appropriate.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-061							
	102	2	9	9.30 9.27	BSP/GCMP	Torres	Summary of Potential Mitigation Measures The DEIS fails to adequately address mitigation to recreation resources here as a result of the proposed activities related to the buildup. The 3 mitigation measures seem to have been given very little thought and are put forth to satisfy NEPA requirements to address the adverse impacts. The DEIS needs to provide more details as to specific losses of recreation resources and how they intend to mitigate them. For example how does DOD intend to mitigate or minimize the loss for numerous people utilizing the roads and trails at Pagat, Anderson South, the Former FAA for walking, jogging and bicycle riding. Will they provide alternate jogging/hiking trails on the perimeter of their facilities? Will they assist the government of Guam in developing other trails? The loss of recreation resources with serious mitigation measures and not trivialized. These resources speak to the quality of life for the local community, but are also enjoyed by military residents and visitors alike.
J-015-062							
	103	4	4	4-10	BSP/GCMP	Burdick	In this section and in others, there is reference to relatively coarse grained sediments being found in the vicinity of dredging. However, there does not appear to be a summary of grain-size analysis data that was collected in 2006 as part of a NAVFAC PAC study that is not readily accessible to the readers. Further, it is not appropriate to make comparative statements without quantitative data. Such statements must be removed unless relevant quantitative data is provided. In addition, a summary of organic content measurements was not presented, and only brief mention was made to a related aspect of sediment composition. These basic data should be presented, especially considering the magnitude of this project and the major impacts to marine resources. Recommend including grain size distributions for the project site, and values from other locations if comparisons are to be made.
J-015-063							
	104	4	4	4-10	BSP/GCMP	Burdick	No data were reported regarding the infaunal composition of the sediments. The importance of soft-bottom habitats and their infauna to food fishes (Gomelyuk, 2009) was stated in the introduction to these comments. A full characterization of the marine environment, required by the EIS process, must include a characterization of the soft-sediment infauna. Recommend for this information to be included in the FEIS.

J-015-041

Thank you for your comment. Under standard Navy dredging procedures in Guam, dredging would not occur during peak coral spawning periods. It is anticipated that this would be proposed as a special condition under the Section 404 CWA USACE permit for dredging in Apra Harbor. There is no data to show that artificial light influences coral spawning.

J-015-042

Thank you for your comment.

A detailed discussion of wastewater systems is in Volume 6 chapters 2 and 3. A brief summary of the capacity of the North District Wastewater Treatment Plant (NDWWTP): current demand is about 5.7 million gallons per day; current permitted capacity is 6 mgd; original design basis for this plant is 12 mgd; current estimated physical capacity is approximately 7 to 8 mgd. We feel that by refurbishing the plant it would be capable of the design basis 12 mgd plus some additional with chemical treatment and regulatory approval. The conservative peak demand would be in year 2014 and estimated to not exceed 12.13 mgd.

The current water capacity in the proposed Finegayan cantonment area is very minimal as most of the area is undeveloped. The DoD water system at Andersen AFB currently has excess capacity of about 1.7 mgd. The estimated average daily demand for the proposed Marine base there is approximately 6 mgd. For a detailed discussion of water needs and existing water systems, please refer to Volume 6 chapters 2 and 3.

J-015-043

Thank you for your comment. Please see response to J-015-026.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-064	4	4	4-10		BSP/GCMP	Burdick	In this section and throughout the DEIS, there does not appear to be any mention of a specific Environmental Protection Plan (EPP), which is required for all WQS permits by Guam EPA. While the details of the EPP typically aren't fleshed out until the permitting process is initiated, the FEIS should inform readers about the process, including a general summary of what the EPP will entail.
106	4	4	4-11		BSP/GCMP	Burdick	The existing Guam water quality standards list these waters as M-2 or area of "Good" water quality. Please provide relevant quantitative criteria for M-1, M-2, and M-3 waters so readers are aware of these designations.
J-015-065	4	4	4-11		BSP/GCMP	Burdick	Duration of dredging operations is stated as 6-18 months; this is a very large range and not useful when trying to assess impacts of dredging operations on marine waters. Recommend including a narrower estimated range. Further, please include the various dredge schedule options being considered, and how decisions will be made.
J-015-066	4	4	4-17	4.2.2.4	BSP/GCMP	Burdick	The coral mass spawning period should be identified here. This period should encompass the entire process of spawning and larval settlement, including 1) a 5-day pre-spawning period to protect the larval development period appropriate for competency of broadcast spawning corals (Harrison and Wallace, 1990, Miller and Mundy, 2003), 2) an 8-day period following the full moon when corals have been observed to spawn (Richmond, 1995), and 3) an 8-day post-spawning period during which larvae settle upon reefs and attached larvae have been observed to undergo peak metamorphosis. (Miller and Mundy, 2003). The total of 21 days is thus strongly recommended for inclusion into the FEIS based upon published scientific data that describes each critical stage needed for successful coral reproduction. This criteria and language is currently part of the Commonwealth of the Northern Mariana's Water Quality Standards; all activities associated with the build-up of Tinian must follow these criteria, and is strongly recommended that these criteria be adhered to Guam as well.

J-015-044

Thank you for your comment. As part of a program to avoid disturbing archaeological sites and artifacts, historic property awareness training will be provided to all Marines on Guam. This mitigation would apply to all of the Main Cantonment alternatives.

The DoD conducted archaeological surveys of over 5,000 acres of areas that could be disturbed as part of the Marine Relocation. During a three-year planning process, the majority of the archaeological sites were avoided by the proposed construction. As described in Section 12.2, Alternative 1 would disturb 22 sites, Alternative 2 - 25 sites, Alternative 3 - 23 sites, and Alternative 8 - 22 sites.

J-015-045

Thank you for your comment. The summary lists of BMPs and mitigation measures in Volume 7 were updated based on comments received during the public comment period and will continue to be updated after the Final EIS is published, during agency consultation and construction permit application processes. BMPs and mitigation measures listed in the Record of Decision and attached as conditions to a permit will be implemented.

J-015-046

Thank you for your comment.

J-015-047

Thank you for your comment. Both proposed dredging activities have been addressed in the EIS. It is not anticipated that the proposed dredging of the inner harbor and proposed dredging to accommodate the transient aircraft carriers would occur in the same timeframe.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-067							
109	4	4	4-17	4.2.2.4	BSP/GCMP	Burdick	What exactly are "rough sea conditions" to which the third bullet point in this section refers? These conditions must be clarified. Also, the sediment dispersal study in Appendix J uses a 90-100% silt curtain effectiveness for all scenarios. Such high effectiveness levels equate to little or silt curtain failure. It seems probable that curtain failure and sediment leakage (at some level) is inevitable. This assertion is supported by multiple anecdotal reports, particularly with regard to current dredging operations at Kilo Wharf. Recommend revising the models to include various rates of failure in predictions, and present findings in revised FEIS. Also, a null model for sediment dispersal should be included to understand the reliance placed upon curtain effectiveness.
J-015-068							
110	4	4	4-33		BSP/GCMP	Burdick	It is not clear why nutrient or bacteria density data were not collected when water sampling occurred. Clearly, increased aircraft carrier activity has the enormous potential to increase pollution loading through direct runoff from the large ship platform, as well as through bilge waters. This is the equivalent of major watershed urbanization with impervious surfaces that are known to contain elevated bacteria and nutrient concentrations (Mallin et al. 2009). Background levels of the pertinent water quality constituents are needed, and should be included in the FEIS. Nutrient and bacteria concentration data are needed to serve as a basis for potential changed over time. The data must be spatially and temporally sufficient for an appropriate characterization.
J-015-069							
111	4	4	4-30		BSP/GCMP	Burdick	of "lower ecological value," in part due to algae cover estimates (~40%) that are nearly twice the cover of living coral. This conclusion is incorrect, and is not supported by the scientific literature. First, reefs globally around the world have had similar algae cover-coral cover ratios (as reported in the DEIS) for decades (see Bruno et al. 2007 and Bruno et al. 2009). This is a natural feature of coral reef ecosystems. A key attribute of reef health/function that was also brought up by nearly all of the peer-reviewers of the CVN Marine Impact Assessment Report (Appendix J), is calcification. In order to make statements about absolute 'reef' health within a confined area, like Apra Harbor, one would need to accumulate valid photosynthesis-to-respiration ratios. At ecological scales, when comparing multiple reefs around entire jurisdictions, the most relevant 'health' indicators appear to be centered upon coral species richness, recruitment, and overall biodiversity (Jokiel et al. 2004; Cooper et al. 2009; Houk and van Woesik, in Press). In all of these studies, coral cover did not serve as a good metric of 'health' - yet the DEIS relies solely upon coral cover and accompanying "landscape" rugosity as descriptors of reef function and are used in the HEA to

The discussion of marine transportation has been updated and included in Chapter 14 of Volume 2 of the Final EIS.

J-015-048

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-015-049

Thank you for your comment. The DEIS identifies that there is a potential for the incoming population to have the ability to vote (almost all the military population would be U.S. citizens) like other Guam residents. Additional discussion on this issue is on page 4-130 of the SIAS. Given the opportunity to vote in local elections, there is a possibility that new candidates may choose to run for office and persuade the new population to vote for different leadership or causes. On the other hand, off-island U.S. construction workers, military and their dependents may choose not to vote in local elections, especially given their typically short tenure on the island. There was no attempt to state this as a probability, but only a possibility.

To be eligible to vote in Guam's elections, individuals must meet the following requirements:

- Not confined to a mental institution, nor judicially declared insane;
- Not serving a sentence of imprisonment;
- Citizen of the United States;

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-070							
	112	4	4	4-30	BSP/GCMP	Burdick	following dredging; however, no quantitative data or scientific reasoning is provided to support the statement. Where does the estimated recovery time frame come from? Relative to what? Amesbury (1981) found that fish assemblages in dredging impact zones, where fine sediments accumulated during dredging, were significantly and permanently altered. This study was carried out over a 3 to 4-year period. Brown (1980) reported 22 months recovery time for corals on reefs adjacent to dredging (i.e., the indirect impact zone). However, the results of both of these studies were dependent upon the timeframe and magnitude of dredging, the reef assemblages in question, and an array of environmental parameters (depth, exposure, ambient turbidity, etc.). Thus, the cumulative impacts, or time-integrated responses of the reefs surrounding dredging, may differ widely. any analysis of the results of these and similar studies must include a detailed discussion about the various factors influencing ecosystem impacts, and how those factors may be different (or similar) to the study area in question. In the DEIS, the estimated timeframe is presented as a wide range (6-18 months), which suggests widely varying rates of daily dredging. The FEIS needs
J-015-071							
	113	4	4	4-33	BSP/GCMP	Burdick	ecosystem, several relevant water quality parameters, such as the suite of nutrients that can enhance productivity, are not considered. In fact, the potential for increased nutrient enrichment as a result of construction and operations is not discussed anywhere in Volume 4. The re-suspension of fine organics that occur in the dredge area are dismissed because organics were found to make up only a small fraction (by weight) of sediments. However, when this small fraction (even if as low as 1%) is multiplied by the total volume of dredge material to be excavated (~350,000 m3), the results are the re-suspension of 3,500 m3 of organic, nutrient-rich sediment. Indeed, this re-suspension of organic sediments represents a contribution of pollution to reefs as large as initial transport from land-runoff or other upland activity (Wolanski et al. 2003). The cited study describes such a situation for one embayment in Southern Guam, with regards to re-suspension of terrigenous and other sediments due to large typhoon-induced swells. The dredging will act on the sediments in a similar fashion, facilitating the re-suspension of large quantities of organic, nutrient-rich sediments. Increased nutrient availability from re-suspension of these particles, and

- Legal resident of Guam; and
- Eighteen (18) years of age by Election Day.

In the Guam 2008 elections there were nearly 50,000 registered voters.

J-015-050

Thank you for your comments. Distribution of Section 30 funds are not part of the proposed action and are not discussed in the DEIS. H2B workers will be required to pay U.S./Guam personal income tax.

Please see the Socioeconomic Impact Assessment Study (SIAS) which is Appendix F in Volume 9 of the DEIS for other information on economic impacts related to the proposed action. Analysis of Labor Force Demand (which begins on page 4-147), under both the unconstrained and constrained scenarios, assumes that some military dependents would be employed as civilian military workers - up to about 940 dependents working as civilian military workers. Analysis in the constrained scenario further estimates that other military dependents would participate in the Guam labor market, and would compete for jobs with other Guam residents.

Please see the SIAS Section 4.3.7 for information on Tourism. The analysis of the impacts on tourism generally reflect that the impacts of the proposed action would have on tourism would be mixed. Tourism may decline as some visitors may shy away from Guam due to construction activities and an increased military presence on the island but that would be made up for by increased visits from members of the military who are tourists while their ships are docked on Guam.

Impacts to marine resources are discussed in the marine biological resources chapters of the DEIS.

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-072							
	114	4	4	4-40	BSP/GCMP	Burdick	In the course of preparing this DEIS and the surveys leading to it, contentious discussions between Guam agency-based staff and US Military consultants were evident regarding artificial reefs. In response to Kilo Warf dredging, Guam's Coastal Zone Management Program, as well as many others, logged complaints with the introduction of artificial reefs as possible mitigation. Based upon these documents, and the science cited within them, it is clear that artificial reefs are not desired, not warranted scientifically, and should be removed from all discussion in the final EIS. In the event that artificial reefs remain in consideration, several sets of detailed comments are already on record, and must be responded to.
J-015-073							
	115	4	11	11-1 Para. 2	BSP/GCMP	Burdick	Based on the experiences of the GCMP Biologist on these reefs, the statement "these reefs all consist of relatively flat and shallow upper surfaces that are covered primarily with muddy sand and rubble" does appear to be not accurate. Recommend that this statement be removed or that the information be validated. Much of the top of Jade Shoals has significant coral cover, primarily <i>Porites rus</i> and massive <i>Porites</i> species, while non-coral areas are dominated by rubble and hard substrate colonized by algae. While the shallow (<3 m) top of Western Shoals seems to have less coral cover than Jade Shoals, I do not recall muddy sand being a major cover type. Instead, coral rubble and hard substrate colonized by algae (similar to Jade Shoals) dominated the top of the shoals. The GCMP Biologist is not as familiar with Big Blue Reef, but suspect the top to be similar to Western Shoals. While these shoals receive less wave energy compared to reefs outside the harbor, there is still enough wave energy acting upon these reefs to prevent the accumulation of much muddy sand, except perhaps on the eastern sides of the shoals.
	116	4	11	11-1 Para. 3	BSP/GCMP	Burdick	The beginning of this paragraph states that the project area does not contain any of the shallow shoal patch reefs, but it appears as though deeper portions of Jade Shoals and the shallow shoals immediately to the north of Big Blue Reef falls within the project boundary. In addition, this statement does not take into account the indirect impact area, which encompasses large portions of all of the shallow shoals. This statement should be changed to more accurately reflect the potential impacts to shallow shoals within the vicinity of the project area.

J-015-051

Thank you for your comment. Your recommended mitigation measures have been taken under consideration and extended mitigation discussion is now available in Volume 7 of the FEIS.

J-015-052

Thank you for your comment. The U.S. Navy applied tributyltin TBT-based paint to ships in the 1979-1988 time frames. The use of TBT in the U.S. was banned in 1988. The last Navy ship to use TBT had that coating removed in 1994. The Navy currently uses copper-based antifouling paints and is actively exploring less toxic alternative coatings. HTIS BULLETIN Vol.9 No.3, May - June 1999. Tom McCarley, HTIS 2 Global Invasive Species Programme (GISP). 2008. Marine Biofouling: An Assessment of Risks and Management Initiative. Compiled by Lynn Jackson on behalf of the Global Invasive Species Programme and the UNEP Regional Seas Programme. 68 pp.

Regarding the drums mentioned at NCTS, any known information regarding these is contained in Volume 2, Chapter 17 of the EIS document. As a policy, the DoD is committed to the protection and responsible stewardship of the environment. The DoD is committed to the safe handling and use of all hazardous substances, including lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, etc. In fact, when feasible, the DoD is attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-074							
117	4	11	11-1	Para. 3	BSP/GCMP	Burdick	The second sentence in this paragraph states that "this area was dredged in 1946..." but, even without making the changes requested in the previous comment, this statement does not seem supported by adequate evidence. While it may be true that the majority - or even most - of the area within the proposed dredging footprint was dredged in 1946, it is unlikely that all of this area had been dredged. In addition, when considering the indirect impact area, which encompasses large portions of all of the large, shallow shoals, this statement is not appropriate. It's also important to note that the entirety of a deeper (>40 ft) shoals (to the west of Jade Shoals) falls within the direct and indirect impact areas. It is not clear if this shoals had been dredged in 1946, but the remarkable reef growth on this shoals suggests that it had not. Finally, there exists a large amount of reef habitat at depths below 60 feet. The slopes of the reefs to be dredged generally possess greater coral coverage than the tops of these "mounds," likely because they were not as catastrophically impacted by the dredging in the 1940s.
118	4	11	11-3		BSP/GCMP	Burdick	general reference to an "assessment being made to quantify the resource services lost." If the aim was to assess the ecological services that would be lost as a result of dredging/fill activities associated with the CVN Berthing project, it is not clear why remote sensing techniques were relied upon so heavily. It was pointed out by one technical reviewer (Dr. Katherine Fabricius) that given the relatively small size of the project area (as opposed to large reef tracts assessed and monitored by various governmental and non-governmental entities), in situ transect work could have easily been expanded to include more rigorous data collection (i.e., longer transects with replications at each site) in all of the habitats within the area of interest. The dependence upon satellite-derived data, with limited amounts of photo quadrat-based ground validation data, is a serious limitation of the impact assessment. These data were not able to differentiate between the ecological assemblages across quite different 'biotypes' (i.e., rubble, mud/sand, mixed coral-algae, patch-reef margins, etc.) known to occur within the project area. Sheppard (1982) clearly describes how exposure to wind and waves, varying slope, surface current patterns, and gradients

mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document. However, these are not considered mitigation measures since they are already being performed by law and do not represent new actions to "mitigate" hazardous substance usage issues. If a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. These actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the environment from adverse impacts associated with the use of solvents, herbicides, pesticides, fertilizers, PCBs, MEC, nuclear materials, and other hazardous substances.

J-015-053

Thank you for your comment. The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, etc. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-075							
119	4	11	11-3	Para. 1	BSP/GCMP	Burdick	As described in the 3rd sentence in this paragraph, coral cover has indeed been used as an indicator metric to represent lost services in Habitat Equivalency Analyses (HEA) to scale compensatory restoration. However, the local and federal resource agencies have consistently supported a more comprehensive approach to characterizing the coral community involving size frequency distribution from the beginning of discussions with the Navy regarding coral survey methodology, HEA inputs, and compensatory mitigation. Such an approach is supported by the available literature.
120	4	11	11-3	Para. 1-3	BSP/GCMP	Burdick	All of these paragraphs repeatedly refer to Natural Resource Damage Assessments (NRDA). While it is not inappropriate to refer to NRDA in such a discussion, it is important to note differences between NRDA (specifically, the regulations under which NRDA are conducted) and assessments required to satisfy Clean Water Act requirements, particularly the Final Mitigation Rule.
121	4	11	11-3	Para. 3	BSP/GCMP	Burdick	The last sentence in this paragraph states that "a nearly complete understanding of coral reef ecological services is required to objectively determine whether selected compensatory restoration projects adequately restore lost services for a given injury." However, the Viehman et al. paper actually states that a "more complete understanding of coral reef ecological services is required..." The phrases "a nearly complete" and "more complete" have very different meanings. This sentence should be changed to more accurately reflect the statement in the Viehman paper.
122	4	11	11-4	11.1.1.1	BSP/GCMP	Burdick	See comment below about concerns regarding peer review of the study, "Assessment of Benthic Community Structure in the Vicinity of the Proposed Turning Basin and Berthing Area for Carrier Vessels Nuclear (CVN) Apra Harbor, Guam" by Dollar et al. (2009).

them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). The BMPs, SOPs, and other controls to be used by DoD are fully described in the EIS document (summarized in Volume 2, chapter 17 and described in Volume 7). However, these are not considered "mitigation measures" since they are already being performed by law and do not represent new actions to "mitigate" hazardous substance usage issues. If a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs)

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-076							
123	4	11	11-4	11.1.1 iii	BSP/GCMP	Burdick	Here the DEIS states that the report "Habitat Equivalency Analysis (HEA) and Supporting Studies" by Navy (2009) was "peer reviewed by eight renowned coral scientists" and that the reviews are included in Volume 9, Appendix J. The peer review (see comment below for concerns regarding peer review) appears to only pertain to the study "Assessment of Benthic Community Structure in the Vicinity of the Proposed Turning Basin and Berthing Area for Carrier Vessels Nuclear (CVN) Apra Harbor, Guam" by Dollar et al. (2008). This is a major oversight, and one that misleads readers into thinking that the HEA and all supporting studies were peer reviewed by the world's leading coral reef scientists. This is not true, and even the peer review carried out for the single study above does not address the resource agencies' main concerns about the study's methodology and the appropriateness of using the data collected by the study in the HEA.
124	4	11	11-5	11.1.1.1	BSP/GCMP	Burdick	The first paragraph on this page very briefly refers to a study conducted by the U.S. Fish and Wildlife Service, Guam Coastal Management Program, University of Guam Marine Lab, and the National Marine Fisheries Service entitled, "Comparison of a Photographic and an In Situ Method to Assess the Coral Reef Benthic Community in Apra Harbor, Guam." The DEIS authors state that the data collected for this study were not used in the DEIS, and the study was relegated to the Appendices. The data collected as part of the study is viable, scientifically defensible and should have been incorporated into the impact analysis. At the very least, the findings of this study should be discussed in considerably more detail, especially since it calls into question the appropriateness of using the methodology employed by the Navy consultant in an impact assessment of a project of this magnitude, as well as the validity of some of the data collected using this methodology.

where interested party questions and concerns may be communicated. These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the environment from adverse impacts associated with the use of solvents, herbicides, pesticides, fertilizers, PCBs, MEC, nuclear materials, and other hazardous substances. With regard to assessing potential impact, by knowing the categories of hazardous substances and the estimated quantities (derived from actual DRMO operations numbers in Guam and Okinawa which currently handle such wastes) the potential impacts of inadvertent leaks, spills, or releases can and has been identified in Volume 2, chapter 17.

J-015-054

Text has been revised to clarify Class A mishaps are those that result in damage of \$3 million or more. The current existence of UXO at Asan/Piti is unknown. The EIS specifies that to reduce the potential hazards related to exposure to MEC, qualified UXO personnel would perform surveys to identify and remove potential MEC items prior to the initiation of ground disturbing activities. The general public would be excluded from entering construction zones and training areas. Additional safety precautions would include: UXO personnel supervision during earth-moving activities and providing MEC awareness training to construction personnel involved in grading and excavations prior to and during ground-disturbing activities. The identification and removal of MEC prior to initiating construction activities and training construction personnel as to the hazards associated with unexploded military munitions would ensure that potential impacts would be minimized. Medical records are not a consideration in military personnel career decisions unless a physical limitation arises (e.g., pilot with burst ear drum). Military personnel are instructed to seek medical attention once signs of a condition arise to ensure treatment is started as soon as possible. Military personnel should not be seeking medical services at non-DoD clinics or hospitals. UXO professional would consult existing

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-077							
125	4	11	11-14		BSP/GCMP	Burdick	(i.e., the habitat classes that describe sand habitats, turf algae, coral, etc.). See above comments and recommendations surrounding why field data didn't distinguish between very basic features and gradients. Multivariate data was presented in the referenced marine surveys to show how 'biotypes' were not well predicted by field data. This lack of structure in the data, even along basic environmental gradients such as wave exposure, suggest flaws in field data replication and/or taxonomic resolution (also discussed above). However, the reader is still led to believe these biotypes represent a habitat mapping scheme. But, starting on page 11-14, totally different habitat classes are now introduced, with no introduction as to how or why. There are six different classes of coral cover: 0%, 0-10%, 10-30%, 30-50%, 50-70%, and 70-90%. First, there was no discussion surrounding the spectral signatures of the initial 'biotypes' or the secondary coral cover classes. Although the extensive, non-significant analysis of multivariate data is presented for field data, these are not used in the final HEA assumptions. Recommend removing all analyses of these field data, as they are not robust enough (described above) to provide meaning on their own, and can
126	4	11	11-15	11.1-10	BSP/GCMP	Burdick	It is unclear how such a detailed image classification can be performed on relatively deep reef areas (<10m) in an area characterized by higher levels of turbidity than in more exposed reef areas. While it is difficult to assess the quality of the image presented in the figure, it does not appear as though these deeper areas are visible - and if they are, that very little detail is discernible. I understand that there are techniques to enhance an image for spectral analysis, but I am not aware of processes that allow one to differentiate 10 classes of coral cover for deeper reef areas, the rough shape of which can barely be made out from the image in this figure, if at all. Even the incorporation of lidar bathymetry data does not seem adequate enough to reach the level of detail claimed. An example is the deeper (<14m) shoals due west of Jade Shoals. A detailed classification is provided for all reef area on this shoals occurring between 60 feet and the top of the shoals (about 45 feet).

documentation that identifies the types and location of UXO to aid in protecting the public, construction workers, military personnel, and themselves.

J-015-055

Thank you for your comment. As indicated in Volume 6, Chapter 4, page 4-87, a proposed mitigation for impacts to traffic from the buildup is the development and implementation of a Traffic Management Plan, which includes among other measures, staggered work hours, flextime, and compressed work weeks.

J-015-056

Thank you for your comment. DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access will be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

J-015-057

Thank you for your comment. The DEIS describes the intensive selection process that the DoD went through to select alternatives for the location of the firing range on Guam in Section 2.3.1. Specific reasons why the firing range could not be located on the west coast at Finegayan include the following. There was concern that the amount and location of submerged land that would be encumbered by the SDZs generated by

	Vol	Ch	Pg	Line, Tol, Fig	Org	Commenter (last name)	Comment
J-015-078							
127	4	11	11-19		BSP/GCMP	Burdick	proposed aircraft carrier project currently is "of marginal to modest ecological value" is highly subjective and does not appear to be supported by available scientific data. It is also not clear why such a statement would even be necessary, and suggest that it be removed. The area within the project boundaries for each alternative possesses a range of coral reef habitats, with some areas possessing significant biological diversity, structural complexity. Surveys conducted by the resource agencies as part of the methods comparison study (Appendix J) revealed reef assemblages apparently unique to Apra Harbor, and possibly unique to the general vicinity of the project boundaries. This is consistent with the findings of a Navy-funded study conducted by Paulay et al. (1997), which describes numerous species found only within the harbor. The study also described several distinct physiographic/ecological zones within the harbor, with each possessing unique environmental characteristics and supporting ecological assemblages distinct from other zones. The project area, which lies to the west of Sasa Bay, falls almost entirely within a distinct zone. While this area is described as not having as high biological diversity as areas
128	4	11	11-21		BSP/GCMP	Burdick	consistent bias towards minimizing impacts of sediment on corals. For example, the Connell (1997) study examined responses to typhoons. Typhoons and tropical storms are acute disturbances, lasting, at most, only a few days. By referring to this study in the manner presented in the DEIS, the DEIS authors appear to classify dredging impacts as acute, despite the activity to occur over many months, possibly close to two years. Clearly, the two types of disturbances are significantly different, and comparisons between the two are not particularly informative. The reference to Connell (1997) should be removed or these very important differences should be explained. In addition, throughout the discussion on the impacts of sediment on corals, the results of several studies are referenced without placing these results into the proper context. For example, the DEIS states that the indirect impacts to corals from dredging activity would be mainly from carbonate sediments, while nearly all the studies cited examine gradients of terrestrial sediments. There are fundamental differences between these sediment types. Most notably, terrestrial sediments have a humped-shaped relation with coral growth, and often with diversity.
129	4	11	11-21		BSP/GCMP	Burdick	No supporting literature is provided for the use of the spectral band ratio (NDVI) to estimate coral stress. It is common knowledge that this index will change with depth, light-levels, and many other natural factors. The reviewers (Appendix J) appear to agree with this too. This analysis does not seem necessary and could be removed from the FEIS.

the ranges on the west coast would be an unacceptable impact on recreational activities and traditional fishing areas, which are prevalent on the west coast. Secondly, higher density civilian development in vicinity of ranges increases risk of encroachment. Discussion on the screening process associated with the firing ranges has been clarified in the FEIS.

The boundaries of the two alternative firing range locations are different. The size of the area for Alternative A is 921 ac (373 ha), while Alternative B is 1,129 ac (456 ha).

J-015-058

Thank you for your comment. Requests for GIS information should be made to:

Vanessa E. Pepi
 Supervisory Fish and Wildlife Biologist
 Naval Facilities Engineering Command, Pacific
 EV2 Environmental Planning
 258 Makalapa Drive, Suite 100
 Pearl Harbor, HI 96860-3134
 Tel: (808) 472-1406
 E-mail: vanessa.pepi@navy.mil

J-015-059

Thank you for your comment. Figure was verified in the FEIS.

J-015-060

Thank you for your comment. The EIS has been revised.

	Vol	Ch	Pg	Line, Tol, Fig	Org	Commenter (last name)	Comment
J-015-079							
130	4	11	11-21		BSP/GCMP	Burdick	Given the lack of in situ measurements, the reliance on photos, and the inability of the photo-quadrat method to collect accurate coral colony size frequency data (as identified in the comparative study carried out by the resource agencies - Appendix J, and by one of the peer reviewers, Dr. Fabricius), the size frequency analysis section must be removed from the DEIS. It has no scientific merit and therefore offers no assessment of existing conditions. Colony size data must be collected for the coral assemblage characterization using an appropriate method. These data is essential for understanding the impacts of the proposed project, the dynamics of change over time, and for determining the appropriate level of compensatory mitigation. These data must be reported in the FEIS.
131	4	11	11-23	Para. 1	BSP/GCMP	Burdick	This paragraph summarizes some of the findings presented in Rogers (1990), with an emphasis on points raised in the paper that minimize the impacts of dredging on coral reef ecosystems. However, the DEIS authors neglect to include Rogers' concluding comments in the section in the relevant section in her paper. The examples of dredging projects that either had no significant impacts to coral reef ecosystems or that apparently benefitted them, are presented in same order in this paragraph in the DEIS as provided in the first paragraph of page 186 in Rogers (1990). However, after the last example involving the project to extend an airport at St. Thomas, Rogers states that "sediments are less likely to cause a problem when strong currents are present as in this case. In some of these studies, more detailed or longer investigations might have revealed detrimental effects." It is clear the point the DEIS authors are trying to make here, and it is duly noted, but a more complete analysis of the cited literature should be included in order to avoid coming to an oversimplified conclusion.
132	4	11	11-23		BSP/GCMP	Burdick	Last paragraph: It is important to include a discussion of the important differences between study areas in the literature cited here and the CVN project area, as different factors associated with study area may make comparisons of study outcomes problematic. For example, the work conducted by Brown (1990) was conducted on a massive Porites-dominated reef flat community.

J-015-061

Thank you for your comment. It is the intent of DoD to maintain public access to the cultural and historic sites at Pagat and Marbo consistent with safety and operational requirements. Restricting access to certain DoD areas at certain times is required to maintain public safety. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites. Specific mitigation measures for loss of recreational use on former FAA property and Andersen South are not offered because these properties are private and/or under Government of Guam and under military ownership, respectively. Once plan implementation is underway, these properties would need to be secured primarily to protect its facilities, personnel, and other assets; this is typical of military bases everywhere, including the U.S. mainland. Restrictions to certain areas are required to maintain national security and public safety. However, access to and through military property may be allowed and in certain cases access may be allowed pursuant to policies in place at the time.

J-015-062

Thank you for your comment. The majority of the sediment (e.g., >50%) is comprised of larger grained material and therefore is generally referred to as being "coarse" in the EIS. Sediment grain size data is presented as a percentage and is discussed as such in the EIS. The three-dimensional circulation and transport model of the project area was developed using the Environmental Fluid Dynamics Code (EFDC). The model included wind and tide forcing, and fresh water inflow into the Inner Apra Harbor; the dredge plume was simulated by loading the water column with specified quantities of suspended sediment composed of 5 different grain sizes. The sediment grain distribution was determined

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-080							
	133	4	11	11-26	BSP/GCMP	Burdick	included as a matter for the public record. The evolution of the disagreement regarding the use of coral percent cover and coral density and size frequency data to describe ecological function and as inputs into a HEA must be addressed publicly. From the beginning, the local and federal resource agencies have been unanimous in the conclusion that percent coral cover alone is not adequate and that colony density and size frequency data can significantly improve an assessment of ecological function and can significantly improve the HEA outputs. There didn't appear to be an issue with this approach until one of the Navy consultants claimed that it is not possible to collect colony density and size frequency data for certain reef communities - such as those within the impact area - that are dominated by corals (e.g., <i>Porites rus</i> , <i>Porites cylindrica</i> , <i>Pavona cactus</i> , staghorn <i>Acropora</i> spp.) whose growth forms make it challenging to discern individual colonies. The Navy consultant thus recommended that only percent coral cover be collected. Such an assertion was not supported by a range of experienced coral reef scientists subsequently brought in on a conference call aimed at resolving the issue. Unfortunately, the consultant in question
	134	4	11	11-26	BSP/GCMP	Burdick	of the methods comparison study carried out by the resource agencies (Appendix J), the photo-quadrat method used by Dollar et al. (2009) did not produce reliable estimates of coral colony size and density. The decision to count all colonies partially or wholly within the quadrat, combined with a measurement of the longest colony dimension of even colonies that were only partially contained in the quadrat, would inevitably produce colony size frequency distributions biased towards smaller colonies. For example, the small (say, 10 cm) portion of a 50 cm coral colony that extended into the quadrat would be measured and counted as a whole colony. This is a major methodological flaw and these data must be discarded. Because the photo field of view does not extend beyond the quadrat frame, the measurement of any colonies not wholly within the quadrat cannot be taken. It would not be appropriate to even count only those colonies with their centers within the quadrat (one of the more common decision rules employed with in situ measurements of colony sizes), as it is not possible to tell where the colony center lies if any portion of the colony extends outside the quadrat (although somewhat reliable estimates could be made for species that typically have more

from bottom samples taken in the project area. The EIS has been updated to present collected grain size data.

J-015-063

Thank you for your comment. The seafloor tends to be hard material at the proposed CVN project site. In areas of soft sediment, the potential additional deposition of sediment associated with dredging would not represent a change in habitat integrity for infaunal organisms. Any impact to infaunal or epifaunal organisms would be short-term and localized. References supporting this have been included in the FEIS.

J-015-064

Thank you for your comments. The EIS has been revised to include a general description of the Environmental Protection Plan and what elements could potentially be applicable to WQS permit requirements developed through agency coordination. Relevant quantitative data for M-1, M-2, and M-3 waters has been added to the FEIS.

J-015-065

Thank you for your comment. At the current stage of project development, a timeframe of 8 to 18 months is estimated. Further refinement of the dredging timeframe will occur during the final design and permitting phase.

J-015-066

Thank you for your comment. The USACE permit special conditions section will specify the required period of suspended activity based on input from the University of Guam Marine Lab.

J-015-067

Thank you for your comment.
 For all practical purposes, sea conditions are considered to be rough

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-081							
135	4	11	11-26		BSP/GCMP	Burdick	Last paragraph: The DEI authors state that <i>Porites lutea</i> colonies were never encountered with a long dimension greater than 31.5 in (80 cm). It is impossible to obtain a coral colony diameter measurement greater than 119.8 cm using the photo quadrat size employed by Dollar et al. (2009), and the chances of the quadrat falling squarely on a large colony so that occupies the entirety of the quadrat is small. Recommend removal analysis of the size-frequency data collected by Dollar et al. (2009) and strongly recommend collecting colony density and size frequency data as part of an impact assessment utilizing appropriate methods. The presence of very large (>150 cm) <i>Porites rus</i> colonies requires the use of a larger quadrat in these areas.
136	4	11	11-31		BSP/GCMP	Burdick	Last paragraph: To which measure of rugosity are the authors referring in the second sentence? Presumably this refers to rugosity as measured with the standard chain-length method used in the Dollar et al. (2009) study, but a different, much coarser-scale, landscape rugosity is used for the HEA. This must be clarified.
137	4	11	11-37	Para. 1	BSP/GCMP	Burdick	Shouldn't the Marine Resources Biological Assessment have been included in the DEIS? This should be included in the FEIS. This and other on-going studies that seem critically important for understanding the range of impacts associated with buildup activities are not provided in the DEIS. Their absence is apparently a result of the compressed timeline, but instead of omitting this important information, it seems as though the time should instead be compromised.
138	4	11	11-37	Para. 3	BSP/GCMP	Burdick	The Guam Dept. of Agriculture's Division of Aquatic and Wildlife Resources has at least 20 years of aerial sea turtle survey data; it does not appear as though this data set was used in the DEIS, and instead the only sea turtle observation data used was that collected as part of reef community surveys by Smith (2007). In this study, sea turtles were recorded if observed during the course benthic surveys, which did not focus specifically on sea turtles. In my experience, benthic surveys miss much of what happens in the surrounding water column. It is also likely that the relatively turbid conditions within much of the impact area limited observation of sea turtles in situ. Aerial surveys would provide a much more accurate estimate of sea turtle population within the impact area. To our understanding, the Navy is aware that such data is available.

when observed current velocities are > 1 ½ knots [2.5 ft/sec].

To determine the amount of material released into the water estimating the percent of the dredge material that is lost or released during the clamshell dredge process, 1% was selected as a representative, conservative bucket release rate for use in the modeling analysis. To bracket the range of possible conditions, 2% was selected as a possible worst case release rate. Analysis of the TSS monitoring data from the recent Alpha-Bravo dredging project indicated that the highest 10% of the TSS levels measured outside of the silt curtain were approximately 8 times greater than the typical TSS levels measured during the dredging. To simulate this worst case level of material release, and achieve an 8-fold increase in material released outside the silt curtain, the material release rate was increased from 1% to 2% (see Section 5.4), and silt curtain effectiveness was decreased by a factor of 4.

As discussed in the DEIS, there are several likely BMPs that will be employed for the proposed CVN wharf dredging and construction activities. The specific BMPs that will be implemented will be generated in discussions with the USACE during the CWA permitting process.

Because this process has yet to occur, the Navy cannot commit to any specific BMPs in the FEIS.

J-015-068

Thank you for your comment. Volume 4, Section 4.2.2.2, addressing operations and nearshore water, contains an analysis of potential impacts from turbidity, siltation, shipboard waste, and spills. With implementation of the proposed upgrades, the existing wastewater collection system at Apra Harbor Naval Complex would be sufficient to handle the wastewater requirements of either a CVN 68 (Nimitz Class) or CVN 78 (Ford Class) aircraft carrier for a duration of 21 days. Proposed improvements to the wastewater system at Naval Base Guam would result in a minor beneficial impact to the treatment of wastewater and thus nearshore receiving waters. Available nutrient and bacteria data

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-082							
139	4	11	11-38	Para. 1	BSP/GCMP	Burdick	The DEIS states that "the reef area in the aircraft carrier dredge footprint does not represent a unique or unusual habitat in comparison to the entire Apra Harbor reef complex..." However, the in situ data collected by Dollar et al. (2009) really don't provide the taxonomic resolution required to make such a claim, and can only differentiate between habitat types at the most broad taxonomic resolution (e.g., coral, algae, etc.). Such a statement also does not take into account the large size of the impact area and how this may reduce the overall availability of preferred food sources to green and hawksbill turtle populations. Were algal surveys actually conducted to assess the presence of preferred food species inside and outside the project area? If not, such a study should be conducted in order to adequately assess impacts to the preferred sea turtle food sources.
140	4	11	11-38	Para. 1	BSP/GCMP	Burdick	According to the DEIS authors, the reef area in the aircraft carrier dredge footprint does not contain an abundance of algal species that represent a major food source for sea turtles that cannot be found elsewhere in Apra Harbor. See comment above regarding the lack of appropriate data in support of such a statement. In addition, there may be additional reasons why sea turtles observed in the vicinity of the impact area may prefer this area, such as ship avoidance or some other behavior. Aerial survey data collected by DAWR should be analyzed for patterns of sea turtle distribution within Apra Harbor. It is possible that sea turtles do indeed prefer the proposed impact area.
141	4	11	11-45	Para. 4	BSP/GCMP	Burdick	Review Taylor Engineering, Inc. (TEI)(2009); compare selected statements with actual contents of report; reports and studies reviewed by TEI seem focused mainly on the resilience of non-coral benthic flora and fauna in non-reef environments; do not appear to address impacts to reef flora and fauna; especially concerned about impact coral-associated flora and fauna in indirect impact area where corals and other sessile organisms may be damaged or destroyed by exposure to high sediment loads

were added to the FEIS.

J-015-069

Thank you for your comment. Habitat assessment methodologies, which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-070

Thank you for your comment. Habitat assessment methodologies, which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-083							
142	4	11	11-47		BSP/GCMP	Burdick	dredging and the added aircraft carrier wharf armor rip rap and vertical pilings will provide beneficial long-term impact for the recruitment of marine flora and invertebrates is inaccurate, not supported by literature, and should be removed. As supported by the results presented in Pauley et al., (2002), the increase in artificial substrate will very likely provide new habitat for non-native species, which tend to prefer artificial substrate to natural substrate already populated by native species. This habitat will be available to non-native, and potentially invasive, species already occurring within Apra Harbor, as well as for newly introduced species. This is does not provide a benefit, and instead will likely be detrimental to the long-term viability of the harbor's (and possibly Guam's) native coral reef ecosystems. The potentially detrimental nature of this impact should be described. The statement that the "development of the pier would provide suitable habitat for species such as benthic invertebrates including sponges, sea urchins, starfish, and mollusks, which are poorly represented within Inner Apra Harbor and the entrance channel areas" also does not take into account the preference of non-indigenous species for artificial substrate. These
143	4	11	11-47		BSP/GCMP	Burdick	Last paragraph: This statement should be revised to reflect the above-stated concerns regarding the highly questionable benefits claimed for artificial reefs substrate, given our present understanding of the preference of non-native species for artificial substrate.
144	4	11	11-49	Para. 3	BSP/GCMP	Burdick	3rd paragraph, 2nd and 3rd bullet points: It is not clear why the study was limited to reef area shallower than 60 ft when the impacts of dredging will extend to the harbor bottom. A preliminary spatial analysis indicates that approximately 25 acres of coral reef habitat that occurs at depths below 60 feet on the slopes of reefs planned for dredging. An additional 70 acres of deeper (>60 ft) reef occur on the slopes of reefs within the arbitrary 200-m indirect impacts buffer. Personal observations indicate that some of this slope area is comprised of dense coral cover. For example, much of the reef slope down to a depth of at least 80 feet surrounding the shoals west of Jade Shoals is characterized by prolific coral growth. Coral growth diminishes significantly beyond this
145	4	11	11-50	Para. 1	BSP/GCMP	Burdick	It is important to state here that the figure presented ("35% of the proposed dredge area contains some coral coverage and virtually all of the area consists of reefs that were dredged 60 years ago...") only refers to reef area shallower than 60 feet. No data is available for reef areas deeper than 60 feet, so this figure does not accurately reflect the true extent of the reef area to be impacted by the CVN project. Also note comments below discussing the limits of the remote sensing method to accurately assess coral coverage as well as comments regarding the importance of non-coral areas

new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

The time frame for recovery was estimated from similar dredging projects at other coral reef areas, which are described and cited in the FEIS.

J-015-071

Thank you for your comment. The Final EIS includes a discussion and analysis of potential impacts associated with the resuspension of nutrients and organics.

J-015-072

Thank you for your comment. All mitigation options associated with the proposed CVN transient wharf, including the use of artificial reefs and

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-084	4	11	11-50	Para. 3	BSP/GCMP	Burdick	It is not clear how the statement, "it can be stated with high certainty that the buffer zone is indeed very conservative" is substantiated in the cited reference, Dollar et al. (2009).
147	4	11	11-50		BSP/GCMP	Burdick	Last paragraph: In the last sentence in this paragraph, the DEIS authors state "in addition, breakage of coral by the dredge that is not removed from the sea/floor can also result in impacts to the reef habitats that are bordering the dredge sites." Such an effect is then termed a "potential indirect impact." This is contrary to the statement on (page #) that the coral fragments created and dispersed during dredging would provide an overall benefit. The latter statement conflates the acute impacts of storm activity on certain coral species known to depend heavily on asexual reproduction with the long-term impacts of dredging, and is a misrepresentation of the literature.
148	4	11	11-52	Para. 1	BSP/GCMP	Burdick	Confused about apparent discrepancy between 10% release rate cited here with use of 2% release rate as worst case scenario on page 11-53. This must be clarified.
149	4	11	11-52	Para. 2	BSP/GCMP	Burdick	The reason for limiting sediment plume analysis to 24-hour period is not clear. Also need to take into account changes in sediment release rates as a result of changing depth - if depth of bottom of silt curtain is constant and depth of dredge area changes, more or less sediment would be released into the water column. How do the depths in the CVN dredge footprint compare to Alpha-Bravo and Kilo Wharf dredging project?
150	4	11	11-52	Para. 2	BSP/GCMP	Burdick	Recommend inclusion of results from recent water quality and ecological survey data collected during the construction of the Kilo Wharf extension.
151	4	11	11-52	Para. 2	BSP/GCMP	Burdick	DEIS states that "none of the plume extends past the dredged boundary near Big Blue Reef," but in the figure to which the statement refers (11.2-2) depicts the plume clearly extending to the west of the project boundary. This statement should be changed to reflect this.
152	4	11	11-54		BSP/GCMP	Burdick	1st bulletpoint: The statement, "plumes near the bottom would be more extensive because most of the suspended sediment would be released into the bottom layer," underscores the necessity of assessing impacts to reef areas >90ft, which include areas along the slopes immediately adjacent to dredging areas and which have been reported to possess relatively high coral abundance.

watershed restoration, are being considered by the Navy. When the Navy develops its proposed compensatory mitigation plan, mitigation options contained within the plan would be evaluated by the USACE to determine compliance with the Compensatory Mitigation Rule.

J-015-073

Thank you for your comments. The document has been reviewed and modified as appropriate based upon your comments.

1. The text has been revised and clarified to emphasize coral coverage location.
2. Text and Figure 11.2-2 has been revised and labeled correctly to show the extent of indirect impacts. The 200m "project study area" is not the indirect impact area as stated. However, as stated in the EIS and based on sediment transport modeling, an adverse indirect impact is anticipated out to 39 ft (12 m) from the outer dredge foot print. Indirect impacts (less than significant) are expected out to 144 ft (44 m). The shallow shoal areas are not expected to be impacted by either direct or indirect impacts.

J-015-074

Thank you for your comment.

Comment 1. Text in the FEIS does not indicate that the entire area was dredged, but rather explains that the area in general was dredged, and that dredging likely accounts for the present configuration of the live coral growth on the reefs today where dredging did take place.

With respect to reefs deeper than 60 feet, a 200 meter (m) indirect zone used in the DEIS was based upon discussions with resource agencies, which indicated that indirect impacts would be contained within the shallow reef area, which is approximately 200 meters from the outside edge of any dredging footprint. Subsequent to discussions with the

Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment	
J-015-085	4	11	11-54		BSP/GCMP	Burdick	2nd bulletpoint: What is the reason for using the 1% and 2% sediment release rates, with the 2% release rate used to simulate the maximum environmental adverse impact scenarios? Confused about previous reference to a 10% release rate (=90% retention rate) referred to on page 11-52. How does altering the silt curtain effectiveness (how is this measured?) by a factor of 4 affect the model results? Why was this value used? Is this explained in the full report? If so, this description must be included here.
	4	11	11-56	Para. 1	BSP/GCMP	Burdick	It is not clear how the cumulative sediment deposition total was calculated, and the reason for the need to extrapolate as opposed to running the model across the duration of the dredging activity (except that perhaps computational power was limited). Please clarify.
	4	11	11-56	Para. 2	BSP/GCMP	Burdick	2nd bulletpoint: The DEIS makes reference to Brown et al. (1990), which suggests that relatively slow current speeds (<3cm/second) are often sufficient to remove the small aggregates from the tops and flanks of mound-shaped and branching corals. However, some of the coral species present within the impact area, including the most dominant coral species (Porites rus), cannot be characterized as being either mound-shaped or branching, so the appropriateness of this reference to the situation within the impact area is limited. Porites rus, especially at greater depths, is composed primarily of horizontal plates, the surfaces of which are uneven, with concave areas that collect sediment and result in tissue loss (as mentioned in the 3rd bulletpoint on page 11-56).
	4	11	11-56	Para. 2	BSP/GCMP	Burdick	3rd bulletpoint: The DEIS states that while the relatively steep reef slopes along the margin of the reefs targeted for dredging are among the areas of highest coral cover, "indirect impacts from suspended sediment would be mitigated by downgradient flow with little accumulation on the steep reef face (MRC 2008c). Much of the coral cover on the steep reef slopes is comprised of Porites rus, which exhibits a plate growth form. This morphology provides for a larger surface area exposed to light. However, this morphology also readily accumulates sediment. The horizontal Porites rus plates, even on relatively steep reef slopes, will collect significant amounts of sediment. This section must be altered to reflect this point.
	4	11	11-57	Para. 1	BSP/GCMP	Burdick	The claim that dredging activity will result in the expansion of coral coverage should be removed entirely. This statement conflates the acute impacts of storm activity on certain coral species known to depend heavily on asexual reproduction with the long-term impacts of dredging, and is a misrepresentation of the literature.

resource agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for 188 m buffer area.

The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced.

Comment 2. Habitat assessment methodologies, which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-086							
158	4	11	11-57	Last para.	BSP/GCMP	Burdick	proposed aircraft carrier project are not expected to exceed the "normal" conditions observed over several days in the Inner Apra Harbor Channel," and goes on to state that "there are distinct water quality differences (i.e., turbidity zones) in Apra Harbor...field observations during surveys indicated substantially higher turbidity in the Inner Apra Harbor Entrance Channel than in the proposed aircraft carrier turning basin dredge area. It was also observed that ships transiting through the Inner Apra Harbor Entrance Channel created plumes of resuspended sediment that reached the surface directly over the area occupied by "dense coral communities" within the Inner Apra Harbor Entrance Channel. Hence, these communities support the expectation that minimal indirect impacts would occur as a result of the proposed dredging." As stated above, turbidity levels are generally higher in the Entrance Channel than in the proposed turning basin dredge area. While dredging may not cause water quality to exceed "normal" turbidity levels experienced by coral communities occurring in the Inner Apra Harbor Entrance Channel, the conditions in the Entrance Channel and in the proposed turning basin are not equivalent. Therefore, it is not appropriate to infer that
159	4	11	11-57		BSP/GCMP	Burdick	In general, this section appears to consistently underestimate the indirect impacts of dredging. As John McManus, one of the peer reviewers pointed out, "Coral communities tend to develop to the limits of environmental perturbation and stress characteristics of a particular site. Additional loading of sediments can easily overwhelm the sediment removal mechanisms of the existing corals, especially in places which are somewhat shielded from strong current flow. Thus, in our study of sediment impacts associated with mining in the central Philippines, the massive Porites colonies and other corals were forced to release large amounts of mucous to remove the unusually high loads of sediment. The currents were not strong enough to remove this heavy mass of sediment-laden mucous, and nearly all corals in the impacted area basically "smothered" to death. That area had been similarly inhabited by moderately sediment-tolerant corals." The analysis of indirect impacts to coral reef resources should be presented in a more objective manner, and should consider the input of expert input such as that from Dr. McManus

under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

With respect to in situ surveys, the Navy coral surveys were conducted in-situ at the sites of the proposed project area. As noted previously, the Navy has used a scientifically recognized and defensible survey methodology. Further, the analysis was performed by recognized experts from the University of Hawaii and the National Coral Reef Institute.

J-015-075

Thank you for your comments.

Comment 1. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-087								
	160	4	11	11-58	Para. 1	BSP/GCMP	Burdick	The conclusion that coral recruitment is limited by the availability of hardbottom, and not by suspended sediment levels, is completely unsubstantiated. The limited coral recruitment rates observed on Guam over the last couple decades (see work by National Park Service at Asan and Birkeland's work at Luminao and other sites) are likely limited by larval supply, and also by pre- and post-settlement factors. More recent literature should be discussed here. In addition, the presence of coral does not necessarily mean the reefs are healthy. This is one of the main reasons why size frequency data is much more heavily relied upon than percent coral cover in ecological assessments and monitoring.
	161	4	11	11-58	Para. 2	BSP/GCMP	Burdick	DEIS states that "the area of potential effects comprises a relatively small fraction of the total live reef area mapped in Apra Harbor," but does not specify what fraction of area this represents. This statement appears to be entirely unsubstantiated, yet is the basis for many claims of less than significant impacts to various resources. Recommend including this value, and let readers decide if it is a significant fraction of the harbor or not.
	162	4	11	11-58	Para. 2	BSP/GCMP	Burdick	In a significant change to the existing EFH condition in Apra Harbor and would also not likely result in decreased reproductive potential (i.e., coral spawning) of the Apra Harbor reef community as a whole." However, this statement relies on the assumption that the communities of coral reef organisms are the same or similar across the entire harbor. This is not the case, as different parts of the harbor host different assemblages, depending on a variety of factors (depth, proximity to anthropogenic impacts, water quality, hydrographic regime, etc.). Also, none of the surveys conducted for this DEIS provide data that support the assumption. On the contrary, surveys conducted by the resource agencies as part of the methods comparison study (Appendix J) suggest that coral species not previously recorded anywhere on Guam (in Apra Harbor or beyond) occur within the impact area. The taxonomic resolution of the resource agency surveys allows an accurate comparison between reef communities. It would be necessary to conduct surveys using this or a similar method with the same level of taxonomic resolution across the harbor to properly evaluate the assumption that the impact area does not possess unique EFH, or that if the area

updated to reflect the latest developments in this review.

Comment 2. Chapter 11 of both Volumes 2 and 4 provide detailed information on CWA permit requirements and the need to fully comply with these requirements.

Comment 3. Text was modified in the FEIS to reflect the correct statement from the Viehman et al. reference.

Comment 4. Addressed for following comment.

J-015-076

Thank you for your comment. The FEIS has been clarified. Because of the incompatibility of the methodology used by the resource agencies in comparison to the Navy, and the resulting differences in data coupled with differences in areas studied, the comparative analysis conducted by the resource agencies was of little relevant value in assessing the environmental impacts of dredging on coral resources.

J-015-077

Thank you for your comment.

Comments 1 and 2. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an

Vol.	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment	
J-015-088							
163	4	11	11-58	Last para.	BSP/GCMP	Burdick	Last paragraph: The statement that "based on the most environmentally adverse scenario model run, none of the projected contours of sediment deposition extend to the large patch reefs characterized as benthic communities with high coral coverage" appears to be incorrect, as associated figures depict contours extended to some of the shallow shoals. Also, see comment above on inadequacy of coral cover to value coral reef ecosystem function
164	4	11	11-58	Last para.	BSP/GCMP	Burdick	unique species; almost two thirds (63%) of the area to be dredged contains coral coverage of less than 30%, the project area is previously disturbed, having been dredged in 1945, and although not "unhealthy," the coral in the project is sediment-laden and not as healthy as coral at the shoal area further away from the channel (Dollar 2009)." With regard to unique species, as is mentioned in previous comments, data collected by the Navy consultants is not adequate to make the categorical claim that no unique species occur in the affected area. It does not appear as though the individuals conducting the surveys possessed the required knowledge of Apra Harbor's marine flora and fauna to make such a statement. The detection of several coral species during the resource agency surveys that appear to be species not previously reported from Guam, at the very least, suggest that such a comment not be made until adequate data be collected. This data was provided to the Navy consultant several months prior to the release of the DEIS, along with the rest of the data collected during the field work for the comparison study carried out by the resource agencies. Even if a given species is not "unique" to the affected area, the presence of a species. It is not clear why sedimentation rates of 1000 and 40 mg/cm ² 1/4 in (6 mm) are focused upon so heavily. Please clarify the use of these values.
165	4	11	11-59	Para. 1	BSP/GCMP	Burdick	In the second sentence of this paragraph, it is stated that "the area of coral within the indirect impact area that is shallower than 60 ft is assumed to be temporarily lost due to indirect dredging impacts..." However, there is no consideration of impacts to reef communities below 60ft, which would certainly be impacted by sediment, and possibly by larger debris, released during dredging.
166	4	11	11-59	Para. 2	BSP/GCMP	Burdick	The assumption that indirect impacts from Alternative 1 would be "short-term and localized, and that recovery would be expected within five years" is not adequately supported. Indeed, the sum of many of these comments strongly suggests otherwise. Recommend altering this statement to reflect this.
167	4	11	11-59	Para. 3	BSP/GCMP	Burdick	

historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-078

Thank you for your comments.

Comment 1. Text modified as appropriate in FEIS.

Comment 2. The information provided for disturbances to coral from sediment is included to demonstrate the response of corals to suspended sediments, regardless of the source. Text in the FEIS differentiates between potential impacts from dredging and those from shorter term and/or natural disturbances (such as typhoons).

Comment 3. Volume 9, Appendix E includes a more detailed description of the use of the Normalized Difference Vegetation Index. Please refer to this appendix.

J-015-079

Thank you for your comments.

Comment 1. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems,

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-089							
168	4	11	11-59	Last para.	BSP/GCMP	Burdick	Here the DEIS authors state that "implementation and enforcement of appropriate BMPs and potential mitigation measures would reduce the effects of dredging, possibly from adverse to no adverse impacts." However, BMPs are not described in sufficient detail (find other references to BMPs). Commitments to certain BMPs and an analysis of their effectiveness must be made in the DEIS and especially in the ROD.
169	4	11	11-59	Last para.	BSP/GCMP	Burdick	The final sentence in this paragraph states that "no adverse effects to EFH are expected from indirect impacts of sedimentation to coral habitat and other benthic habitat with appropriate implementation of dredging BMPs and potential mitigation measures. However, without detailing the BMPs and mitigation measures, including evaluating the effectiveness of each, such a statement remains unsupported. In addition, this statement appears to be in contrast to information provided in the previous paragraphs.
170	4	11	11-62	Para. 1	BSP/GCMP	Burdick	to be extremely rare (Navy 2009c) and seasonal high concentrations of adult bigeye scad, may also be temporarily disturbed by increased vessel traffic and dredging activities." However, the lack of data regarding the scalloped hammerhead data, and especially the heavy reliance on a single, unsubstantiated personal communication, does not mean that their occurrence is rare. Indeed, it appears as though the authors have made a serious error in conflating "spawning" with "pupping." Apparently very little effort has been made to document the scalloped hammerhead pupping activity, and the result is that all know about is the result of a personal observations (mainly, the catch of young individuals within the area on a seasonal basis). In addition, the impact on these PHCRT species by vessel traffic and dredging activities should not be limited to concerns about collisions between vessels and adult fish or impacts to EFH. Disruption to movement and behavior of these species should also be discussed. Such impacts would be of particular concern for the scalloped hammerheads, which may be especially susceptible to disruptions in behavior during spawning activities.

are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

The size frequency analysis was removed from the FEIS.

Comment 2. The reference to other studies is sufficient for comparisons with the proposed actions.

Comment 3. The reference to other studies is sufficient for comparisons with the proposed actions. The study areas are not portrayed as being identical.

J-015-080

Thank you for your comment.

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-090							
171	4	11	11-62	Para. 3	BSP/GCMP	Burdick	Here the DEIS states that the presence of back fill and pilings installed during wharf construction would add benthic habitat suitable for colonization by sessile organisms. Indeed, these structures would be colonized by a variety of sessile organisms and would be inhabited by associated fishes and invertebrates, but these communities are distinct from natural reef communities and should not be considered beneficial. This is especially true when considering that artificial reef habitat (especially wharves and other structures near heavy ship traffic) is known to host a disproportionately high number of non-native species (Cite Gustav). Instead these structures should be considered detrimental, as they provide havens for non-native species that have the potential to become invasive and thus threatening native reef communities. This threat is acknowledged in the "Non-Native Species" section on page 11-67.
172	4	11	11-62	Last para.	BSP/GCMP	Burdick	Last paragraph: See comment above regarding the claimed benefits of the installation of artificial structures. This statement should be removed entirely or altered.
173	4	11	11-64	Para. 2	BSP/GCMP	Burdick	Last bulletpoint: See comment above regarding the claimed benefits of the installation of artificial structures. This statement should be removed entirely or altered.
174	4	11	11-64	Para. 3	BSP/GCMP	Burdick	BMPs are not described in sufficient detail (find other references to BMPs) to make such a statement. Commitments to certain BMPs and an analysis of their effectiveness must be made in the DEIS and especially in the ROD. Recommend removal of this statement unless BMPs are described in detail. See comment above.
175	4	11	11-67	Para. 2	BSP/GCMP	Burdick	The second sentence in this paragraph presents a misreading of the cited paper (Paulay et al. 2002). The 5500 species noted in the Paulay et al. paper include all known native and non-native reef-associated species on Guam. Paulay et al. (2002) report numerous non-native species, the majority of which were restricted to Apra Harbor. This change must be reflected in the FEIS.

Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-081

Thank you for your comment.

Comment 1.

The referenced size frequency analysis was removed from the FEIS.

Comment 2.

J-015-091

Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last-name)	Comment	
176	4	11	11-67	Para. 3	BSP/GCMP	Burdick	Instead of arriving at the more sensible, logical, and scientifically-defensible conclusion that the presence of non-native species pose a very real threat to native reef communities (as described just a few sentences earlier in the DEIS), the authors state that the recruitment of some non-native species from the inner harbor area to the new aircraft carrier wharf piling may "enhance the community assemblage and diversity of the area." While diversity may increase in the short-term with the recruitment of non-native species, it is...Statements such as this are misleading. This statement should be removed and instead the detrimental effects of non-native species should be included in the analysis. This statement is an example of the consistent bias towards underestimating the impacts associated with the CVN Berthing project, and even goes so far as to claim benefits of activities that are actually detrimental.
177	4	11	11-67	Para. 6	BSP/GCMP	Burdick	Invertebrates as a result of CVN operations. While it is acknowledged that increased vessel traffic may disturb organisms living in the upper water column or in or on the sediments due to propeller wash and resuspension of sediments, and that the impacts to marine flora and invertebrates would be long-term, the impacts are minimized and considered episodic and minor, considering the existing condition. However, no evidence is provided to support this claim. Observations of overturned, damaged sponges, other reef organisms (see comment X for discussion of impacts to corals) suggest that the propeller wash of large ships have very real, long-term impacts on the marine flora and invertebrates. It is not clear what types of ships cause this type of damage, but it is likely that the massive aircraft carriers brought into the harbor by the Navy are responsible for at least some of the damage. An increase in vessel traffic associated with the buildup (not just CVN traffic) will certainly increase the level of impact to marine flora and fauna. While marine flora would likely be more resilient to such impacts, slower-growing invertebrates, such as sponges, would be more vulnerable. In addition, even episodic impacts have the potential to alter the reef.
178	4	11	11-67	Last para.	BSP/GCMP	Burdick	Last paragraph: The first sentences of the last paragraph on page 11-67 states that "there would be long-term, localized, and mitigation for indirect operational impacts? Please clarify.

The sentence in the FEIS refers to the Dollar (2009) reference when describing rugosity results.

Comment 3.

The FEIS has been updated to include information from the requested references.

Comment 4.

The FEIS indicates that a cooperative effort between the Navy and resource agencies is ongoing for monitoring sea turtle nesting activity.

J-015-082

Thank you for your comment.

Comments 1 and 2.

Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-092							
179	4	11	11-67	Last para.	BSP/GCMP	Burdick	Last paragraph: This paragraph states that "tugboats would disturb bottom sediments that could potentially be deposited on corals in and near the turning basin, including Big Blue Reef" but goes on to minimize these impacts by claiming that because the majority of sediment grab samples and cores consisted of relatively large-grained (not silt) material, the extent and duration of impact of resuspended materials would be minimized. This paragraph also refers to an earlier section of the DEIS that cites research suggesting that corals exposed to sandy, nutrient-poor sediments experience fundamentally different outcomes than those exposed to silt-sized sediments rich in organic matter and nutrients. However, both of these points do not discuss the disproportionate impact of silt on corals and other marine organisms, even when it comprises only 10% or 17% of bottom sediments. This issue is addressed in other comments.
180	4	11	11-68	Para. 2	BSP/GCMP	Burdick	The last sentence in this paragraph states that "the indirect impacts of ship traffic within the proposed aircraft carrier channel on nearby coral shoals would be comparable to existing impacts for current ship traffic, which are minor and short-term." No evidence is cited to support the claim that current impacts are minor and short-term. Anecdotal evidence suggests that the coral reef communities on the periphery of ship navigational channels are indeed impacted by the direct physical impact of propeller wash (in the form of overturned sponges, corals, etc.) and possibly by the indirect impacts of sediment resuspension. Recommend collection of data in an attempt to quantify this impact; possibly incorporate sampling design aimed at answering this question into large impact assessment, which should be re-done (see other comments).
181	4	11	11-68	Last para.	BSP/GCMP	Burdick	Here the DEIS authors appear to suggest that any indirect impacts to EFH as a result of CVN operations would be offset by the long-term benefits conferred by the additional habitat provided in the form of the aircraft carrier wharf vertical pilings and rip rap. In no way should artificial reef structure be considered an appropriate offset of impacts to natural reef communities. This is especially true in Apra Harbor, where artificial substrates appear to be preferred by non-native species, and thus contribute to an elevated risk of impact of marine invasive species to natural reef communities.

impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

As stated in the FEIS, algal surveys were not conducted. Smith (2007) was cited and this study included documentation of algae in the project area.

Comment 3.

The TEI (2009) study is cited in the FEIS.

J-015-083

Thank you for your comment.

Comments 1 and 2. Although some non-native or invasive species are known to use artificial substrates, there is no evidence that an artificial structure would become inundated with non-native or invasive species. The artificial substrate would be equally available for all species occurring in Apra Harbor, whether native or non-native. A Micronesian Biosecurity Plan will be funded and prepared by DoD to address the issue of non-native species.

Comments 3 and 4. The 200 meter indirect zone used in the DEIS was based upon discussions with resource agencies, which indicated that indirect impacts would be contained within the shallow reef area, which is approximately 200 meters from the outside edge of any dredging

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-093							
182	4	11	11-69	Para. 1	BSP/GCMP	Burdick	Again, the DEIS authors acknowledge potential impacts to fish within the Apra Harbor channel and associated nearby shoals and nurseries (Sasa Bay) by increased aircraft carrier and MEU embarkation and commercial ship movements through underwater noise or physical disturbances and resuspension of sediments from proposed dredging or propeller wash, but appear to claim that these impacts would be offset by the additional recruitment potential of juvenile finfish from Sasa Bay to the aircraft carrier wharf. No evidence is provided to support the claim that juvenile finfish from Sasa Bay or other nearby nursery areas would recruit to these structures. Furthermore, as stated in the above comment, the installation of artificial structures should in no way be considered mitigation for impacts to natural reef communities. This is especially true in Apra Harbor, where artificial substrates appear to be preferred by non-native species, and thus contribute to an elevated risk of impact of marine invasive species to natural reef communities.
183	4	11	11-69	Para. 2	BSP/GCMP	Burdick	The claim that "the deeper channel resulting from dredging activities would cause decreased turbidity during current operations and would offset the potential increase in turbidity from carrier operations" completely unsubstantiated. Please remove or provide appropriate support for such a statement.
184	4	11	11-69	Para. 4	BSP/GCMP	Burdick	The DEIS authors conclude that there would be no adverse effects to EFH from operation, and that Alternative 1 would result in less than significant impacts to EFH from standard Navy operating procedures and BMPs to protect marine resources. It is not clear how such a conclusion is reached when a list of long-term impacts is provided immediately preceding this statement. Recommend changing this section to reflect information provided in comments above pertaining to EFH impacts.
185	4	11	11-73	Para. 1	BSP/GCMP	Burdick	The Regional Biosecurity Plan and the associated analysis of marine biosecurity risks will contain information critical for assessing the potential risk of impacts from marine invasive species. This information should be included for review prior to the release of the FEIS.

footprint. Subsequent to discussions with the resource agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for 188 m buffer area.

The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced. Observations of sedimentation from Kilo Wharf are inapplicable to proposed dredging for the transient CVN pier because of its location further inside Apra Harbor and its associated reduced wave action. Implementation of BMPs would sufficiently reduce indirect impacts associated with sedimentation.

J-015-084

Thank you for your comment.

Comments 1 and 2. The document has been reviewed and modified as appropriate based upon your comments.

Comment 3. The 1-2% sediment release rate would result in a worst case scenario of 10% TSS measurements outside the silt curtain, which is why 10% was included in the description of the worst case scenario. This is described in the FEIS.

Comments 4-6. The document has been reviewed and modified as appropriate based upon your comment.

Comment 5. Observations of sedimentation from Kilo Wharf are inapplicable to proposed dredging for the transient CVN pier because of its location further inside Apra Harbor and its associated reduced wave

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last-name)	Comments
J-015-094							
186	4	11	11-73	Last para.	BSP/GCMP	Burdick	1st bulletpoint: The two dredging/filling restrictions during coral spawning periods call for different levels of protection, with the first calling for cessation of dredging operations during the period of peak coral spawning in July in consultation with the Guam DAWR and the second point calls for the prohibition of dredging or filling of tidal waters during hard coral spawning periods, usually around the full moons of June, July, and August. Based on the requirements adopted by the CNMI DEQ based on the recommendations of Dr. Peter Houk, we recommend the adoption of a revised version of the second proposed action. See comment above for more information regarding the prohibition of dredging operations around the period of coral spawning.
187	4	11	11-73	Last para.	BSP/GCMP	Burdick	Guam Department of Water Resources (GDWR) should be "Guam Department of Agriculture - Division of Aquatic and Wildlife Resources)
188	4	11	11-75	Last para.	BSP/GCMP	Burdick	address the concerns of the resource agencies (federal and local - should mention local resource agencies, as expressed in earlier discussions and comments and in a letter from the Governor of Guam). The resource agencies have consistently advocated for the use of coral colony density and size class data as more appropriate HEA inputs, and do not support the use of coral percent cover alone. While the use of rugosity is, in theory, more informative than percent coral cover alone, there are a number of reasons why colony density and size class data are more robust HEA inputs and why the type of rugosity data used in the DEIS is not appropriate. Rugosity, as used in the HEA calculations, is a coarse-scale, landscape rugosity derived from bathymetric data. This type of rugosity, is not really what most ecologists consider rugosity, which is a measure of topographic complexity at the scale of local sites (and as influenced by the shape conferred to the reef by coral colonies and other topographic features). Instead, the "rugosity" used here is actually just a measure of the slope of the reef and does not capture the local-scale topographic complexity that is known to influence, or be associated with, various local ecological characteristics and

action. Implementation of BMPs would sufficiently reduce indirect impacts associated with sedimentation.

Comment 6. The document has been reviewed and modified as appropriate based upon your comment.

Comment 7. The 200 meter (m) indirect zone used in the DEIS was based upon discussions with resource agencies, which indicated that indirect impacts would be contained within the shallow reef area, which is approximately 200 meters from the outside edge of any dredging footprint. Subsequent to discussions with the resource agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for 188 m buffer area.

The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced.

J-015-085

Thank you for your comment.

Comment 1. The combined use of 2% actual release rate and a less effective silt curtain retention results in the total 10% release rate referred to. Silt curtain effectiveness can be measured, so the effectiveness value was increased to use a more conservative estimate of sediment release amounts.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-095							
188	4	11	11-77	Para. 2	BSP/GCMP	Burdick	2nd bulletpoint: The coral habitat index is essentially a more complex version of the "100% coral cover equivalent" method, the validity of which had been rejected by the resource agencies because it is based on the assumption that the only valuable reef is that with 100% coral cover. Such an assumption does not take into account the variable nature of even pristine coral reefs, which can have varying amounts of coral cover and are also often comprised of coralline algae, fleshy algae, sponges, and other benthic organisms. The coral habitat index appears to assign an index value to each pixel based on a variety of factors, including percent coral cover. Pixels with lower percent coral cover values will be assigned lower coral habitat index values. When these values are used as inputs into the HEA, the result is that compensatory mitigation is not appropriately scaled.
190	4	11	11-77	Para. 4	BSP/GCMP	Burdick	The use of three-dimensional area value, as presented here, is preferred over 2D estimates, as it more accurately estimates the actual surface area of reef habitat. However, reef habitat with no coral coverage should not be excluded from consideration, as some of this area may be comprised of hard-bottom habitat that provides ecological functions and which is also potential habitat for coral recruitment.
191	4	11	11-78	Para. 5	BSP/GCMP	Burdick	"The shape of the recovery curve, the period over which losses are calculated, expected project timing and an appropriate discount rate" is critical information for understanding how the HEA was carried out and appears to be missing (but recognize that it is presented in the relevant appendix). This should be included in the main body of the FEIS.

Comment 2. The total value was calculated by including the various model parameters (area to be dredged, thickness of sediment to be dredged, dredging rates, etc.). Extrapolation was used to calculate totals for the dredging duration based on data from one day.

Comment 3. The Brown et al. reference is still valid for some species occurring in the dredge area.

Comment 4. Text modified to indicate the potential for sediment accumulation based on the morphology of *Porites rus*.

Comment 5. The statement the commenter is referring to clearly points out that the comparison is to storm-induced expansion of corals. The analysis is comparing the fragmentation caused by dredging to that caused by storm events; whether anthropogenic or a natural phenomenon, it is possible that the end results would be similar.

J-015-086

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

1. A sediment plume is an inevitable effect of in-water construction activities that the Navy proposes to minimize by using best management practices (BMPs) such as silt curtains and operational controls of dredging equipment. These practices and mitigation measures will be determined and agreed upon during the U.S. Army Corps of Engineers (USACE) permit phase of the projects. The dredging plume models that were run for the Draft EIS, were based on silt curtain sediment retention of 90% that were observed at other dredging operations in Inner Apra Harbor. Additionally, the Navy will be performing in-water monitoring. Operations will cease if water quality exceeds predetermined levels, and continue when water quality has returned to ambient conditions and the silt curtain modifications have been made.

	Vol	Ch	Pg	Line, Tb, Fig	Org	Commenter (last name)	Comment
J-015-096							
192	4	11	11-78		BSP/GCMP	Burdick	It is critical that the most recent references documenting the current rates of coral recruitment on Guam be incorporated into the impact analysis and the HEA. It appears as though the most recent reference regarding coral recruitment rates on Guam is to a study from the 1980s that looked at reef recovery following a catastrophic Acanthaster outbreak. These data are nearly 30 years old. Since then, the work of Chuck Birkeland, the National Park Service, and others have shown a 1-2 order of magnitude decline in recruitment rates. This has large implications for the recovery potential of damaged reefs or in the development of coral communities at mitigation sites. There is also the larger issue of assuming uniformity among recovery rates between the past, the present, and the future, with no consideration of cumulative impacts such as climate change and local anthropogenic stressors. If it is too late to assess coral recruitment rates (in consideration of recovery rates for compensatory mitigation projects), should consider use of more recent studies of coral recruitment in assessing recovery rate – even then, coral recruitment in Apra Harbor may be substantially different (higher or lower, not sure) when compared to the study areas. The statement, "compensatory mitigation is the science of reef restoration" is a general approximation; a linear recovery rate is utilized for HEA purposes" is the exact opposite of what is requested.
193	4	11	11-80	11.2-9	BSP/GCMP	Burdick	
194	4	11	11-81	Para. 2	BSP/GCMP	Burdick	The DEIS states that "although the HEA assumes permanent loss of habitat due to dredging, in reality there would be coral re-growth that would provide minor functions/services in the dredged areas. This could offset losses of habitat on which artificial reefs are placed." These statements contradict statements made on page 11-78, "areas directly impacted by dredging are considered permanently injured, and therefore experience a 100% loss in ecological services in perpetuity (i.e., no recovery). Any recovery would be lost during future maintenance." Recommend removing the statement on page 11-81.

2. The EIS indirect impact analysis was based on sediment transport modeling. The modeling identified adverse conditions (>6mm cumulative deposition) up to 40 ft. (12 m) from the dredge foot print. The USACE ERCA will be running its own model for comparison and information from this effort will be incorporated post ROD into the compensatory mitigation plan.

J-015-087

Thank you for your comment.

1. Text has been revised as appropriate regarding hardbottom as sole limitation associated with coral recruitment within Apra Harbor. Please see added references, including a paper discussing overall viewpoints of the theoretical and practical considerations of the use of measures of size-frequencies of coral populations vs. benthic coral cover as a more suitable method to assess the function and structure of reef ecosystems. A summary has been included in Volume 1, Volume 4, and the full paper can be found in Volume 9, Appendix J.

2. Text modified to include approximate percent area of coral to be impacted.

3. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-097							
196	4	11	11-83	Para. 3	BSP/GCMP	Burdick	compensatory mitigation method, despite the repeated objections by regulatory agencies. We feel that this type of mitigation is not appropriate compensation for the reef system that will be lost or compromised. The scientific literature, taken as a whole, does not appear to support the use of artificial reefs to replace lost reef ecosystem function and instead casts doubt on the rationale for using artificial reef structures as potential mitigation for the destruction of a natural reef system, particularly when such artificial reefs structures would be in close proximity to natural reef systems. Several prominent authors have also expressed their doubts about the ability of artificial reefs to mimic natural reef systems. For instance, the International Coral Reef Initiative (ICRI) put forth a Resolution on Artificial Coral Reef Restoration and Rehabilitation in 2005, in which the signatories of the resolution, including Gregor Hodgson, Clive Wilkinson, and Richard Kenchington, agreed that artificial systems cannot replace a natural coral reef and do not function as effectively as a living reef. We believe that the scarce resources available for natural resource management be used to reduce threats to natural systems instead of deploying artificial reef structures, especially
198	4	11	11-85	Para. 5	BSP/GCMP	Burdick	According to the DEIS, as described in this paragraph, the Cotti Bay watershed restoration project was not successful because land use was not totally controlled and management agreements could not be concluded. While the project has run into management issues, it is far to early to claim that the project failed. Even if the project fails, this should not preclude the implementation of other watershed restoration projects. It only means that a different approach may be warranted. Should implement coral translocation as BMP, especially for rare species, but it should be not considered compensatory mitigation because of the often poor long-term success rates of translocation projects.
197	4	11	11-90	Para. 2	BSP/GCMP	Burdick	Should implement coral translocation as BMP, especially for rare species, but it should be not considered compensatory mitigation because of the often poor long-term success rates of translocation projects.
198	4	11	11-92	Para. 2	BSP/GCMP	Burdick	Dredging acreages different than on page 11-50. Please clarify.

approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-088

Thank you for your comment. 1. The Figure and text has been revised accordingly. The 200 m area is the coral study boundary. Indirect effects are expected out to 144 ft (44 m) and adverse effects out to 40 ft (12 m) based on sediment modeling. USACE is running their own model which will be compared with the Navys. Results will be incorporated post ROD into the compensatory mitigation plan.

2. The "spring surveys," and comparative surveys, prepared for the DEIS covered areas beyond the impact area, so even if these species were present, which has not been justified by any data, it is not clear that they occur in the dredge footprint and would be affected by the dredging. As pointed out in the discussion of all reports discussing indirect effects, it is clear that the study area is routinely subjected to high levels of sediment stress, and hence all inhabitants must be pre-adapted to such conditions. Thus, if these "rare" species occur outside of the direct impact zone, it is not likely that they would be permanently eliminated from the area. Hence, without further work to elucidate the actual presence and exact location of the undocumented rare species, these comments are not relevant. Additionally, unless these coral (or other

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-098	199	4	11	11-99	Para. 6	BSP/GCMP	Burdick	area are of marginal to modest ecological value, based upon eight criteria..." Many of the indicators provided here appear to rely on faulty data, and do not reflect the true value of the reef communities within the project area. For example, while it is agreed that a substantial portion of the project area is dominated by <i>Porites</i> spp., <i>P. cylindrica</i> , and other <i>Porites</i> spp. (not necessarily a bad thing) it is also important to note that the photo quadrat method employed by the Navy consultant significantly underestimated the number of colonies of more cryptic taxa (e.g., <i>Leptoseris</i> crustaceans, <i>Stylococcolia armata</i> , <i>S. guntheri</i> , <i>Montipora</i> spp., <i>Acanthastrea</i> spp., <i>Astropora</i> spp., <i>Cyphastrea</i> spp., <i>Favia</i> spp., <i>Leptastrea</i> spp., <i>Tubastrea</i> spp., etc.) by limiting the analysis to a planar view and preventing a detailed examination of the entire 3-D reef surface. The results of the comparison study (Appendix J) provide a detailed explanation - and quantification - of this underestimation. Species counts arrived at through the work of Smith (2007) also appear to be quite low compared to that observed in the resource agency comparison study, and may be a result of a limited methodology or limited taxonomic expertise. While not presented in the marine species. This is a completely unsubstantiated statement, especially considering the apparently limited taxonomic expertise of the Navy consultants. Indeed, it appears as though the opposite is true. During coral reef surveys carried out by government and UOG Marine Lab biologists last spring found several corals, sponges, and possibly other marine organisms that appear to have not yet been found elsewhere in Aora Harbor. In addition, such a statement does not take into account the presence of rare species in the impact area, while these species may occur elsewhere in the harbor, their populations may be significantly impacted by the dredging activity because there are so few of them anywhere in the harbor. In addition, this statement does not take into account. Recommend consulting with local experts regarding this matter, and also recommend that a study on the distribution of rare corals, sponges, and other marine taxa throughout the harbor. This section, and sections containing similar statements, must be revised accordingly. Also recommend reviewing the Navy-funded work carried out by Paulay et al. (1997), which designates the vicinity of the impact area as a distinct physiographic/biological zone within
	200	4	11	11-105	Para. 2	BSP/GCMP	Burdick	

invertebrate) species have been identified as a legally recognized special status species, they are afforded no additional level of protection or consideration than other coral (or invertebrate) species in that area. Further, habitat assessment methodologies, which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-089

Thank you for your comment. The DoD is committed to performing its mission in an environmentally responsible manner with minimal damage to sensitive ecosystems and marine resources.

1. Best management practices (BMPs) and mitigation measures will

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-099								
	201	4	11	11-105	Para. 3	BSP/GCMP	Burdick	that "It is anticipated that associated coral communities (should be coral-associated biological communities?) (i.e., marine flora, invertebrates, fish, etc.) would repopulate or move back into the areas after in-water dredging activities cease." While it is acknowledged that "some mortality may be seen in site-attached species (e.g., damselfishes) that have lost their habitat," these statements underestimate the impacts to associated biological communities. The removal of EFH within the dredge footprint and the indirect impacts to nearby EFH will certainly impact fish and other communities. The remaining rubble and accumulated soft-sediment will only accommodate certain reef organisms, and certainly will not be inhabited by the full suite of reef organisms that currently occur in these areas. Previous statements in the DEIS indicate that the habitat losses within the dredge footprint will effectively be lost in perpetuity, with maintenance dredging removing regrowth on a regular basis. These statements also do not take into account the effect of the loss of site-attached species on other trophic groups (e.g., reduction in predator populations and release of prey).
J-015-100	202	4	2	21	2.3.4.3	BSP/GCMP	BSP/GCMP	were't concrete caissons used at Kilo Wharf, and didn't they have a problem there which led to unanticipated destruction of corals?
	203	4	2	23	2.3.5.1	BSP/GCMP	BSP/GCMP	the language here is confusing: "Mechanical dredging is assessed as the environmentally conservative method (maximum adverse impact) of dredging..." Max. impact would not appear to be the environmental conservative choice! If mechanical has the greatest adverse impact, then hydraulic dredging should be the method of choice.
	204	4	2			BSP/GCMP	BSP/GCMP	It is not only imperative to sample and analyze sediment samples where the dredging is proposed, but it is important to understand the impact the new berthings will have on the environment and therefore sediment samples at Kilo Wharf should also be analyzed in order to plan for and mitigate for the negative environmental impacts that would follow the creation of new carrier berthing facilities.
J-015-101	205	4	2			BSP/GCMP	BSP/GCMP	is it possible for biologists to remove significant corals/prime corals from the dredge area and move them and place (cement) them next to or onto other healthy reefs?
J-015-102	206	4	4	4	para. 4	BSP/GCMP	BSP/GCMP	docking activities also impact near shore waters through flaking of anti-fouling paints, corroded materials and other indirect discharges which settle into sediments and may be taken up by biota.

minimize the potential impacts of the proposed action. They are described in Volumes 2, 4, and 7.

2. The FEIS text, impact analysis, and description of BMPs and mitigation measures has been revised and clarified.
3. There is limited to no data on this species "pupping event" in Apra Harbor and as considering that the species is not federally protected under ESA, it is not considered beyond general descriptions in the EFHA. The NOAA (2005a, b) reference used to identify this "spawning event" has been changed based on this comment. The EFHA has been updated and clarified as appropriate regarding this PHCRT MUS. If the commenter is aware of additional references on this subject please provide to the Navy so they can be evaluated.

J-015-090

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

1. The text has been revised to acknowledged the potential for non-native species to be the majority in recolonization on the new wharf structure. Please also see a previous detailed response to a similar comment.
2. See previous response to comment. This was not officially considered a beneficial impact under NEPA; however, an increase in the diversity of the community, including forage habitat for finfish from increased sessile macro-invertebrate growth (albeit non-native) could be argued as such. Text has been modified.
3. See previous comment regarding artificial reefs. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-103								
	207	4	4	16	4.2.2.2	BSP/GCMP	BSP/GCMP	While TBT may have been phased out in (year not specified for final use), the leachates from copper based ablating paints are still a concern as their potential for long-term build-up in defined areas has not been addressed. Paragraph indicates sampling in "Outer Apra Harbor" may not be indicative unless they were taken in the shadow of berthed vessels at Kilo Wharf where build-ups of ablated or eroded ship related materials could be expected to concentrate. Sampling at Kilo Wharf should be undertaken and, if samples show a high concentration of metals or other vessel-related contaminants, then a mitigation for long-term impacts should include a regular schedule of sediment clean-up and disposal at the wharf sites.
	208	4	4	26	Table 4.2-6	BSP/GCMP	BSP/GCMP	add: no use of lights (except navigational hazard lights) during periods of coral spawning.
J-015-104								
J-015-105		4	4	26	para. 6	BSP/GCMP	BSP/GCMP	a comparative analysis of mechanical v. hydraulic dredging should be included. Mechanical dredging may be the way things have generally been done in the past on Guam, but that is insufficient reason to accept that method without a cost/benefit analysis of the two methods.
J-015-106								
	210	4	4	32	230.11 (G)	BSP/GCMP	BSP/GCMP	If the action is considered necessary for National Interest, as planned, and impacts on coral reefs and coral reef ecosystems in the proposed dredged area cannot be avoided or fully mitigated, compensation could include a greater role for DAWR in management responsibilities for reef areas in DOD submerged lands, and/or recognition of the GovGuam designated Marine Preserve in the Apra Harbor/Orote area.
	211	4	4	34	230.3	BSP/GCMP	BSP/GCMP	"The Navy recognizes that there are many on-going and recent past studies on the subject of potential exposures to sea turtles and other marine species from pile driving actions". To follow this statement up with "Further research and validation of these studies are necessary prior to being able to determine the applicability of the methodologies and results to the proposed action within this DEIS/OEIS" begs the question, when is enough enough? What do the completed studies show? Why aren't they enough to make a determination from?"

waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

4. See previous comment regarding description and clarification of BMPs and mitigation measures in Volume 7.

5. Text has been revised regarding non-native species associated with the cited reference.

J-015-091

Thank you for your comment. This is a duplicate comment that has previously been addressed. The document has been reviewed and modified as appropriate based upon your comments.

J-015-092

Thank you for your comment. These comments have been previously addressed in detail under another comment number. The document has been reviewed and modified as appropriate based upon your comments.

1. In short, there are many factors that contribute to resuspension of sediment and all of these have been taken into account when the sediment transport modeling was performed. See other response to comments.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-107								
	212	4	4	para 485	BSP/GCMP	BSP/GCMP	an artificial reef is, in no way, equal in resource or resource usage value to a natural coral reef, in the same way that an orchard of planted trees does not equal the value of a natural forest. The processes and specie-interactions that create the functionality of a coral reef are so complex as to not be fully understood and therefore cannot be duplicated through artificial means. At the very minimum on any reef, several hundred and probably several thousand species of aquatic flora and fauna create a single system. No artificial reef should be given much value as either mitigation or compensation. If damage cannot be avoided, a greater compensation could be in DOD support in restoring water quality on other, threatened reefs on Guam	
J-015-108								
	213	4	5	general note	BSP/GCMP	BSP/GCMP	while it may be correct to state that the level of pollution, or the air quality will not be altered significantly by vehicles (temporary), or aircraft or carrier operations, there would still be an increase in co2 and other pollutants due to the increased power plant production that will be required for the daily operations associated with support of carrier berthing operations. (Indirect impact)	
J-015-109								
	214	4	8	2	8.2.1.1	BSP/GCMP	BSP/GCMP	"Other owners who do not want to sell their property (or relocate) would be likely to consider the forced sale or relocation as an adverse impact even though they are properly compensated." This statement can only refer to monetary compensation, which may be proper for owners who only view the land as a monetary investment, (typically a western approach to value), but for owners of the lands in question on Guam there are familial and spiritual ties to the land which has been considered family lands for hundreds or even thousands of years. Ancestors are buried on those lands. While a "taking" might be necessary, such action should be approached with significantly more sensitivity about the real importance of the land to the owners. They will not be simply giving up soil for cash, they will be losing much of their family history and connections to their homes.

2. In short, an extra three trips per year into the harbor is considered negligible over the no-action alternative. The EIS supports this analysis stating that although additional trips may be long-term, the additional impacts would be short-term, periodic and localized. see other responses to comments.

3. Text has been revised. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

J-015-093

Thank you for your comment. The artificial structure is not being considered as mitigation; rather, it is part of an overall explanation of impacts, which will result from carrier operations. Additional references have been added to the FEIS.

Under the MSA, federal agencies are required to identify both negative and positive effects associated with the proposed project. This has been identified as a net positive benefit resulting from the deepening of the channel related to continuing operations and therefore is appropriate.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-110	215	4	8	3	8.2.1.2	BSP/GCMP	BSP/GCMP "Federal actions on federal lands/submerged lands are subject to base command approval, but are not required to conform with state/territory land use plans or policies". This statement is not altogether true. Actions on federal lands which may have spillover impacts on non-federal lands are certainly subject to federal consistency requirements, which are based on local policies. Marine waters and ecosystems are not confined by artificial boundaries, but in fact migrate between state and federal jurisdictions. Actions on submerged lands must address impacts or coral reef communities downstream of the project area.
	216	4	10	11	bullet pt. 2	BSP/GCMP	BSP/GCMP in order to ensure educational measures in locally accurate, DOD could provide funding to Guam and CNMI agencies to produce a site specific educational video (or series of videos), and pamphlets/brochures for use by all incoming military and DOD employed civilian workers, detailing the unique environment, and detailing the do's and don'ts/ laws, etc. regarding the natural, historic and cultural issues for Guam. Given the number of toxic and potentially deadly fauna within shallow waters, (and the propensity of people to handle them because of their coloring/shapes, etc), the video highlighting of them would also result in a safety briefing for personnel not accustomed to tropical ecosystems.
J-015-112	217	4	11	5	11.1.1.1	BSP/GCMP	BSP/GCMP Why wasn't resource agency preferred methodology used to provide data for the EIS?
	218	4	11	43	11.2.1.2	BSP/GCMP	BSP/GCMP "10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." while this is the last consideration in the list, it does open the door for introducing local law into the argument and analysis of actions.
	219	4	11	52	bullets	BSP/GCMP	BSP/GCMP these bullets assume severe stress at above 40mg/cm2/day, yet the source they've been quoting (Rogers) in 1990 cited "...moderate to severe sedimentation stress ...as 10-50 mg/cm2/day..." (Life and Death of Coral Reefs, Birkland, et al, 1996, page 372. Chapman & Hall publishers.
	220	4	11	73	11.2.2.4	BSP/GCMP	BSP/GCMP add sub-bullet to first bullet: "Avoid the use of artificial lighting during summer full moon spawning".

Minor text revision has been done to address terminology of impact issues.

J-015-094

Thank you for your comment. The DoD is committed to performing its mission in an environmentally responsible manner with minimal damage to sensitive ecosystems and marine resources.

1. The text has been revised to be consistent, including BMPs and Mitigation Measures identified in Volumes 2, 4, and 7. The specific mitigation measure associated with cessation of in-water construction activities (and others) will be detailed in the USACE permitting.

2. Text has been revised.

3. Habitat assessment methodologies, which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-113								
	221	4	11	76	11.2.2.5	BSP/GCMP	BSP/GCMP	The USACE has regulatory authority; compensatory mitigation would be developed during permitting and appropriate units for quantifying credits and debits would be determined by district engineers on a case-by-case basis. District engineers are encouraged to use science-based assessment methods for determining aquatic habitat condition, such as the index of biological integrity, where practicable." There are several concerns with this paragraph. First; Marine biologists should be determining credits and debits, or at least should be the primary voice inputting to the District Engineer. Second: the phrase suggesting District Engineer is encouraged to use science-based assessment methods should read "District Engineer will use science-based assessment methods.
	222	4	11	81	11.2.2.7	BSP/GCMP	BSP/GCMP	The HEA and Supporting Studies report (Volume 9, Appendix E, Section A) provides background on the mitigation proposals discussed among regulatory agencies and DoD. Many ideas were proposed at a HEA workshop that was hosted by USFWS in 2008 (Guam agencies were unable to attend due to scheduling difficulties).
	223	4	11	83	first para.	BSP/GCMP	BSP/GCMP	"The Navy has not advanced a proposal at this time and specific mitigation measures would be subject to the permitting action/mitigation decision of the USACE." Because any USACE permit would require a federal consistency review, a partnership (govguam agencies, USACE and DOD) in developing ACE's decision would be beneficial to all parties.
	224	4	11	107	table 11.2-14	BSP/GCMP	BSP/GCMP	If construction of an artificial reef and/or coral removal and transplantation are deemed acceptable mitigation measures, then the required mitigation plan should include funding by DOD to conduct (through UOG and DAWR) monitoring of those reefs for a period of 50 years. This DEIS has detailed elsewhere in this chapter that long-term monitoring of reef recovery efforts have not been undertaken or completed. This is an opportunity to begin such a monitoring effort in order to address changes as they occur and to observe recovery methods.
	225	4				BSP/GCMP	BSP/GCMP	
J-015-114	226	4	17	7	table 17.2-6	BSP/GCMP	BSP/GCMP	add: annual testing of soils and bottom of submerged lands at berthing areas to identify releases of toxic materials as by-products of operation.

elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-095

Thank you for your comments. The Navy has prepared a coral methodology paper which is summarized in Volume 1, Volume 4, Chapter 11, and is included in its entirety in Volume 9, Appendix J.

In summary, quantifying area cover of benthic habitats and component communities is central to understanding coral reef ecosystem status and function. A myriad of theoretical considerations indicate that measurement of populations structure in terms of size-frequency is not the most effective method for evaluating reef ecosystem structure and function. In addition, the field method suggested by resource agencies to determine population structure in Apra Harbor has a variety of problems that negate this metric as providing a valid, non-subjective data set. These methodological short-comings do not exist for measures of benthic cover. In terms of repeatability, the photographic cover method produces a permanent record of the data source, which can be analyzed by multiple investigators in an identical manner to arrive at reliable and repeatable estimates of coral community cover. Replication reduces the potential for individual investigator bias. Furthermore, remote sensing has become a proven tool for quantifying reef community structure and distribution at large scales. This technology has been demonstrated to be the most cost-effective means for acquiring comprehensive data on reef community structure, and it is the only available tool that can produce globally uniform data (Riegl et al., 2010).Size-frequency can be an important parameter for addressing specific aspects of populations, yet it does not provide the best theoretical and most practicable scientific method for a baseline assessment of the various coral ecosystems in

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-115	5	3	9	para. 2	BSP/GCMP	BSP/GCMP	sinkholes should be regularly maintained, cleared of debris to preserve their natural functions.
J-015-116	5	5	2	5.2.1.2	BSP/GCMP	BSP/GCMP	The potential effects of CO2 and other greenhouse gas emissions are by nature global and are based on cumulative impacts. Individual sources are not large enough to have an appreciable effect on climate change. This statement is perhaps the most ludicrous sentence in the whole project. Cumulative means that it is the result of many actions, and so all those many actions must be addressed. In addition, USEPA just announced new regulatory authority over CO2 greenhouse gases because of their harm to humans. The CO2 levels need to be addressed as an element of cumulative impact.
J-015-117	5	6	3	6.2.2.1	BSP/GCMP	BSP/GCMP	Preferred alternative 1 is compatible with Marine Corps build-up alternatives 1 and 8 - however, Marine Corps preferred alternative is 2, not 1 or 8!
J-015-118	5	7			BSP/GCMP	BSP/GCMP	The SUA for this project encompasses all of NWF - which HC-25 currently uses and which is proposed for Marine training areas in Vol. 2 of this document. What is impact on those uses?
J-015-119	5	9	2	9.2.2.1	BSP/GCMP	BSP/GCMP	Paragraph 2 of this section is the first instance I've seen where they state that Hazulo and GNWR would be off-limits to non-DOD affiliated persons and their dependents. This is a much stricter statement than appears in previous volumes.
J-015-120	5	9	3		BSP/GCMP	BSP/GCMP	The sole recreational resource at Navy Barrigada features one of two golf courses available to installation personnel and guests on Guam, the Admiral Nimitz Golf Course. This statement is not true. All golf courses on Guam are available to installation personnel and guests. Installation personnel have the right to register to vote on Guam while stationed there and, by doing so, would qualify for local rates at civilian golf courses. Whether to do that or not is strictly a choice of the military member or their spouses. This, by the way, is exactly the same choice that military personnel on Hawaii have to make relative to getting and golf rates.

Guam. The photographic percent coral cover method used by the DoN for the assessment of Apra Harbor and potential mitigation sites is presently the best, most practicable science available (Riegl et al., 2010).

1. The report you refer to is a final report and will not be edited. There may be updates to the report to support the Army Corps of Engineers permits, but they would be considered new reports with new information. The following text includes information to address your comment.

2. The Navy recognizes the importance of all substrate types in the waters of the proposed action area. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits

	Vo	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-121	233	5	9		BSP/GCMP	BSP/GCMP	There is something wrong with the notion that military personnel, their dependents and non-DOD employees should have free access to all recreational opportunities (competing with residents and tourists for these resources) off base, and should also have sole access to recreational resources (and natural resources, and historic resources and cultural resources) on base. This approach of segregating the military community from the civilian community for non-DOD related activities helps to create the split between the communities that contributes to friction between them.	
J-015-122	234	5	10	6	10.2.2.2	BSP/GCMP	BSP/GCMP	It would appear from Figure 10.2-1 that destruction of the primary limestone forest lands could be avoided through design of headquarters and housing - either through reconfiguration of building footprints and/or more compact building (up rather than out).
J-015-123	235	5	10	11	0.2.3.1 (eta)	BSP/GCMP	BSP/GCMP	However, long term, permanent impacts to populations of such species would not result because the species known to be present are abundant in surrounding areas, and would rapidly repopulate suitable portions of the affected area. This statement has been made throughout the DEIS and, while there is some truth in it, the statement ignores the impact of diminished total populations. In natural settings, wildlife tends to occupy the maximum land space it can (or attain a maximum population density for the land available). Any wildlife displaced to adjacent lands would, in all likelihood, expand that species population beyond the sustainability levels of the habitat. Natural levels would result over time, but the overall long term impact is that total populations of species would, necessarily, be reduced.
J-015-124	5	13	3	1st para.	BSP/GCMP	BSP/GCMP	The fact that the property is or is not in DOD ownership is immaterial unless a scenic view is only seen from within that property.	

under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

3. The HEA is included in Appendix 9, and includes detail on this and many other matters. Please refer to Appendix 9.

J-015-096

Thank you for your comments.

1. The information provided in the DEIS on coral resilience and stress tolerance were based in part on the HEA report, which was reviewed and commented on by resource agencies with Navy response. Additionally information was provided during the “spring survey” second report. Most of the older references (1970 -1990s) are backed up by more recent references (2005 and earlier). And just because the commenter thinks they are "old" doesn't make them invalid. If there are other key references the commenter has become aware of, please forward those to the Navy POC for review and potential incorporation into the FEIS.

2 and 3. See previous comment(s) on coral methodology debate.

J-015-097

Thank you for your comment. These comments have been previously addressed in detail under another comment number. The document has been reviewed and modified as appropriate based upon your comments.

1-3. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting

	Vol	Ch	Pg	Line, Tbl, Fig	D/g	Commenter (last name)	Comment	
J-015-125	237	5	9	2	line 21, Par	BSP/GCMP	Torres	<p>"The primary users of these on-base recreational resources would be installation personnel, civilian workers, and their dependents. To shelter military on-base equipments and personnel, as well as to facilitate training operations, persons other than the described would not have access to, and use of, these recreational resources."</p> <p>Does this mean that local military persons, retirees, families & guests will have no access to recreational areas?</p> <p>Nevertheless, some crowding at the existing recreational resources (e.g., more people on trails, beaches, cultural sites) is expected as the result of the presence of the new population on base. Therefore, Alternative 1 would result in less than significant impacts to recreational resources at NCTS Finegayan.</p> <p>"Some crowding" may actually be significant when total population increase on NCTAMs is considered. Mitigation of such impacts may include Management Measures to reduce impacts while still allowing the widest access to recreational resources, including for non-base personnel. This should be planned and implemented.</p> <p>There are no existing recreational resources at South Finegayan. Consequently, there would be no impacts on recreational resources from construction. Therefore, Alternative 1 would result in no impacts to recreational resources at South Finegayan.</p>
	238	5	9	3		BSP/GCMP	Torres	<p>An increase in the number of golfers could potentially lead to reduced availability of tee times at the golf course. Therefore, Alternative 1 would result in less than significant impacts to recreational resources at Navy Barrigada. This appears to be a contradictory statement in that it states "reduced availability will result" but it is a "less than significant impact". Seems to be a boiler plate statement throughout the DEIS which brings in to question the analysis of other portions of the DEIS. An attempt at actually quantifying actual impacts would be useful. Could the increased population of golfers result in loss of privileges for retired local military in the future?</p>
J-015-126	239	5	12	2	12.2.1.2	BSP/GCMP	Torres	<p>Paragraph 3 refers to a PA or Programmatic Agreement with all agencies involved. Other than the Local SHPO have other local "Participants" to the PA process been consulted? Especially with regards to the Pagat site. There is a requirement for such consultation under the 36 CFR 800.2 Participants in the section 106 Process. If not then they should be consulted immediately.</p>

the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

4. The acreages found in each table are referring to different Alternatives.

J-015-098

Thank you for your comment. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last-name)	Comment
J-015-127	5	13	3		BSP/GCMP	Torres	These mitigation measures should be incorporated throughout the project. In addition to retention of mature native forest species planting of such species lost to construction in areas suitable for long term survival should also be a mitigation measure of the project. This is addressed on pg 13.9 mitigation measures.
J-015-128	241	5	18	4	BSP/GCMP	Torres	"Because corresponding increases in GPD personnel are anticipated to occur to maintain existing service conditions, no impact to police service are anticipated." The statement implies there will be a corresponding increase in police, also fire and other GovGuam personnel to handle increased Public Health and Safety issues. Is this expected increase to be funded entirely by GovGuam through expected increases in tax revenue increases? There will probably be lag time before increased tax revenues are realized. How will the gap in such services be handled? This period will be critical as there will be a significant increase in population. Will DOD pay for the initial few years of increased personnel costs associated directly with the buildup until revenues catch up? The less than significant impact are not accurate unless additional resources are provided to GovGuam for the gap period and spelled out in the mitigative measures.
J-015-129	242	5	18	4	BSP/GCMP	Torres	"There is only a small potential for increases in notifiable diseases (including construction workforce contribution) and the Navy hospital would be available to treat military personnel, therefore, Alternative 1 would result in less than significant impacts to public health and safety (from notifiable diseases)." Though anticipated as small for this portion of the buildup, the cumulative effects of the buildup may result in significant impacts to public health and safety (from notifiable diseases). How does DCD intend to assist in addressing this potential adverse effect to the local population? Considering the already stretched health resources from previous Federal actions (Compact with FSM) will additional funding be provided to hire adequate health personnel for the construction surge or will GovGuam and the local population be expected to deal with the additional burden? This also includes the other public health and safety categories in this entire section. The less than significant impact determinations are not accurate unless additional resources are provided to GovGuam for the gap period and spelled out in the mitigative measures. Note: The above statements apply to all alternatives in this public health and safety section

"best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-099

Thank you for your comment. This exact comment has been previously addressed in detail under another comment number. The document has been reviewed and modified as appropriate based upon your comments.

In short, any re-growth of coral (encrusting), macro-invertebrates, or submerged aquatic vegetation in the Channel with relatively low vertical relief may not be impacted by future maintenance dredging operations. The EFHA has taken into account the loss of habitat.

J-015-100

Thank you for your comment. As noted in Chapter 2, Section 2.3.4.3 of Volume 4, Kilo Wharf construction and its extension utilized concrete caisson construction. The Kilo Wharf Extension EIS and Record of Decision noted that the dredging-related plume associated with the caisson construction under the Preferred Alternative for the Kilo Wharf Extension could adversely impact approximately 1.7 acres (0.7 hectares) to 14.9 acres (6.0 hectares) of benthic habitat including approximately 0.14 acres (0.06 ha) to 0.72 ac (0.29 ha) of coral reef communities over the course of the dredging period. The spread in the modeling analysis was dependent on the dredging rate and environmental conditions at the time of dredging. The analysis did in fact note that adverse impacts to corals from the caisson-designed extension of Kilo Wharf could occur. The EIS for this proposed action notes the advantages and disadvantages of the three potential types of wharf design in Section

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-130								
	243	5	18	18-4	BSP/GCMP	Torres	The summary of impacts as LSI in this section related to public health, safety and mental fitness is considered invalid based on previous statements above on the section. When considered as a part of the whole buildup project the cumulative effects may be considered significant without more mitigation measures. It appears that this part of the buildup meets the criteria of Environmental Justice section, "Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts." This appears to be the smaller component part of the buildup.	
J-015-131								
	244	5	1 AB	1	9	BSP/GCMP	Perez	DoD should address who are the members of the Army Air and Missile Defense Task Force?
	245	5	1 AB	1	12 & 13	BSP/GCMP	Perez	The Draft EIS on "purpose and need" statement indicates to develop land-based terminal defense and to develop infrastructure and facilities that support the presence and operation of an AMDTF land based air defense capability on Guam. Does DoD plan on utilizing any government or private lands for the proposed project activities or will it strictly be situated on military land?
	246	5	2 AB	1	23	BSP/GCMP	Perez	DoD needs to explain what is a "weapons emplacement site"? Does this proposed site involve any clearing of land, any disturbance to native species and their habitat, taking of Government or Private land?
	247	5	2 AB	2	Fig. 2.1-1	BSP/GCMP	Perez	Weapons Emplacement - Alternative 4: What is the perimeter of the combined three sites? How will DoD address the impacts on the native species and their habitat?
	248	5	2 AB	4	9	BSP/GCMP	Perez	Statement "for planning purposes it is assumed that all soldiers, contractors, and dependents would be permanently stationed on Guam". Gen: Does "contractors" as referred to on the above statement implying military personnel or are they foreign workers? If they are not military personnel and are foreign workers, it is not accurate to assume that they would be permanently stationed on Guam.
	249	5	2 AB	8	9	BSP/GCMP	Perez	Statement "Other activities would include storage of petroleum, oils, and lubricants (POL); battery storage; fuel dispensing; and welding". control or safety measures does DoD have in order to address the affects on the release of hazardous substance that may result from the discharge or release of any petroleum/oil spills? What

2.3.4 of Volume 4.

The differences between the environmental effects of mechanical and hydraulic dredging are discussed in Chapter 2, Volume 4 and Appendix D of the EIS. Mechanical dredging involves use of a clamshell or fixed bucket that excavates the dredge sediment from the harbor floor and then carries the sediment in the full bucket through the water column before lifting the bucket out of the water and placing the dredged sediment in a nearby barge or scrow. During this movement, a small fraction of the collected sediment will escape from the bucket and create suspended sediment in the lower and higher levels of the water column. On the other hand, a hydraulic dredge works solely on the harbor floor and any suspended sediment will emanate only in the lower portion of water column. As a result, the plume of suspended sediment is generally greater with use of conventional clam shell bucket as compared with a hydraulic dredge. However, use of hydraulic dredging is generally limited to soft bottom sediment on relatively flat surfaces. Mechanical dredging, which has historically been used in Apra Harbor, was chosen as the dredging method for evaluating environmental impacts as it presents the most adverse impact scenario.

A sediment plume is an inevitable effect of in-water construction activities. The Navy proposes to minimize sedimentation by using best management practices such as silt curtains and operational controls of dredging equipment. Final mitigation measures for all dredging activities will be determined and agreed upon during the permit phase of the projects.

Sediment samples within the proposed dredging areas were comprehensively analyzed for a wide range of parameters according to USEPA and USACE standard testing criteria. A total of fourteen discrete, representative sampling sites were included, as shown in Chapter 2 of Volume 4. These locations included the proposed turning basin in the Outer Harbor and the berthing areas of Alternative 1 and 2.

	Vol.	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-132 J-015-133	5	2 AB	10	Fig. 2.3-2	BSP/GCMP	Perez	From the Legend, what does "Class D Airspace" mean? Statement: "A site-specific geotechnical investigation was not undertaken for this Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS)". What is DoD's reason for not having the geotechnical investigation done?
	5	3 AB	1	24	BSP/GCMP	Perez	
	5	3 AB	9	8	BSP/GCMP	Perez	The second paragraph describes the Topography and landscape features. It further states that "if deemed hazardous... signs will be put in place etc." Why not take precautions now and not wait until it is deemed hazardous? You should always plan for the worst.
J-015-134							The DEIS statement on wetlands: The proposed project areas do not contain wetlands therefore an approach for analyzing wetland impacts is not presented here.
	5	4 AB	4	8	BSP/GCMP	Perez	Based on whose determination that there are no wetlands contained in the proposed areas? DoD should analyze to determine the type of soil in the area. Who is to say that the area is not a habitat for native species that live near or within the area. If there are native species, then yes wetlands will be impacted.
J-015-135							Statements made regarding CO2 is questionable. With the various types of activities that DoD proposes, CO2 will definitely have an impact on climate change and effects on humans whether it be short or long term or in some rare instances, deadly effect. How does DoD propose to address the cumulative impacts from carbon dioxide?
	5	5 AB	2	26	BSP/GCMP	Perez	
	5	5 AB	8	Below Tbl. 5.2-5.	BSP/GCMP	Perez	Statement: The DEIS states that "The air emissions predicted for Alternatives 1, 2 and 3 associated with construction and operation activities required for the relocation of the Army AMDTF to Guam are all well below the significance criterion of 250 TPY." Gen: If DoD is predicting that the air emissions are well below the significance... then we must assume that DoD is not quite sure of its affect. DoD should provide supporting documents to validate the above statement. In addition, how does DoD plan to address the above statement should the prediction is inaccurate.
J-015-136							Preferred Alternative 1 for Headquarters/Housing references: "This alternative is compatible with Marine Corps Alternatives 1 and 8 (refer to Volume 2)". In reviewing Volume 2 as referenced above, statement made on Volume 5 does not concur with what appears on Figure 2.1-2 of volume 2...which identifies it as Alternative 2, not 1 and 8.
	5	6 AB	3	8 & 9	BSP/GCMP	Perez	

As discussed in the EIS (Chapters 2 and 4 of Volumes 2 and 4), preliminary sampling results indicate that all contaminant parameters that were tested with the exception of nickel were below the Effects Range Low (ER-L) level. Nickel is a substance that is naturally occurring in the environment. The study results suggest that the materials to be dredged would not require special handling and would be suitable for upland placement for beneficial reuse or ocean disposal (although the ocean disposal permitting process would require separate analysis and toxicity testing). Additional testing will occur during the permitting process and a dredged material management plan will be developed. It should be noted that the analysis for disposal at the ocean disposal site is especially rigorous testing beyond what is normally required for upland disposal. Testing of the sediments at Kilo Wharf would not provide site specific results needed for the sediments to be dredged for either Alternative 1 or 2.

J-015-101

Thank you for your comment.

Transplanting corals is possible, and is discussed as a possible compensatory mitigation option in Volume 4, Chapter 11. This will be included in the compensatory mitigation plan to be prepared by the Navy.

J-015-102

Thank you for your comment. The paragraph in question has been updated to include anti-fouling paint as an item that could affect nearshore water quality. The Final EIS includes a discussion of potential impacts from anti-fouling paint.

J-015-103

Thank you for your comment. Sediment samples within the proposed

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment	
J-015-137	257	5	9	1	22 & 23	BSP/GCMP	Perez	The Draft EIS states within the Methodology that conducting recreational resource impact analyses are somewhat limited since the Government of Guam, Department of Parks and Recreation does not collect visitor data for its recreational facilities. DoD should contact the Guam Department of Parks and Recreation (DPR) to ascertain the visitor data. From coordinations with DPR's recreation division, they have provided visitor data in the past on user count, user conflicts etc.
J-015-138	258	5	10	6	28	BSP/GCMP	Perez	The Draft EIS states that the wildlife species that currently occur at Barrigada to include native and non-native species will not have a long-term impact from the proposed construction because the species would rapidly repopulate to suitable portions of the affected area. General Comment: Regardless whether the species will repopulate elsewhere, the fact of the matter is that these species will be helpless and traumatized from being displaced out of their natural habitat of which they have lived there for so many years. DoD must find ways to guarantee for the protection of these species.
J-015-139	259	5				BSP/GCMP	Perez	General Comment: It is difficult to accurately review the DEIS when the document keeps citing "Refer to Volume so and so". It takes up a lot of time in having to go back to a specific volume resulting in loss of concentration. The DEIS in my opinion could have been prepared better and easier to understand. Not a user friendly document, too technical at times.
J-015-140	6	4				BSP/GCMP	De Leon	Ways to accommodate pedestrians, bicycle travel, sidewalks and parking must be addressed on all affected roadway activities to prevent accidents which are prevalent on Guam due to conflicting uses of roadways.
J-015-141	6	9	9.2			BSP/GCMP	De Leon	Must indicate that aircraft operating at the AAFB airfield will continue to follow existing procedures that restrict overflight of federally listed endangered Mariana crow and Mariana fruit bat territories.
J-015-142	6	2	5	1st para.		BSP/GCMP	BSP/GCMP	The Navy transient personnel are all shipboard, and the ships would not require support services during the interim period (i.e., would not initially contribute to demands on public utilities), with the exception of wastewater. Also a demand of solid waste disposal and potable water.

dredging areas were comprehensively analyzed for a wide range of parameters according to USEPA and USACE standard testing criteria. A total of fourteen discrete, representative sampling sites were included, as shown in Chapter 2 of Volume 4. Additional testing would occur as determined to be necessary by the regulatory agencies during the permitting process and a dredged material management plan would be developed similar to what was required for Kilo Wharf.

We note that the Department of Army Permit No. POH - 2008, which authorized the expansion of Kilo Wharf, required that sediment removed from dredging be tested for possible pollutants before it is dredged. If the sediment is to be deposited with other sediment from previous dredging, the contaminants in the other sediments must be sampled before the Kilo Wharf dredge material is deposited with them. Results of this sampling are being monitored by the Guam EPA. If samples show high concentrations of metals and or other related contaminants, all parties to the Department of Army Permit would be notified for appropriate action.

J-015-104

Thank you for your comment. The Final EIS identifies this mitigation measure.

J-015-105

Thank you for your comment. The Section cited is from the least environmentally damaging practicable alternative (LEDPA) discussion in Volume 4, which is only a summary of the project and its potential impacts. Additional information on mechanical and hydraulic dredging may be found in Section 2.3.5, and a reference has been added to the text.

The differences between the environmental effects of mechanical and hydraulic dredging are discussed in Chapter 2, Volume 4 and Appendix

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-143	263	6	2	10	Table 2.1-3	BSP/GCMP	BSP/GCMP	Solar power should not be discounted. This section concerns itself with power plant generated power. Housing (family and barracks) could utilize solar power for water heating and, in some cases, air conditioning. This may not make a substantial difference in power generation needs from plants, but it would seem a requirement to meet LEED standards - and would address energy policy as iterated by the White House.
	264	6	2	11	Table 2.1-3	BSP/GCMP	BSP/GCMP	Any increased production utilizing oil, particularly #6 heavy, should include the addition of scrubbers to reduce sulphur and CO2 emissions.
	265	6	2	12	Table 2.1-3	BSP/GCMP	BSP/GCMP	If a new plant at Cabras is pursued, it is recommended that LNG as a fuel be vigorously pursued, not only as a cleaner alternative, but in the spill-over impact it might have on fuel options for the general population. A LNG supplier would (by economics of scale) be able to reliably supply LNG for home use (particularly in cooking) thus reducing electricity demands.
	266	6	2	16	2.1.3.6	BSP/GCMP	BSP/GCMP	Solar hot water heaters and photovoltaic's are being considered for individual buildings including housing and office buildings. Since all fuels have to be imported to Guam, this argument is specious.
	267	6	2	17	2.1.3.10	BSP/GCMP	BSP/GCMP	OTEC production, initially proposed for Guam under the Calvo administration, was an ammonia-closed cycle system, which raised concerns over the safety of ammonia storage and use adjacent to a coral reef system. If OTEC is pursued in the future, it should be based on being an open cycle system.
J-015-144	268	6	2	37	2.2.3.2	BSP/GCMP	BSP/GCMP	there is sufficient water supply to meet the anticipated non-DoD water demand, provided that the proposed system expansion is operational in time to meet increased demand. Given the financial state-of-affairs of the Government of Guam, it is important that DOD contribute up-front costs for GWA to undertake expansion of their system, since increased off-base demand is directly attributable to on-base developments.

D of the EIS. Mechanical dredging involves use of a clamshell or fixed bucket that excavates the dredge sediment from the harbor floor and then carries the sediment in the full bucket through the water column before lifting the bucket out of the water and placing the dredged sediment in a nearby barge or scrow. During this movement, a small fraction of the collected sediment will escape from the bucket and create suspended sediment in the lower and higher levels of the water column. On the other hand, a hydraulic dredge works solely on the harbor floor and any suspended sediment will emanate only in the lower portion of water column. As a result, the plume of suspended sediment is generally greater with use of conventional clam shell bucket as compared with a hydraulic dredge. However, use of hydraulic dredging is generally limited to soft bottom sediment on relatively flat surfaces. Mechanical dredging, which has historically been used in Apra Harbor, was chosen as the dredging method for evaluating environmental impacts as it presents the most adverse impact scenario.

A sediment plume is an inevitable effect of in-water construction activities. The Navy proposes to minimize sedimentation by using best management practices such as silt curtains and operational controls of dredging equipment. Final mitigation measures for all dredging activities will be determined and agreed upon during the permit phase of the projects.

J-015-106

Thank you for your comment. The commenter is referencing Chapter 4, Water Resources and should refer to Chapter 11 (as stated in Chapter 4) for additional detail.

1. Comment noted.

2. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment	
J-015-145								
	269	6	2	51	Table 2.2-13	BSP/GCMP	BSP/GCMP	The tables on sustainable yield do not appear to take in effects of sea level rise on the fresh water within the aquifer. The studies cited (CDM '82 and Barrett '91) were completed long before studies on sea level rise were undertaken. While studies still vary in their predictions (World Climate Research Program predicts as little as three quarters inch rise to a high of .195" per year between 2010 and 2020, while Proudman Oceanographic Laboratories in the UK predict a 1.17" per year rise for the century), there is almost unanimous agreement that the sea level is rising and will continue to do so. These impacts have to be addressed in assessing sustainable yield at both a best case and worst case scenario.
J-015-146								
	271	6	2		table 2.3-8	BSP/GCMP	BSP/GCMP	some of the concerns with the alternatives on this table (Impacts on coral reefs and/or aquatic animals) can be alleviated by extending outfall pipes down below the reef level through horizontal drilling.
	271	6	2			BSP/GCMP	BSP/GCMP	It should be noted that Section 438 (EISA 2007) requires now measures be undertaken by federal agencies in management of storm water runoff. USEPA issued specifics in a Technical Guidance in December 2009. Among other measures, the planting of green spaces on rooftops is recommended.
J-015-147								
	272	6	2	93	2.4.3	BSP/GCMP	BSP/GCMP	The use of Layon solid waste facility by DOD will result in significant extra traffic by large trucks on a daily basis. Has this been accounted for in the road improvements? At the estimated amount of solid waste that will be DOD generated (table 2.4-1, page 90), and using the manufacturers estimates on pounds per square yard (1,000 as per Heli trucks vs. 1,200 provided in this document), the total amount of DOD generated waste to go to Layon would be 1, 013, 898 cubic yards of waste. A large, modern trash truck (using the Heli Formula 5,000 as the example) can carry between 18-32 cubic yards. Assuming a full load (32 cubic yards per truck), DOD would deliver 12 truckloads per day, five days a week for 10 years (that's 32,000 lbs. per load not including the weight of the truck). During the construction phase it is likely that the frequency of the loads will be even greater. What impact will this have on roads that are used as route to Layon from DOD sites and are they being upgraded to address this impact?

evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-015-107

Thank you for your comment. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-148	6	2	96	2.4.4.1	BSP/GCMP	BSP/GCMP	a new liner system would require approximately 3 years for design, permitting, and construction (assuming that the Navy would hire contractors to do this work) and therefore would not be ready by 2010 when the Marine Corps would begin to relocate. The marines will not relocate until 2013/2014, so this particular argument is based on an erroneous assumption. There are some reasons for dismissing this option, but design and permitting time are not part of those reasons.
J-015-149	6	2	134	2.5.5	BSP/GCMP	BSP/GCMP	USEPA Technical Guidance, issued December 2009 (storm water management).
J-015-150	6	3	26	3.1.4.1	BSP/GCMP	BSP/GCMP	NAVFAC Marianas has initiated an effort to "partner" with Andersen AFB in its recycling efforts. By collecting and transferring recyclable waste from Navy facilities to the Andersen AFB recycling center, the Navy hopes to reduce the flow of waste into the Navy landfill and increase the profitability of the Air Force's investment into its recycling equipment by adding volume of recyclable waste. However, the current volume of recyclable waste generated by the Navy is likely well below the amount needed to construct and operate a dedicated Navy recycling center that is capable of supporting itself in terms of cost. NOTE: because recycling is an "economy of scale" effort, an opportunity would exist to allow for collection points of recyclable materials from the general public as well, thus helping to reduce the solid waste load at Layton. (GovGuam has been consulting with the military for several years regarding the potential consolidation of their individual solid waste programs or components of these programs (e.g., recycling facilities). [Ch. 3, page 28]
J-015-151	6	3	52	3.2.3.1	BSP/GCMP	BSP/GCMP	GovGuam may charge development impact fees that could enhance financing options that could go toward acceleration of projects to improve the GWA water system. This is probably not feasible within any workable time frame. Federal courts in NC have recently ruled against developer impact fees and while this could be overturned in appellate or Supreme Court, the process is questionable at this time.
J-015-152	6	4	31	table 4.1-17	BSP/GCMP	BSP/GCMP	Blue Line 2 has 8 outbound and 6 inbound trips per day. Do they lose a bus along the way every day?
	6	4	40	4.2.1	BSP/GCMP	BSP/GCMP	note: delivery of construction/demolition debris to Layton was not included in these calculations.

FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

J-015-108

Thank you for your comment.

J-015-109

Thank you for your comment. DoD was required to determine whether military relocation requirements could be met by excess, underutilized or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action.

Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value. Where circumstances exist that require resolution of issues such as ownership or value, procedures exist under eminent domain authority to resolve those questions. Eminent domain requires reimbursement at fair market value.

J-015-110

Thank you for your comment. The coastal zone consistency determination, currently ongoing, summarizes the direct and indirect impact to GovGuam lands and submerged lands.

J-015-111

Thank you for comment and suggestion. DoD will work closely with the

	Vol.	Ch.	Pg.	Line, Tbl. Fig.	Org.	Commenter (last name)	Comment	
J-015-153	6	4	40	4.2.1.1	BSP/GCMP	BSP/GCMP	Typically, a 2% increase of a critical movement at an intersection operating at LOS D or worse would be considered significant. For the purpose of this analysis, 5% increase in total traffic was used as the significance threshold regardless of level of service.	
	280	6	4	general note	BSP/GCMP	BSP/GCMP	It may help to reduce time/eliminate v/c F times to designate inside lane for mass transit or vehicles with 3 or more passengers only, which may also increase mass transit ridership. In some areas the creation of a convertible lane may also be possible. While these options would normally be the responsibility of GovGuam for designation, the severity of the impacts created by DOD actions would suggest that a DOD/GovGuam cooperative effort be made to find creative solutions to anticipated congestion.	
	281	6	4	167	Table 4.2-34	BSP/GCMP	BSP/GCMP	This table indicates that only 10 out of 58 road segments analyzed will not be congested, no matter which alternative is selected. This would demand that alternatives for transportation be seriously considered immediately. Staggering work hours for both DOD and for non-DOD workers is the simplest action, but that is not the total answer. Incentive/disincentives for drivers (car pool-bus lanes, etc) will also be necessary. This is a problem that both DOD and GovGuam need to act on in concert.
J-015-154	282	6	5	8	5.2.2.1	BSP/GCMP	BSP/GCMP	• the area of land to be graded shall be kept to a minimum, stabilized, or receive temporary covering if delays exceeding 2 months of exposure occur; if the delay occurs in any part of the rainy season, then two months is much too long to wait to cover or stabilize graded areas, and very short periods of inactivity near streambeds or areas of particular concern should be stabilized at all times. Tropical storms and/or typhoons can occur with no more than a week's notice of potential strike and, as was shown with Pamela in '75, as much as 30" of rain can fall in a very short period. There must be plans for emergency covering of graded sites in such events.
J-015-155	283	6	6	12	6.2.3.1	BSP/GCMP	BSP/GCMP	The cave and pool systems may be considered jurisdictional waters of the U.S.

Government of Guam agencies and local stakeholders to minimize impacts associated with the proposed military relocation program.

J-015-112

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

1. The FEIS has clarified why the resource agencies' preferred coral methodology is flawed in Volume 1, Volume 4, Chapter 11, and the paper that these summaries are based in Volume 9, Appendix J.
2. Comment noted.
3. These bullets on page 11-52 of the DEIS are a summary of result from SEI (2009) modeling, not directly quoted from Rogers (1990).
4. These mitigations would be detailed in the USACE permit special conditions. If dredging has been halted near the reefs, most artificial lighting, would also not be in operation.

J-015-113

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

1. District engineers is the language used in the Federal Registrar. Text changed to "will use."
2. The report you refer to is a final report and will not be edited. There may be updates to the report to support the Army Corps of Engineers permits, but they would be considered new reports with new information.
3. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-156								
	284	6	6	19	6.2.5.2	BSP/GCMP	BSP/GCMP	Implementation of the Preferred Alternative has the potential to contribute to continued contamination of the underlying groundwater. However, the landfill is located over aquifers not used for supplying drinking water. This is extremely shortsighted. Whether or not the existing groundwater is used at this time should not be a determining factor in deliberately continuing pollution of the lands and waters of Guam.
J-015-157								
	286	6	7	29	7.2.5.2	BSP/GCMP	BSP/GCMP	It should be noted that CO2 is not a criteria pollutant and therefore is not compared to criteria pollutant thresholds.
	286	6	7			BSP/GCMP	BSP/GCMP	Given the significant delays in traffic predicted (more time with vehicle in idle), it could be suggested that, at least for "automobiles", DOD could use vehicles that automatically shut down when left to idle - such as Toyota Prius and other hybrids. This would not only result in a significant fuel savings annually, but would reduce CO2 emissions.
J-015-158								
	287	6	10	3	10.2.1.2	BSP/GCMP	BSP/GCMP	Federal actions on Federal submerged lands and submerged lands are subject to Base Command approval, but are not required to conform with State/Territory land use plans or policies. While U.S. Government may claim control over portions of Guam's submerged lands, the activities on those submerged lands are still subject to GovGuam policies (via: Federal Consistency) because any activity will have an impact on resources in the water column, which moves across jurisdictional boundaries. At the very least, the Resource Policies 1,4 and 5 of Executive Order 78-37, which forms the basis for the Guam Coastal Management Program policies, must be addressed.
J-015-159								
	288	6	10	4	10.2.1.2	BSP/GCMP	BSP/GCMP	restricted access, while important to affected land-owners, is equally if not more important in terms of cultural connections with the land and sea for the native population of Guam. This impact cannot be mitigated with compensation.
J-015-160								
	288	6	10	10	10.2.4.1	BSP/GCMP	BSP/GCMP	No new uses in submerged lands are proposed. While no new uses are proposed, an increase in effluent discharged into near coastal waters will result.

FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Section 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

J-015-114

Thank you for your comment. The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and instead substitute these materials for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to comply with these laws and regulations, DoD has developed various procedures, protocols, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered "mitigation measures" because the BMPs and SOPs are existing requirements under existing laws and regulations and would be implemented as part of the proposed action. However, if a leak, release, or spill is suspected or confirmed, aggressive measures would be used to first clean up the leak, spill, or

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-161	290	6	10	11	10.2.5	BSP/GCMP	BSP/GCMP	The impacts from use of Layon landfill have not been addressed. With significant increase in traffic to accommodate both DOD and civilian solid waste disposal, the use of heavy garbage trucks (est. peak of twelve 36 cy trucks per day for DOD only) on Rt. 4, which is at sea level and close to beach areas for much of the route, would result in increased oil, rubber and other pollutants that would be transported onto nearshore reefs. There has been no discussion of this indirect impact.
J-015-162		6	12	8	12.2.3.1	BSP/GCMP	BSP/GCMP	long-term, permanent impacts to populations of such species would not result because the species known to be present are abundant in surrounding areas. If you reduce habitat, you reduce population!
J-015-163	292	6	12	38	12.2.6.1	BSP/GCMP	BSP/GCMP	The CNMI and Guam Stormwater Management Manual (CNMI and Guam 2006) provides examples of BMPs that would be included in the planning, design, and construction for all proposed road improvement projects. A Storm Water Runoff Drainage System Plan is required for a Building Permit by the Guam DPW when the area to be graded is more than 5,000 square feet (464 square meters) or a proposed cut or fill is greater than 5.0 ft (1.5 m) in height. This stormwater plan would describe the potential impacts and proposed mitigation associated runoff and drainage. USEPA has developed new guidelines for stormwater (Doc. 2009) which should include new mitigation techniques and allowances.
J-015-164		6	13	16	13.2.4.1	BSP/GCMP	BSP/GCMP	do not take into account the degradation of constituents, die-off of organisms, or uptake of the pollutants by existing aquatic life. If the pollutants are taken up, is there a cumulative build up within the marine life, and what are the impacts within the food chain?
	294	6	13	16	13.2.4.1	BSP/GCMP	BSP/GCMP	When mixed with the higher pH level of the receiving marine water, ammonia present in the wastewater discharge will increase in toxicity. Toxicity is still a function of concentration and, since the initial dilution of ammonia in the rising primary treatment plume is around 60 µgN/L, this value is nearly two orders of magnitude (or about 1/100) of the concentration found to be toxic to most fishes (USEPA 1972).
	295	6	13	19	13.2.4.1	BSP/GCMP	BSP/GCMP	Spinner Dolphins were regularly observed congregating near the outfall plume of the Agaña Treatment Plant prior to its repair. Have any morbidity studies been accomplished to assess the impact of primary treated effluent on marine mammals?

release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are eliminated quickly and effectively. The frequency of media monitoring is determined on a case-by-case basis. In many cases, part of a remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. Comprehensive actions (e.g., BMPs, SOPs, etc.) would protect public health, welfare, and the environment from adverse impacts associated with the use of hazardous substances.

J-015-115

Thank you for your comment. Sinkholes that are large and remain on DoD (versus being filled) will be protected from any disposal of debris, but will not be cleaned out as part of the Guam/CNMI military build-up.

J-015-116

Thank you for your comment. The change in climate conditions caused by the burning of fossil fuels is a global effect, and requires that the greenhouse gas emissions analysis be assessed on a global or regional scale, not at the local scale of a city or an island. The proposed alternatives mostly involve the relocation of the military operations already occurring in the West Pacific region, therefore fossil fuel burning activities in the region are unlikely to change significantly.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	
J-015-165								
	296	6	14	2	BSP/GCMP	BSP/GCMP	this section appears to be mixing cultural resources with historic resources, which may be adequate for stateside consideration in homogenous areas (off Native American properties). For Guam, there is still a living culture that continues an affinity with sites beyond those listed on the NRHP. These ties should be recognized in the definition of adverse effect through the inclusion of restrictions on use or access to culturally sensitive sites to natives as an adverse effect. In other words, if the actions contemplated in this DEIS should restrict or deny access to cultural sites currently available to Chamorros, then a finding of adverse effect should be made.	
J-015-166								
	6	14	11	14.2.2.1	BSP/GCMP	BSP/GCMP	Any properties that have not been previously evaluated would be assessed for eligibility for inclusion on the NRHP. If NRHP eligible sites are impacted, data recovery excavation would take place as necessary.	
	298	6	14	14.2.3.1	BSP/GCMP	BSP/GCMP	Prior to any disturbance or excavation, work plans would be developed and reviewed by the appropriate WFO.	
J-015-167								
	299	6	16	2	16.2.2	BSP/GCMP	BSP/GCMP	The annual number of vessels visiting the Port of Guam has decreased by 1,902 vessels over the period of 1995 to 2008. It is expected that the addition of up to 12 vessels per year transporting fuel for the power facilities above the average annual number of vessels visiting the Port of Guam would result in less than a significant impact on marine transportation in Apra Harbor. It is disingenuous to treat each type of added shipment related to these activities as separate. With the activities that will require an extra 12 fuel shipments per year would come many more ship arrivals to supply all the food and living needs for the added personnel. It is only the cumulative impact that is of concern. What is the impact of the fuel ships, the carrier arrivals and their associated escort ships, the marine training boats and ships, and the ship arrivals supporting the induced population addition?
J-015-168								
	300	6	21	6	21.3.2	BSP/GCMP	BSP/GCMP	the fact that they are fenced off from public entry, the Guam National Wildlife Refuge is not considered an accessible "publicly owned" wildlife refuge; therefore, it is not determined to be subject to the protective provisions of Section 4(f). This ignores the whole purpose of a refuge and over-ry refuge. It is intended not just to protect habitat, but the wildlife that moves in and out of the refuge, and depends on the refuge. Because the wildlife move from DOD to publicly owned land, the public also has a stake in the habitat that sustains their ability to survive. To dismiss the public's rights over their own living resources is, at best, arrogant.

Overall global greenhouse gas emissions are likely to remain near the current levels on a regional or global scale, resulting in an insignificant impact to current global climate change trends. A more detailed discussion of climate change, inclusive of recent EPA regulations, is included in the FEIS. Although it is still an appropriate assessment statement, the sentence "Individual sources are not large enough to have an appreciable effect on climate change" will be removed. Volume 7 contains an assessment of potential impacts from climate change.

J-015-117

Thank you for your comment. Sentence was removed.

J-015-118

Thank you for your comment. The FEIS has been modified to include a discussion of the impacts to the use of the NWF by HC-25 and identifies potential mitigation for scheduling and activation of the proposed Special Use Airspace.

J-015-119

Thank you for your comment. There is an existing trail on NCTS Finegayan property accessible by military personnel (their dependents and guests) that terminates at Haputo Ecological Restoration Area (ERA). The general public may access the ERA through public/private properties. Additionally, the Guam National Wildlife Refuge (GNWR) spans over three properties: Andersen Air Force Base, NCTS Finegayan, and Dededo. The part of GNWR accessible to the general public is referred to as the Ritidian Unit. The EIS has been revised to clarify these points.

J-015-120

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-169 301	6	2	2-26	fig2.2.1	BSP/GCMP	Torres	Proposed Water System Components The map shows replacement of water mains along some of Guam's busiest routes, including routes 1, 8 and 16. does this involve tearing up the roads to lay the main lines? How does DOD intend the adverse impacts on traffic during construction?
J-015-170 302	6	2	2-59		BSP/GCMP	Torres	Water Supply To the maximum extent possible well locations should be located outside of the Primary Limestone forest or endangered species habitat areas. If not possible all possible mitigation measures should be taken to ensure the most minimal adverse effects possible.
J-015-171 304	6	8	8-14-8-42		BSP/GCMP	Torres	Related Actions Roadway and Utilities There is No Map to relate the areas listed in potential noise impacts to alternatives and regions examined. This would be extremely helpful in analyzing impacts. This should be provided. Nothing is said about the potential impacts the sound walls may have on movement of people from residential areas to roadways to cross to the other side and other potential effects. Provide such analysis and potential mitigation measures.
J-015-172 305	6	10	10-9		BSP/GCMP	Torres	Operation The DEIS proposes a new sewer on non-DOD land which is can be assumed an adverse impact especially if the land is being taken for a utility easement without just compensation. Even then it may also still adversely affect a landowners plans on using their property. The paragraph proposes "utility easement acquisitions". Does this mean DOD will purchase the Land from non-DOD owner? If so, this should be more explicitly stated and what other mitigation measure may be employed. For example will the landowner be able to connect to the sewer?
J-015-173 306	6	10	10-10	para2	BSP/GCMP	Torres	The statement that "Basic alternatives 1a & 1b would result in LSI to land use because the acquisition of new utility easements on non-federal land" is flawed. Land use by non-DOD landowners could be constrained by severing their properties in way that hampers use of their land. The preceding paragraphs mitigation measures should be employed and this statement removed.

Thank you for your comment. The EIS section refers to the existing recreational resources at Navy Barrigada.

J-015-121

Thank you for providing your comments and opinions against the military buildup. The military secures its bases and property primarily to protect its facilities, personnel, and other assets; this is typical of military bases everywhere, including the U.S. mainland. Access to and through military property would be provided and in many cases access is allowed to use or visit recreational and cultural resources. These issues on base security, public health and safety, and access will be emphasized in the FEIS.

The military base, in itself, is a community. It includes military personnel, housing for the military and their dependents, medical and dental facilities, discount stores, recreational areas, and schools. These are provided for the benefit of the military personnel and their dependents. The cohesion of the military base, like any social group, is based on the similarity of their jobs and duties, objectives, age, situation, and other military affiliation. Subsequently, their similarities and benefits within the base are not the principal reasons for what appears to be "a separation from the local community." Logistically, having housing within a contiguous base allows military personnel to be available should an emergency situation arise and immediate military action is required. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

	Vol	Ch	Pg	Line, Tbl Fig	Org	Commenter (last name)	Comment	
J-015-174	307	6	10	10-13	para1&4	BSP/GCMP	Torres	Four non-residential and 51 residential units will be relocated by roadway impacts associated with the military buildup. Where are these areas or units? It is not shown. Have the owners been notified of this possibility? This is a significant impact and should be mitigated. Provide map and put more explicit statement regarding this adverse impact of the undertaking.
J-015-175	308	6	4	4-12		BSP/GCMP	Torres	Roadways It should be mentioned here and in the recreational impact sections that Andy South roadways from route 1 have become extremely popular walking/running exercise route for local residents for many years. The same can be said for the old road to the FAA housing in Dedeco and Navy Barrigada roadways through the housing by the golf course. How can the military mitigate or replace the loss of this recreational resource which locals have come to depend on and utilized for many years or can the use remain as is and sanctioned as acceptable use?
J-015-176	309	6	12	12-11	12.2.3.2	BSP/GCMP	Torres	Basic Alternative 2 AAFB and Andy South Construction Just because no "primary limestone forest" will be removed does not mean the action is a LSI. Secondary limestone forest is also an important resource as its recovery to a primary one is part of the overall strategy to preserve the limited primary limestone forest resources. Mitigation for impacts on the limestone forest should include secondary limestone forest that fits Green Infrastructure criteria for recovery of this resource.
J-015-177	310	6	12	12-15	12.2.4.1	BSP/GCMP	Torres	Wastewater, 12.2.4.1 Construction Is there really a need to lay a new sewerline from the former FAA parcel to the NDWWTP? Can the sewer be pumped along existing sewerlines? Can existing sewerlines in existing utility easements be upgraded? Laying of this new sewerline easement will result in further taking of Ancestral Land Bank Trust lands and private property. In effect another taking of land. Besides potential impacts to the environment it may also have other adverse effects to land owners such as severing the land as to make some part of it less valuable. It also may have beneficial effects if the land owners agree to such easements and are allowed to utilize them.

J-015-122

Thank you for your comment.

J-015-123

Thank you for your comment. It is recognized that total population number could be reduced, however these are not significant impacts if a large population still remains.

J-015-124

Thank you for your comment.

J-015-125

Thank you for your comment. The EIS has been revised to clarify that the existing and proposed on-base resources and facilities would be accessible to present, incoming, and retired military personnel, their dependents, and their guests.

Qualitative assessment of potential impacts to the existing recreational resources on Government of Guam property (under the care of Department of Parks and Recreation), DoD properties, and Federal properties (National Parks Service) were made on an island-wide scale. In researching the existing recreational resources on Guam, it was learned that both Government of Guam Department of Parks and Recreation nor DoD bases maintained visitor numbers to each recreational resources; only Andersen Air Force Base (AFB) and the National Park Service (NPS) did. The data obtained from Andersen AFB or NPS do not forecast future impacts, but rather, mere records of the number of visitors received for their facilities. It is recognized that quantitative island-wide assessment of the existing recreational resources would serve multiple beneficial purposes: determine baseline conditions and carrying capacity of each resource, as well as to formulate a plan to manage each resource. With this concern in mind, a

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-178	311	6	13	13-2 para2	BSP/GCMP	Torres	The paragraph states the Navy is "conducting a study to evaluate impacts on water quality and the marine environment from the GPA (sic, must mean GWA) NDWWTP wastewater discharge at its new ocean outfall." This study and its results should be part of any final EIS on the proposed project and further decisions on how to upgrade the sewage system associated with the proposed buildup.
J-015-179	7	1	16	1.3.1	BSP/GCMP	BSP/GCMP	The highest point in Guam is Mount Lamlam, which is 1,332 ft (406 m) above sea level. Since it extends into the Mariana Trench, it is also considered the tallest mountain in the world from below sea level.
J-015-180	313	7	1	16 1.3.2'	BSP/GCMP	BSP/GCMP	it does receive large transfer payments from the general revenues of the U.S. federal treasury into which Guam pays no income. This is not altogether a truthful statement. The people of Guam pay taxes as dictated by the federal government - and therefore they do pay federal taxes. That the federal government then returns these monies to the Guam treasurer does not alter the fact that it is a federal tax.
J-015-181	314	7	2	4 2.1	BSP/GCMP	BSP/GCMP	Add Dec. 2009 USEPA guidance: Section 438 of the Energy Independence and Security Act of 2007 reads as follows: Section 438. Storm water runoff requirements for federal development projects. The sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow. (per page 13, Section D. of Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act
	315	7	2	18	BSP/GCMP	BSP/GCMP	Management must include policies and practices to manage the 95% rainfall and to (attempt to) achieve a zero loss/zero gain stormwater flow into surface waters, as well as to return to the extent possible to the evapotranspiration and recharge rates previous to the disturbance.
J-015-182	317	7	2	22 table 2.2.1	BSP/GCMP	BSP/GCMP	It might help reduce the feral pet problem by ensuring that all pets brought into Guam are certified spayed or neutered. Many of the feral problems arise from a transient community that leaves pets behind.
	317	7	2	23 table 2.2.1	BSP/GCMP	BSP/GCMP	Add: extinguish dredge operation lighting during coral spawning period.

mitigation measure is suggested in the EIS for a carrying capacity study to be performed. Data gathered for the carrying capacity study would be used to develop a baseline (i.e., carrying capacity for a recreational resource) and appropriate mitigation measures would be included in resource management plan to be developed.

An increased permanent population near the golf course (sole recreational resource at Navy Barrigada) may bring more users (i.e., walk-ons) as the result of the proposed action. Reduced availability of tee time, by retired and current military personnel would likely result. To alleviate this impact, a wide range of recreational alternatives on Main Cantonment would be available. The EIS has been revised.

J-015-126

Thank you for your comment. As part of the National Historic Preservation Act (NHPA), the DoD has consulted with the public and multiple interested parties including the Advisory Council on Historic Preservation, Guam State Historic Preservation Officer, CNMI Historic Preservation Officer, the National Park Service, Department of Chamorro Affairs, Guam Museum, Guam Preservation Trust, National Trust for Historic Preservation, interested individuals, and other groups. Ten public meetings under NHPA were held on three islands in order to reach out to the people of Guam and CNMI. The many comments, suggestions, and concerns heard during these consultation meetings helped shape the PA.

J-015-127

Thank you for your comment. Native forest plantings are being planned for conservation areas being established at Andersen AFB and at the Naval Magazine. These plans are being discussed with the U.S. Fish and Wildlife Service and this information will be provided in the final EIS.

	Vol	Ch	Pg	Line, Table, Fig	Org	Commenter (last name)	Comment
J-015-183	7	2	23	table 2.2.1	BSP/GCMP	BSP/GCMP	Add, where possible, relocate corals from impacted areas to other, nearby sites.
J-015-184	7	2	30	2nd para.	BSP/GCMP	BSP/GCMP	The DoD has limited authority to implement mitigation measures on non-DoD land.
J-015-185	7	3	19	table 3.3-18	BSP/GCMP	BSP/GCMP	It is not fair to say that there would be no significant impact on land-use (non-DoD) with the preferred alternatives for solid waste. The use of the Layon land-fill by the DOD will significantly shorten the life span of that govGuam owned land-fill!
	7	3	19	table 3.3-18	BSP/GCMP	BSP/GCMP	It is not correct to say there will be no impact on the use of non-DoD submerged lands. The leasing or purchase of private lands for the firing ranges near Route 15 would create new restrictions on access to and use of the waters and submerged lands within GovGuam jurisdictional waters adjacent to the site. This should require, at least, compensation.
	7	3	20		BSP/GCMP	BSP/GCMP	A beneficial land use impact was identified under submerged land use because an existing firing range at NCT's Finegayan would no longer be used and the associated surface danger zone over submerged land would be eliminated. Comparisons with that submerged land and the route 15 submerged lands must be made. If the Finegayan submerged lands are currently under federal jurisdiction, then entry and harvesting can still be more restrictive than in state jurisdictional waters. Are the resources the same in the two areas? Is the amount of area under restriction the same between the two areas? The federal government already claims approx. 1/3 of all Guam's state waters - a claim not made anywhere else within the U.S. To control an additional submerged lands acreage in state waters is a move in the wrong direction.
J-015-186	7	3	25	3.3.8.3	BSP/GCMP	BSP/GCMP	recreational opportunities would also be lost for beaches and near shore activities in the Pagat area (firing range)
J-015-187	7	3	46	3.3.1.3.1	BSP/GCMP	BSP/GCMP	If the number of containers per ship remains the same as during the period of 1995 through 2008 (average of 705 containers per ship), there would be approximately 269 container ships visiting the Port of Guam during 2015. Does this average include containers moving between Guam and CNMI on barges? If so, there numbers would be skewed since more containers will be arriving at Guam with no equivalent increase in barge traffic to CNMI.

J-015-128

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-015-129

Thank you for your comment. Social impacts are discussed in the Socioeconomic Impact Assessment Study (SIAS) that is Appendix F, Volume 9 of the Draft EIS. It discusses the impacts of the proposed action to the social services, facilities, and other resources. There is an Executive Summary in the SIAS that identifies the impacts to the social services. If the maximal population increase is assumed to occur, a number of social services (e.g., public schools, health care, police, fire) would need to be improved and supported for the increased population. On the other hand, there would be an increase in taxes collected, license and user fees that would increase revenue to the government of Guam. The increase in revenue to Guam would likely offset some of the needed services. The Final EIS will include additional mitigation measures that could be taken to minimize impacts. The DoD will continue to pursue mitigation measures to ensure that adverse impacts can be avoided and/or reduced.

The FEIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last-name)	Comment	
J-015-188	325	7	3	57	table 3.3-38	BSP/GCMP	BSP/GCMP	It is easy to look at figures like 79,178 and not be impressed, but by comparison the projected increases in population in 2014 and 2019 are the equivalent of putting 23,750,000 new residents in California in a two year period, and then removing almost 14,000,000 almost overnight. The population increase and their impact on a relatively small island cannot be overstated. In addition, the amount of land being developed in these proposals is equivalent to developing 4,250 square miles of California within a five year period.
J-015-189	326	7	3	64	last para.	BSP/GCMP	BSP/GCMP	Just compensation for their property. This is not as simple as stateside acquisitions may be. Some of the land to be acquired is family lands that extend into the hundreds if not thousands of years past. Family lands are not held in the same way as properties with monetary values, and therefore any forced acquisition could not possibly result in just compensation.
J-015-190	327	7	2	2.4		BSP/GCMP	Torres	Summary of Best Management Practices, Stormwater Management Plans – Item 2 The DOD should make the use of Filtration of Stormwater through plant and organic filtration methods more of a priority. Something also needs to be said about how the stormwater generated from the firing ranges will be handled. Constant shooting at dirt berms does not allow for any vegetation to grow. There are eco-friendly berms that have been designed for firing ranges that can minimize stormwater runoff. The use of these or other types of best management practices to reduce erosion runoff should be spelled out in the DEIS.
J-015-191	328	7	2	2.6		BSP/GCMP	Torres	Low Impact Dev: (LID) Says "the Navy could implement LID design technology". Due to the size of the proposed development the utilization of LID should be implemented as much as reasonably possible.
	329	7	2	2.6-7		BSP/GCMP	Torres	Water conservation Education of Military population should be given a high priority as this may be key to water conservation.

services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-015-130

Thank you for your comment. Volume 5, Chapter 18 discusses the potential public health and safety impacts of as a result of population growth associated with the Army AMDTF. Based on the small buildup associated with the Army AMDTF, less than significant impacts are anticipated to public health and safety. Volume 5, Chapter 16 discusses the potential impact of an increased patient to health care provider ratio as a result of population growth associated with the Army AMDTF. Potential cumulative effects of the Army AMDTF action with other build up actions is addressed in Volume 7.

The FEIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-015-131

Thank you for your comments. Specific members of the Army AMDTF are not relevant to the analysis. Proposed project activities are situated

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment
J-015-192							
	330	7	2	2.10	BSP/GCMP	Torres	Munitions and Explosives of Concern Nothing is said about how the proposed impacts of the firing range on the Naval Magazine and Pagat area will be mitigated. We are assuming dirt berms will be utilized to catch rounds fired for all types of weapons but this is not mentioned. How will stray rounds be dealt with? Will there be occasional search and clean up for these? Will munitions of the type that fail to explode after launch be utilized eg. Mortar or rocket propelled grenades? What happens if they do not explode? How will they be cleaned up or neutralized?
	331	7	2	2.10	BSP/GCMP	Torres	Land Use Planning and Project Design Incorporate green infrastructure concepts into the Land Use Planning Design Process. For example, preserve green belts to connect core natural resource areas. This also applies to Natural Resource Management in next section of BMP.
	332	7	2	2.16	BSP/GCMP	Torres	Noise Abatement "Berms could be built and adjacent to live Fire Training Ranges". Shouldn't berms be built as part of firing range design to contain rounds from small arms rounds? If they also serve an effective method of controlling noise then they should also be placed where most effective.
	333	7	2	2.19	BSP/GCMP	Torres	Reduced Use of Water Education of military personnel and families cited in the previous BMP section is left out here. This should be part of the strategy.
	334	7	2	2.21	BSP/GCMP	Torres	Water Resources within DOD Control WR-3 "Attempt to avoid impacts to potentially jurisdictional cave and pool systems." Advance of impacts to such resources should be taken regardless of who has jurisdiction to them.
	335	7	2	2.21	LU-2 BSP/GCMP	Torres	Mitigation should incorporate green infrastructure into Land Use Design Plans
	336	7	2	2.21	BSP/GCMP	Torres	Recreational Resources within DOD Control As a mitigation measure the DOD should open public access to recreational resources on lands controlled by DOD. For example portions of the Glass Breakwater up to the where Luminas Reef meets the Breakwater should be opened for public use. The Recreational resources there include the surf spot known as Magandas, and the fringing reef lagoon for snorkeling and fishing. Additionally open places on Naval Magazine like the trails to Mt. LamLam/ Jumulong Manglo.
	337	7	2	2.22	RR-5 BSP/GCMP	Torres	The potential impacts to sailing and other water sports by the carrier visits is not addressed here. How can those impacts be reduced?

on military land. A summary of the Weapons Emplacement Sites can be found in sections 2.3.2.3 and 2.3.3.2. The environmental impacts of weapons emplacement sites are analyzed in the Classified Appendix. A summary of the weapons emplacement sites is provided at the end of each resource chapter of Volume 5. Contractors are not foreign workers. Hazardous materials and waste management procedures are described in Chapter 17.

J-015-132

Thank you for your comment. Definition for Class D airspace has been added to Chapter 7 (Airspace).

J-015-133

Thank you for your comment.

Geotechnical surveys will be conducted prior to construction at all sites in association with project planning. A Record of Decision (ROD) is needed before proceeding with the proposed action.

Planning is avoiding hazardous conditions. The DEIS does not plan for the worst, it analyzes the impacts based on facts that are provided.

J-015-134

Thank you for your comment. The Final EIS contains updated information reflecting additional investigation of potential wetland areas. The investigations were conducted in accordance with standards commensurate with the methods used.

J-015-135

Thank you for your comment. Climate change is a global effect that should be addressed on a regional or global scale. CO2 is not considered a pollutant that has direct health effects as compared to

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-193							
338	7	2	2.22	tbl 7	BSP/GCMP	Torres	Local resource and recreation agencies and groups that utilize these areas should be consulted/involved to develop any future restrictions. Stakeholder input should be taken into consideration! For example any restrictions to access will affect the local community who forage for certain select plant species leaves for medicinal purposes.
339	7	2	2.22	tbl 11	BSP/GCMP	Torres	The scheduling for the Fire Management Plan should have local input for the now proposed areas if implemented. Public Access to cultural and geological resources at Pagat are important and stakeholder input should be gathered prior to any proposed restrictions.
340	7	2	2.22	tbl 24	BSP/GCMP	Torres	Any establishment or expansion of ecological reserves should involve local resource agency consultation and input.
341	7	2	2.23	tbl 29	BSP/GCMP	Torres	Incorporate green infrastructure concepts.
342	7	2	2.23		BSP/GCMP	Torres	The Government of Guam will be acquiring satellite imagery shortly. This up to date imagery will be utilized as a baseline of the Terrestrial and Marine Biological resources that exist on island prior to the main military buildup. DOD should acquire satellite imagery of the same type or one that meets resources agency needs after the buildup has been completed for the agencies to utilize to adequately determine overall impacts of the . Buildup to natural resources.
343	7	2	2.23-24	CR-1 - CR-2	BSP/GCMP	Torres	As much as reasonably possible site names should be used to identify sites to make the connection to the cultural places.
344	7	2	2.28	SE-1	BSP/GCMP	Torres	This mitigation measure should really be explored and implemented as it may reduce adverse effects of such a significant increase in population on such a short time frame. Military planners themselves have admitted that the time frame for this project is to aggressive.
345	7	2	2.28	SE-3	BSP/GCMP	Torres	This is definitely a mitigation measure that DOD should implement. Direct support through funding for pursuing such funds should be part of the assistance.
346	7	2	2.28	SE-10	BSP/GCMP	Torres	Education should include other migrant worker ethnic groups, that comprise the build-up workforce.
347	7	2	2.33		BSP/GCMP	Torres	Adaptive management techniques should be considered for some of the Natural Resource management concerns. For example Terrestrial and Biological Resource Mitigation measures may need to be adjusted to fulfill the goals of mitigation.
348	7	2	2.44	para2	BSP/GCMP	Torres	Definitely recent weather trends, forecasted weather patterns, and known seasonal variations should be taken into consideration in the forecast for water supply.

those criteria pollutants. Therefore, there is no specific standard that can be used to evaluate localized impacts. Volume 7 of the FEIS contains a discussion of climate change and green house gas impacts. The relocation of Army AMDTF would involved limited earth disturbance and road and facility construction activities. Such an action is anticipated to be similar to other development construction project currently occurring in Guam with minimal air quality impact. Moreover, the associated emissions forecast was made by using the most recent regulatory planing tools that are typically considered conservative. Therefore, it is believed that the emissions from various construction and operational activities were reasonably predicted as per the NEPA process.

J-015-136

Thank you for your comment. Sentence was removed.

J-015-137

Thank you for your comment. As of March 10, 2009, the Government of Guam, Department of Park and Recreation did not have a record of visitor counts to the recreational resources it manages.

J-015-138

Thank you for your comment. Based on biological surveys conducted in the Barrigada area, minimal native vertebrate wildlife is present in the forests that would be removed. There would be no displacement of large numbers of individuals of native species.

J-015-139

Thank you for your comment. Several sections of the FEIS have been revised since the DEIS to clarify issues.

J-015-140

Thank you for your comment. The final design of roadway and

	Vol	Ch	Pg	Line, To, Fig	Org	Commenter (last name)	Comment	
J-015-194	349	7	2	2.48	2.3.55	BSP/GCMP	Torres	Potential impacts and mitigation Para 1, This area of NDWWTP is heavily utilized for fishing and recreation. Any delays in mitigation measures to reduce impacts would have a significant effect on socio-economic uses by the local population. Priority should be high in addressing the impacts of this shortfall and to adequately address the potential for water quality degradation.
	350	7	2	2.49		BSP/GCMP	Torres	Bullet points 3 & 4 to divert wastewater to other treatment plants. What is the capacity of those other treatment plants? Are these mitigation measures realistic based on the capacity of those other plants? Bullet Point 5 to utilize a cruise ship or hotel barge for construction workers. Has this mitigation measure been well throughout? The waste from the ship or barge will still have to be treated and sent to a plant. There also may be other impacts of this mitigation measure.
	351	7	2	2.56		BSP/GCMP	torres	Consideration should be made for reasonable changes to construction tempo for the wet/dry season. Less ground disturbance the wet season could result in less erosion and sedimentation from runoff.
J-015-195	352	7	3	3.3, 3.3.2		BSP/GCMP	Torres	Geological & Soil Resources A less than significant impact for Topo, Geology, Soils and Geologic Hazards is given here including Finegayan in Table 3.3.1. However, para 1 does say that there will be significant impact at Finegayan. The Geologic Map and sections of Guam, Marianas Is. 2007 shows thrust faults and limestone with cavernous and generally porous limestone in Finegayan. What is the correct determination of effects? It seems to us that significant effects of the project will result with potential adverse effects to groundwater and nearshore coastal resources.
	353	7	3	3.7	tbl 3.3.5	BSP/GCMP	Torres	Groundwater impacts are said to be less than significant (LSI) in this table in direct contradiction to the previous page 3.6 which says "increased groundwater production could potentially impact cave and pool water levels; potential impacts to the system could require review and/or permitting by U.S. Army Corps of Engineers. An independent review by water engineers at UOG/WERI or another local firm should be conducted."
	354	7	3	3.33	tbl 3.3-25	BSP/GCMP	Torres	Potential impacts on Marine Flora and Invertebrates under the Navy Aircraft Carrier proposed undertaking is a Less-than Significant Impact (LSI). How can that be? Please explain further as we disagree that it is a LSI.

intersection projects will consider alternate modes of transportation including pedestrian and bicycle facilities as much as practical.

J-015-141

Thank you for your comment. Changes have been made to Volume 6 to include requirements for aircraft flying from Anderson AFB to continue to follow existing procedures restricting overflight of federally endangered Mariana crow and Mariana fruit bat territories.

J-015-142

Thank you for your comment. DoD concurs with your comment and the Final EIS has been revised to reflect the potable water, wastewater, and solid waste demands from the transient ships prior to them going "cold iron." The only utility that these ships won't require would be power.

J-015-143

Thank you for your comment. Alternative energy sources were considered but discarded for baseload supply as this supply must be extremely reliable. Solar and wind are not reliable enough and there is no currently available economical power storage medium to augment them. Also alternative energy is very costly. Per the December 2009 "Watts & Volts" newsletter published by the IREA of Colorado, a very sunny state, "A recent study by Tufts University economics professor Gilbert Metcalf states, 'Solar power currently costs 3.5 to 4 times the price of conventional power,' but when stripped of subsidies and preferential tax treatment, 'solar power is between 570 percent and 887 percent more expensive to produce than coal power.'" We realize coal power is not available on Guam, but this demonstrates that solar power is not cheap. Both solar and wind require duplicative investments, one for the alternative energy and another for the conventional backup.

DoD, however, is mandated to provide a certain percentage of power via

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment
J-015-196 355	7	3	3.39	para3	BSP/GCMP	Torres	With regards to the hawks bill turtle, observation by local community supports the knowledge that there are more turtles in our waters than described here. They are also known to frequent Apra Harbor and many have been sighted by recreational sailors. Interviews with more of the local community that frequent those areas such as the Marianas Yacht Club should be conducted for a better assessment.
J-015-197 356	7	3	3.4		BSP/GCMP	Torres	No Action Much of the discussion here focuses on the geology and soils of southern Guam and not the type of geology of where the main marine cantonment will be. This should be addressed. The geology of Northern Guam especially where the Marines will be located should be the focus of any description.
J-015-198 357	7	3	3.65		BSP/GCMP	Torres	Comparison of Preferred Alternatives to No Action It is said in Paragraph 1 that the "preferred alternatives would be felt on an island-wide basis and would be characterized by a sharp increase in activity and impacts (both positive & negative) in the 2012-2015 timeframe". All the Public Service Impacts starting on Pg. 3-60 all point to a need to increase the local governments staff in various agencies to address the Buildup. However, nothing is said about how the military will attempt to assist in handling this increase load. The lag time between when revenues start to increase to when the GovGuam can start hiring additional personnel will result in a chaotic situation where many services will not meet need. This needs to be addressed more fully especially with regards to how the potential adverse impacts by the shortfall will be mitigated.
J-015-199 359	8	2	2.1	2.1-1	BSP/GCMP	De leon	CZMA Regulations should indicate/include provision of 15 CFR 923.33(b) Federal consistency review requirement regarding excluded lands.
	8	2	2-5	2-1-1	BSP/GCMP	De Leon	E.O. 2005-35 CNMII and Guam Stormwater Management Manual should also indicate Guam Environmental Protection Agency as Responsible Agency
	8	2	3-6	3.1-1	BSP/GCMP	De Leon	Coastal Zone Management Act Federal Consistency Provision, 3rd Column should read Guam Coastal Management Program not Plan"
	8	2	page2-1	2.1.1	BSP/GCMP	De Leon	Corresponding Status of Compliance column must be corrected for CZMA. It is not true that "Consistency determination is prepared and submitted by Navy seeking concurrence from Guam Bureau of Statistics and Plans." The DOD/Navy are required to follow the required time for the Federal Consistency review, 15 CFR Part 930.39.

alternative energy. So, for new installations, solar water heating and photovoltaics would be considered for new installations. Direct solar water heating on Guam is most likely the best alternative energy investment, but it must be done with hurricane resistance in mind. New DoD development would strive to achieve at least LEED Silver, requiring energy conservation be built into the new facilities. Conservation is the best alternative energy source!

Use of existing generating facilities would not exceed current permitted levels. Low sulfur fuel is utilized at Cabras/Piti units when the wind blows onshore. If air modeling results show air compliance issues, exhaust treatment or switching to other fuel such as liquefied natural gas would be considered.

Your observation regarding biofuels from section 2.1.3.6 is correct. However, this section is only on biofuels, not solar, so the introduction regarding solar hot water and photovoltaics is not understood. Biofuels were only considered if they could be locally produced as they are not currently commercially available. If biofuels become commercially available for import and if they offer advantages over diesel, it would behoove Guam Power Authority (GPA) to investigate their use. Currently, GPA's Integrated Resource Management Plan indicates the desire to switch to liquefied natural gas. That option was retained in the alternatives since it is currently viable.

Your observation regarding OTEC is appreciated. This technology is worthwhile to watch for potential long-term needs. As a by-product, it can also produce potable water. At this time, long-term alternatives are only presented at a programmatic level and would require additional NEPA review if they are pursued.

J-015-144

Thank you for your comment. The FEIS provides a detailed analysis of

	Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment	
J-015-200	8	2	1	table 2.1-1	BSP/GCMP	BSP/GCMP	The boundary of a state's coastal zone must exclude lands owned, leased, held in trust or whose use is otherwise by law subject solely to the discretion of the federal government, its officers or agents. Except when actions taken on federal lands may impact non-federal lands.	
J-015-201	363	8	5	4	5.6.2	BSP/GCMP	BSP/GCMP	Compensatory financial mitigation is proposed to the land owners. The land owners do not own the submerged lands that will be impacted, those are under jurisdictional ownership of GovGuam - and significant compensation should be made for the public's loss of those public resources. The non-use of the Finsagayan firing range complex, and the subsequent lifting of that facility's Surface Danger Zone over federally controlled submerged lands does not in any way mitigate for further taking of public lands.
J-015-202	8	2	5	2.2-1	BSP/GCMP	Quinalta	Inclusion of GEPA as responsible agency to the Executive Order 2005-35 CNMI and Guam Stormwater Management Manual.	
J-015-203	365	8	5	6	5.10.2	BSP/GCMP	Quinalta	Long term changes would include the direct loss and disturbance of archaeological sites and historic buildings and the long-term restriction from potential traditional cultural practices as a result of training and safety requirements relating to firing ranges. A mitigation measure to consider is the access of culturally sensitive sites at least twice a month for Chamorros.
J-015-204	366	Gen				BSP/GCMP	Torres	In general, the DEIS classifies many of the impacts associated with the buildup as a Less-than Significant Impact (LSI) or mitigated to LSI. Just this observation of the DEIS calls into question many of the other observations, figures, associated studies and other determinations in this DEIS. The pace of this massive buildup may be much too fast for the people of Guam and its social and natural systems to absorb without adding much stress, chaos and destruction into their lives. The people, the Chamorro culture, and the environment stand to suffer greatly. Especially considering the potential loss of land and reefs to the proposed project. The loyal people of Guam are again not being treated fairly here and stand to lose the most in this endeavor. The construction tempo should be reduced and spread out over time and land not offered up for lease readily to the military should not be taken for their use.

water demands from the direct DoD population, and the indirect population (construction workers and induced population). Refer to Volume 6, Chapters 2 and 3. All water demands are accounted for, both on-base and off-base, during the construction phase of the military relocation and after all construction is completed in 2019. DoD and GWA sources of water are counted in the FEIS when assessing the off-base shortfall that potentially could occur in the peak construction year of 2014.

As described in the FEIS, the total indirect off-base demand on the GWA water system (including demand associated with the construction workforce and induced civilian growth) is projected to reach 50.6 MGd in 2014. That same year, the GWA water system would have the capacity to supply 42.4 MGd of potable water. Based on discussions with GWA, they plan to install new wells to meet expected baseline growth, adding an additional supply of 1.3 MGd. This results in a shortfall of water of 6.9 MGd. DoD has agreed to transfer water up to 7.0 MGd to GWA to meet this shortfall. This would include the continued transfer of 4 MGd to GWA under the current memorandum of understanding, 1.7 MGd from existing DoD wells, and the remainder from new DoD wells that would be installed early (new well capacity in 2014 will be 4.7 MDd).

Funding to meet on-base DoD water demand is described in the FEIS and is expected to come from Government of Japan loans. Additionally, DoD proposes to transfer excess DoD water to meet anticipated off-base shortfalls during the military relocation construction period, and will also seek Government of Japan loans to provide interconnection between the DoD and GWA water systems. Funding for needed upgrades to the off-base GWA island-wide water system is not identified in the FEIS beyond what has already been identified in the GWA's Capital Improvements Program (CIP), and in a recent EPA Region IX assessment of GWA's CIP and companion conceptual cost estimate for 5-year and 25-year capital and operational needs. The FEIS provides information on GWA and GovGuam's ability to fund upgrades, including information on GovGuam's debit rating and history of funding shortfalls. DoD

Review of the "Draft Socioeconomic Impact Assessment Study"

Compact Impact and FAS Citizens

Section 1.2.2

J-015-206 Guam does not receive federal funding in exchange for providing social and educational services to Freely Associated States (FAS) citizens who have migrated here under the Compacts of Free Association, but as reimbursement for the cost to Guam from the General Fund to provide these services to FAS citizens. The unreimbursed Compact Impact cost for the period from FY1987 to FY2003 totaled \$269 million according to the 2004 Compact Impact Reconciliation Report. From FY2004 to FY 2009, the total locally funded cost for providing services to FAS citizens was \$21.5 million (unaudited).

Section 2.1.1.3

FAS citizens are expected to be a large percentage of the in-migrant labor force in addition to the Filipinos. Analysis should be done using the available data on Guam's FAS population when developing a proxy for the in-migrant population.

Section 4.4.3.4

Technological and staffing capacity issues do limit agencies' tracking of services to citizens from the Freely Associated States (FAS). While proper tracking will better quantify the costs to the agencies, it will not increase Compact Impact funding. Currently, Compact Impact reimbursement is set at \$30M by law and distributed based on the percentage of all FAS citizens living in each "affected area" (Guam, CNMI, Hawaii and American Samoa). This amount is only a fraction of the unreimbursed costs incurred by Guam and the other areas.

Housing

Section 4.3.2.2

J-015-206 4.3-22 of the "Draft Socioeconomic Impact Assessment Study" shows that the current number of vacant, for rent housing units is 1,915. This is based on the growth rate of the number of vacant units between the 1990 and 2000 Censuses. The number vacant units should be determined independently to accurately describe the current status and compared to the number from the 2009 Guam Comprehensive Housing Survey.

Population

J-015-207
Section 4.2.1.2

In reviewing the "Draft Socioeconomic Impact Assessment Study (SIAS)", it is not evident from the report how the number of dependents such as school-age children were calculated based on the assumptions made. No information is shown on the number of households, families, and the family composition of in-migrants. In order to properly review the Draft SIAIS, a technical documentation report showing how the numbers were derived is needed. The Draft report only describes the assumptions and the results, not how the assumptions are applied to reach the results.

A description of who will comprise the "indirect/induced workers" and what sort of jobs they represent is lacking. Also missing is an analysis of the relationship between the "indirect/induced

acknowledges the existing sub-standard conditions of the GWA water system on Guam and the desire by many for DoD to fund improvements to these systems and services. DoD's ability to fund projects that are not within direct DoD ownership or control is limited by Federal law. However, DoD recognizes the need to identify and integrate solutions for both on-base and off-base utility infrastructure on Guam, and desires to minimize adverse impacts associated with the proposed military relocation program. To this end, DoD is serving as the lead federal agency on a multi-agency group charged with identify Federal programs and funding sources to make the necessary repairs and upgrades to Guam's utility infrastructure systems. Concurrently, DoD, EPA Region IX, GEPA, GWA and the CCU are working together to identify and integrate solutions for off-base water needs which meet environment requirements, provide reliable and uninterrupted service, and are affordable for all users. Even with an infusion of federal funds to fix the existing problems with the GWA water system, if there is no funding to keep the systems operated properly, maintained, and upgraded, the system will be unsustainable. This has even been acknowledged by EPA Region IX in its CIP assessment report. Both GWA and EPA state that the people of Guam should not have to carry the financial burden of supporting the military buildup. It is hard to argue with this position. However, what is not said is that the people of Guam should carry the burden of sustaining compliant water and wastewater systems required to ensure their health and well being. GWA's Water Resource Management Plan (WRMP) which was developed to achieve compliance with an EPA stipulated order, identifies projects required to correct \$200 Mil in infrastructure deficiencies that existed in the water and wastewater systems at the time the report was prepared. This estimate has increased after the preparation of the CIP. Very few of the deficiencies have been addressed to-date because GWA does not have the financial resources to address these issues. The Consolidated Commission on Utilities (CCU) and GWA continually push for a single water system on Guam. They feel that without the capital that would come from including

FINAL SIAS Review Highlights-1
J-015-208" and the Government of Guam's "outside the fence" population increase (primarily, non-construction workers with dependents who come to take advantage of economic opportunities). The Draft SIAIS has the "indirect/induced workers" increasing, then decreasing. This would suggest that they are not the "outside the fence" population increase due to economic opportunities following the buildup.

DoD into a single island-wide water system and infusing the significant capital that would come with a large, paying customer, they are unlikely to ever have sufficient capital to sustain a compliant water system. The reality is that even with DoD as a customer they will not have sufficient capital to sustain their water system without raising the water rates. The ability to sustain the water and wastewater systems will be a topic of discussions with GWA, CCU and EPA in early March 2010. Without a continuous influx of federal funds to support daily operations, GWA cannot sustain their current systems. Hence the fundamental problem that will not be fixed by a huge infusion of federal funds to correct all of the ills of the GWA water and wastewater systems. GWA's rate base is not sufficient to sustain its system. If the user rates are not increased to a level that will allow GWA to sustain their systems, in a matter of just a few years the systems will be back to a state of total disrepair and require another large infusion of federal money. Guam is unwilling to require its users to pay what is required to sustain their water and wastewater systems at a level that will ensure their safety and well being. So either the rates have to be increased or EPA needs to find a continual source of funds to support routine operation and maintenance of the GWA water and wastewater systems.

J-015-145

Thank you for your comment. Interim Sustainable Yield Assessment: DoD agrees that protection of the sole source NGLA is imperative. The FEIS discussed the two available estimates of the NGLA that have been published, one by the Northern Guam Lens Study (NGLS) (CDM 1982) and one by Barrett Consulting with John Mink (Barrett 1992). The CDM 1982 study estimated the sustainable yield of the NGLA as 57.5 MDD, and the Barrett 1992 study estimated the sustainable yield as 80.5 MGd. University of Guam (UoG) Water and Environmental Research Institute (WERI) provided an expert technical review for DoD of the two sustainable yield estimates for the NGLA in 2009. The study concluded

that the approach and methodology used in Barrett 1992 to estimate the sustainable yield are still valid and are appropriate for initial planning; and the Barrett 1992 sustainable-yield estimates should be used instead of the earlier 1982 sustainable-yield estimates because the later values are based on an additional decade of field data. Additionally, this expert communicated that the additional data that had been gathered from the NGLA since the 1992 study would not likely change the sustainable yield estimate for purposes of the FEIS because the data collected was from sub-basins of the aquifer that are not located where DoD proposes to withdrawal water. Therefore, the FEIS uses the Barrett 1992 sustainable yield estimate of approximately 80 million gallons per day. However, it is important to note that the estimated total average daily demand from the aquifer for all sources (DoD and non-DoD) during the peak construction year of 2015 is 50.33 MGd, which is below both sustainable yield estimates. Volume 6, Chapter 2, Section 2.2.4.1 and Chapter 3, Section 3.2.3.1 discuss this in detail. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and

through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model, and will help guide decision-making during well installation. It is also important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

Long-term Comprehensive Aquifer Study: DoD has already committed funds to conduct the NGLA 3-D model. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the

parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model.

Global warming & sea level rise: Volume 7 of the FEIS includes a discussion of global warming effects, including on the aquifer.

J-015-146

Thank you for your comment. We will make sure that extending wastewater treatment plant outfalls below the reef level is listed as a potential mitigation to coral reefs in Volume 6, Chapter 13.

J-015-147

Thank you for your comment. The estimated additional truck traffic to Layon landfill will not have a significant impact to traffic congestion or condition of the existing pavement. When considering impacts to pavement conditions or structural capacity, it is measured in equivalent single load axles (ESALs). Using your calculation of 12 truck loads per day, five days a week for 10 years results in roughly 100,000 ESALs. In general, pavements are designed for several million ESALs.

Roadways around the DoD sites have been studied and pavement strengthening and/or capacity improvement projects have been identified to reduce impacts from the overall build up. Route 4 improvements to accommodate the trucks going to the new landfill are part of Guam DPW's transportation improvement program.

J-015-148

Thank you for your comment. The Marine Corps will begin arriving in 2010 as shown in Table ES-2.

J-015-149

Thank you for your comment. The US EPA December 2009 "Technical Guidance on Implementing Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act" will be added to the list of environmental permits and approvals included in Volume 6, Chapter 2, page 134.

J-015-150

Thank you for your comment.

The Navy is preparing a Recycling and Solid Waste Diversion Study for DoD Bases, Guam that has established a diversion goal of 50 percent, not including construction and demolition debris. The Study is considering the following alternatives: 1) DoD would construct two refuse transfer facilities, one in northern Guam and one in Southern Guam; 2) DoD would implement a source separation recycling program at all facilities; 3) DoD would construct recycling center(s); and 4) DoD would construct a materials resource recovery facility.

J-015-151

Thank you for your comment. We understand from GWA that development impact fees have been authorized on Guam and will start on March 1, 2010. This may or may not generate enough funds in time for GWA to adequately repair/expand their water system prior to impacts from the proposed DoD buildup. DoD and GWA are working together to resolve this potential dilemma. Resolutions will be included in the final EIS.

J-015-152

Thank you for your comment.

J-015-153

Thank you for your comment.

Managed lanes is an option that should be explored by GovGuam to address future congestion.

Table 4.2-34 lists the anticipated levels-of-service at intersections for the No Build and Build alternatives. The FEIS identifies a number of roadway and intersection projects that if implemented will mitigate most of the traffic impacts related to the military build-up.

J-015-154

Thank you for your comment.

BMPs are discussed in greater detail in Volume 7 of the DEIS. The DEIS analyzes impacts based on normal conditions. In the event of an emergency, DoD will take action to minimize impacts to the environment.

J-015-155

Thank you for your comment. Comment noted, as it repeats what is said in the DEIS.

J-015-156

Thank you for your comment. The landfill being referred to in the comment is assumed to be the current Navy landfill at Apra Harbor. This landfill is located in southern Guam and near the ocean. It is unlikely that there would be suitable ground water available at this location. This

landfill is currently permitted for use. Should upgrading this landfill be deemed necessary, such upgrades would not be completed prior to when the new Gov Guam landfill at Layon is scheduled to be open. In addition the current data on groundwater has detected some chemical constituents assumed to be from this landfill but not at levels exceeding the maximum contamination levels allowed in groundwater. Further investigation is under way to fully assess what is happening with this Navy landfill. Further clarification has been added to the final EIS.

J-015-157

Thank you for your comment. The comment on row 285 is unclear, as the text provided is directly from the DEIS. In regard to the comment on row 286, alternatives to address traffic impacts would require further research. For hybrid vehicle the time spend in city traffic where there are frequent stops, coasting, and idling periods would have to be evaluated against continuous high speed highway use to determine actual fuel savings. Also the use of car air conditioning, especially in Guam's climate, may well limit the amount of wait time that would actually have engines shut down.

J-015-158

Thank you for your comment. The EIS statement pertains strictly to land use planning criteria. For example, GovGuam would not have land use zoning or policies that would direct the location of a new movie theater within military base. Siting options on base are developed by base planners in accordance with DoD land use plans.

J-015-159

Thank you for your comment. Please see response to J-015-026.

J-015-160

Thank you for your comment. It is true that no new uses in submerged

lands are proposed. The EIS includes an analysis of potential impacts to nearshore waters from effluent discharge.

J-015-161

Thank you for your comment. The Layon landfill will be a GovGuam facility. The impacts of the traffic on transportation routes to the landfill were addressed in the Environmental Impact Statement for Siting of Municipal Solid Waste Landfill Facility, Guam, July 2005.

J-015-162

Thank you for your comment. It is recognized that total population number could be reduced, however these are not significant impacts if a large population still remains.

J-015-163

Thank you for your comment. Selection of specific BMPs will be performed through agency coordination and permitting and will be identified and implemented on a site-by-site and activity-by-activity basis. The EIS describes numerous programs and actions that would be taken to protect surface waters and groundwater from stormwater runoff. DoD is also preparing a stormwater pollution prevention plan (SWPPP) and would apply for permits that regulate stormwater discharges during construction. The permit and plan is focused on reducing the amount of earth and soil that is exposed to stormwater during earth-disturbing activities (such as land clearing and grading), providing stabilization of soils during construction through the use of ground covers, and sediment ponds and traps/screens to reduce pollutants getting into storm runoff and from percolating into the ground. These plans also have specific requirements for containment of potential pollutants at construction sites (such as storage areas for equipment fuel). Once construction is complete, a SWPPP would be developed to control stormwater runoff

and infiltration from base operations. This is being done on a regional DoD Guam-wide scale, and has the involvement of Guam EPA.

J-015-164

Thank you for your comment. This chapter had been revised based on new peak flow estimates and refurbishment of the NDWWTP. Concentrations are anticipated to be less than the no-action alternative and cumulative 5-year loading is expected to be significantly less, even with increased flows over the no-action alternative, therefore comment No. 1, 2, and 3 are N/A for NDWWTP. The document has been reviewed and modified as appropriate based upon your comments. Increased flows to GWAs WWTP have been evaluated.

J-015-165

Thank you for your comment. DoD understands and recognizes the significance of access to cultural sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access will be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites. Stipulations for providing cultural access to Pagat is included within the Programmatic Agreement so that continued cultural access will be possible.

J-015-166

Thank you for your comment. These statements are Best Management Practices that would be followed prior to disturbance of archaeological

resources. The process of the development and approval of work plans before implementing mitigation measures is stipulated in the Programmatic Agreement.

J-015-167

Thank you for your comment. The impacts to marine transportation of the ships that would visit the Port of Guam associated with the relocation of the Marines from Okinawa to Guam is addressed in the EIS in Volume 4, Chapter 14 (Marine Transportation). Section 14.2 presents the analysis of the impacts of the construction to be conducted in Apra Harbor and the impacts of the vessels that would be used to transport personnel, equipment, and supplies to support the proposed action. The impacts to marine transportation of the activities associated with the aircraft carrier berthing are addressed in Volume 4, Chapter 14 (Transportation). Section 14.2 identifies the impacts of construction and operations for the aircraft carrier berthing.

J-015-168

Thank you for your comment. In 1993, the desire to create the Guam NWR was established by a Memorandum of Understanding with the USFWS, Navy, Air Force, and GovGuam (GovGuam et al. 1993). In 1994, Cooperative Agreements were signed between the Navy, Air Force, and USFWS to establish the Overlay Refuge (Air Force and USFWS 1994; Navy and USFWS 1994). The Cooperative Agreements defined the management and administrative roles and responsibilities of the Navy, Air Force, and USFWS for the Guam NWR. The 1994 Cooperative Agreements provide a commitment by the Navy, Air Force, and USFWS for a coordinated program centered on the protection of threatened and endangered species and other native flora and fauna, maintenance of native ecosystems, and the conservation of native biological diversity in cooperation with DAWR, consistent with the national defense mission of the Navy and Air Force. Overlay Refuge lands are not Guam NWR lands but are lands managed in coordination

with the DoD and USFWS. However, the management actions on these Overlay Refuge lands, in accordance with the intent and purpose of the Cooperative Agreements, must be consistent with the national defense mission. In accordance with the Cooperative Agreement, the Navy is coordinating with the USFWS regarding potential impacts to Overlay Refuge lands on Navy lands (both historical Navy lands on Guam and Andersen AFB lands recently designated as under the jurisdiction of the Navy). The Navy and Air Force have and will continue to propose and implement listed species management actions on their lands that will benefit to the greatest extent practicable the recovery of federally listed species on Guam.

J-015-169

Thank you for your comment. Yes, of course this would require trenching in the roadways. The water line replacement would be scheduled to occur at the same time for roadway widening and/or strengthening. Traffic impacts and delays would be managed by typical traffic reroutes, temporary lanes, etc. Replacing water lines is a normal maintenance activity and should not require special discussion.

J-015-170

Thank you for your comment. DoD concurs with your objective. DoD is consulting with U.S. Fish and Wildlife Service and will be receiving a Biological Opinion from them that will address protection of endangered species. New wells for the most part would be located near existing roads to provide easier access, avoid animal habitats, be close to water mains, avoid areas of potential archeological and historical sites, and avoid areas that may contain old unexploded ordnance. All wells would be approved by GWA and permitted by GEPA. If any well locations would need to be in sensitive areas, mitigation would be carefully implemented. We feel that this approach would satisfy your concerns.

J-015-171

Thank you for your comment. As indicated in Volume 6, Chapter 8, for the north region, the impacted noise-sensitive receptors are shown in Appendix G-2. Appendix G-2 was inadvertently excluded from the DEIS and is included in the FEIS.

Soundwalls are designed to not infringe on roadway intersections, which are the locations where people typically cross streets. Also, soundwalls are designed to not block driveways with direct access to the road. Most soundwalls would be located at areas between the road and residential backyards. Most of these backyards have property fences and ditches that would prevent pedestrian road crossings even if the soundwalls were not built. Furthermore, during design phase, other factors such as views of impacted residence or recreational areas would be taken into consideration in determining the most appropriate noise abatement measures.

J-015-172

Thank you for your comment. There are two alternatives for wastewater that require new sewer lines: Alternative 1a and Alternative 1b. Both alternatives' sewer lines are either within existing utility easements or rights-of-way or aligned along existing roadways (Volume 6, Figure 2.3-3). Easements along roadways that do not currently have utility rights-of-way would be acquired. This applies to short segments of the both Alternative 1a and 1b sewer lines and would not interfere with existing or planned future land uses.

J-015-173

Thank you for your comment. Please see the response immediately above.

J-015-174

Thank you for your comment. The majority of the private land acquisitions are due to roadway widening along Route 25, Route 26 and Route 28. As these projects are further developed, the design will be refined to minimize the land acquisitions. Once there is a record of decision and the project is funded, the land acquisition process will begin. Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value. Where circumstances exist that require resolution of issues such as ownership or value, procedures exist under eminent domain authority to resolve those questions. Eminent domain requires reimbursement at fair market value.

J-015-175

Thank you for your comment. Chapter 9, Recreational Resources, of the EIS documents the use of Routes 1 and 3 by walkers and joggers. Please note that the use of Andersen South and the Former FAA parcel for recreational purposes is not a by-right, as these are under DoD and Government of Guam and private ownership, respectively. The loss of access to these properties would not mean the loss of walking and running resources as a whole, since these uses may be found in adjacent properties.

J-015-176

Thank you for your comment. Impacts to secondary limestone forest are not considered significant for the vegetation category but secondary forests make up much of the habitat areas that are recovery habitat for threatened and endangered species and therefore removal of these areas is considered a significant impact. Conservation measures are proposed to avoid and minimize for these habitat losses. Currently planned conservation measures would include some areas that are secondary limestone forest.

J-015-177

Thank you for your comment. Wastewater flow from Finegayan base will be discharged to NDWWTP using a new relief sewer as recommended in wastewater utility study. The gravity sewer is considered to avoid pumping that result in higher O&M costs. The sewage can be pumped and routed along Route 3. This will impact traffic along route 3 during construction. The layout of the gravity sewer was not finalized. All the environmental effects will be considered before finalizing the layout. Also a study to assess the capacity of Route 3 sewer is underway and details of the study will be considered in finalizing the layout of the relief sewer.

J-015-178

Thank you for your comment. The document has been modified as appropriate based upon your comments.

J-015-179

Thank you for your comment.

J-015-180

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

Text in the FEIS has been changed to reflect your comment.

J-015-181

Thank you for your comment. Please see the response to J-015-004.

J-015-182

Thank you for your comment. The Marine Corps recognizes the various

issues associated with household pets and has adopted a new order "Domestic Animal Control" (MCO 1000.22 Chapter 6, August 11, 2009) that would be applicable to the forces relocating to Guam. A few of the key points relevant to population control are: 1) Bachelors are not be allowed to have pets, 2) families are limited to 2 dogs, 2 cats or 1 dog and 1 cat, 3) all pets are to be registered with local veterinary treatment center, 4) vaccination and microchips are required and 5) spay and neutering is strongly encouraged but not required. The microchip requirement would deter abandonment, because the owners know in advance that they could be tracked. This order is added to Volume 8 and Volume 7 Best Management Practices table in the Final EIS.

One mitigation measure is no dredge operations during the coral spawning period, as identified in the Volume 7 mitigation table. No dredging lights would be required during coral spawning. The Army Corps of Engineers may attach additional conditions to the permit.

J-015-183

Thank you for your comment. Relocation of coral is being considered for inclusion in the compensatory mitigation plan that will be reviewed by the Army Corps of Engineers.

J-015-184

Thank you for your comment.

J-015-185

Thank you for your comment.

320. The new Layon Landfill is designed to accommodate municipal solid waste from all current and future DoD sources as well as civilian and commercial sources. Based on conservative waste generation rates, the new landfill will reach capacity in approximately 32 years. The DoD

will be implementing diversion and recycling programs that will significantly reduce solid waste generation and will help to extend the life of the landfill. Details of these programs have been added to Volume 6, Chapter 2.

The Navy is preparing a Recycling and Solid Waste Diversion Study for DoD Bases, Guam that has established a diversion goal of 50 percent, not including construction and demolition debris. The Study is considering the following alternatives: 1) DoD would construct two refuse transfer facilities, one in northern Guam and one in Southern Guam; 2) DoD would implement a source separation recycling program at all facilities; 3) DoD would construct recycling center(s); and 4) DoD would construct a materials resource recovery facility.

Additionally, the Navy has prepared a Construction and Demolition (C&D) Debris Reuse and Diversion Study for DOD Bases, Guam that addresses waste characterization, processing, recycling and disposal of construction debris. Information from this study has been used to update the FEIS.

The study is considering the following alternatives: 1) Contractors would continue to process all C&D debris, and DoD would construct a composting facility to process green waste and 2) DoD would construct a C&D debris central processing facility and a composting facility to process green waste.

Through project specific contractual requirements, DoD contractors would be required to process and divert 50% of C&D debris that is generated on each project. Another alternative would be for the DoD to construct a central processing facility that would be used to recover and reuse or recycle scrap metal, concrete (without lead-based paint), asphalt concrete, and untreated wood. Contractors would be required to haul C&D to this facility. Based on the C&D debris composition assumed

in the study, the Navy will be able to achieve a C&D debris waste diversion goal of greater than 50% by the end of fiscal year 2015. A site for the central processing facility is currently being evaluated but will most likely be located in northern Guam. Disposal of C&D debris that is not divertible or recyclable will be disposed at the Navy Hardfill at Apra Harbor. The study also evaluates the construction of a composting facility to handle green waste generated by land clearing activities required for new development.

321. The ownership criterion is based on whether land or submerged land is acquired under the proposed action. No acquisition of submerged land is proposed; therefore, there are no impacts on submerged land ownership. Under the land use criterion access is considered and the EIS identifies impacts to land and submerged lands in Volume 2, as summarized in Table 3.3-18.

322. There is no suggestion in the EIS that a beneficial impact on the west coast submerged lands would be comparable to or compensate for the impacts on the east coast submerged lands. Comparisons of affected environment of the two submerged lands areas are not relevant.

DoD acknowledges that maintaining access to submerged lands is important. Although plans concerning access have not been developed, it is not the intent of DoD to totally restrict access to submerged lands. DoD looks forward to working with stakeholders in developing plans for access that balance operational needs, public safety concerns, and the continuing public use and enjoyment of submerged lands.

J-015-186

Thank you for your comment. It is the intent of DoD to maintain public access to the cultural and historic sites at Pagat and Marbo consistent with safety and operational requirements. Restricting access to certain

DoD areas at certain times is required to maintain public safety. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

J-015-187

Thank you for your comment. The calculation of 269 container ships visiting the Port of Guam during 2015 includes commercial and military containers (see Volume 2, Chapter 14, Table 14.2-1). The number of commercial containers presented in the table includes the anticipated number of containers shipped from CNMI to Guam but not the number of containers shipped from Guam to CNMI.

J-015-188

Thank you for your comment.

J-015-189

Thank you for your comment. DoD acknowledges that the issue of land acquisition is a complex and sensitive issue, particularly related to prior acquisition of land in Guam by the federal government. Prior land acquisition policies and procedures are not reflective of current land acquisition laws and DoD policy.

DoD was required to determine whether military relocation requirements could be met by excess, underutilized or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action.

Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value. Where circumstances exist that require resolution of issues such as ownership or value, procedures exist under eminent domain authority to resolve those questions. Eminent domain requires reimbursement at fair market value.

J-015-190

Thank you for your comment. The DoD and regulatory agencies are equally concerned about minimizing erosion and stormwater runoff, and preventing contamination of surface waters and groundwater (particularly drinking water aquifers). The proposed ranges will be designed and maintained in accordance with all applicable federal and Government of Guam regulations. Specifically, Military Handbook 1027/3B contains procedures for reducing potential impacts from ranges through the implementation of BMPs. These include introducing soil amendments, vegetation management, engineering controls, instituting contaminant monitoring, reclaiming, and recycling. The DoD will also consider other BMPs such as plant and organic filtration methods to minimize offsite impacts. Through the proper design of ranges, application of BMPs, and monitoring, the potential for erosion runoff, stormwater increases, and groundwater contamination would be minimized.

J-015-191

Thank you for your comment. DoD is committed to low impact development.

J-015-192

Thank you for your comment. DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam, and in particular those associated with the Pagat site. While the

Route 15 alternatives would not result in any adverse physical impacts to the archaeological sites at Pagat, concerns regarding access to the resources have been voiced. It is the intent during the final design phase to contain all rounds and effects within the footprint of the range through the use of berms and other media.

It is also the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Final plans concerning access to sites potentially impacted by the proposed action have not been developed, but the DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites. The DoD will also update the Pagat Preservation Plan and production of a Cultural Landscape Report covering the Pagat area.

J-015-193

Thank you for your comments. DoD recognizes the importance of reducing adverse effects on the people of Guam, its natural resources, and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short-term impacts of construction are managed effectively and that the long-term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access would be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action

have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

BMPs and mitigation measures have been updated in the FEIS based on public and agency comments. A comprehensive list of mitigation measures is contained in Volume 7, Chapter 2. Mitigation measures are proposed in Volume 7, Chapter 2 that involve the timing and tempo of construction and arrival of Marines and their families.

J-015-194

Thank you for your comments. Volume 6 has been revised following public and agency comments on the DEIS. The volume further addresses impacts to NDWWTP. Volume 7, Chapter 2 has been updated with additional mitigation measures and the descriptions of mitigation measures involving construction tempo and timing of the arrival of Marines and their families have been updated.

The construction schedule does not allow for limiting work to dry season only. Stormwater management Best Management Practices would be implemented to be effective in dry and wet seasons.

J-015-195

Thank you for your comment. A less than significant impact has indeed been assessed as the result of development at Finegayan. Volume 7, Chapter 3, has been updated for consistency with the rest of the document. Determination of significance of impacts is discussed in Volume 2, Chapter 3, Section 2, Approach to Analysis.

J-015-196

Thank you for your comment.

Dozens of references, including surveys performed by federal and local agencies, have identified and labeled the low concentrations for the federally protected hawksbill sea turtles, as identified in the DEIS. As a note, due to the high concentrations of the federally protected green sea turtle in Apra Harbor and around Guam, mitigation measures and BMPs implemented to minimize potential impacts for these species in the area of the proposed action, will also protect hawksbill sea turtles.

J-015-197

Thank you for your comment.

While this section uses an example from Southern Guam, the No Action Alternative as a whole is referring to all of Guam, not only Southern Guam.

J-015-198

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The Final EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

Through the process of public involvement that has accompanied this proposed action, the Chamorro people of Guam have voiced clearly and concisely their concern that the traditional Chamorro culture, including dance, language and traditions, will be forgotten. While population increases can highlight cultural differences, they also present unique opportunities for cultural learning and sharing. As noted in the Final EIS,

the DoD plans for cultural sensitivity orientation and awareness programs will focus on mutual respect and tolerance and strive to educate all incoming and currently present military personnel on the rich and varied cultural history that has created the culture that is Guam today. Finally, the DoD plans to increase military civilian joint activities in order to foster strong and mutually beneficial military civilian relationships that include the sharing and understanding of culture.

J-015-199

Thank you for your comments.

358. Additional language on excluded lands is added to the Final EIS.

359. Guam EPA is added as responsible agency in the Final EIS.

360. The change from "plan" to "program" is in the Final EIS.

361. The status column is updated in the Final EIS.

J-015-200

Thank you for your comment.

J-015-201

363. Thank you for your comment. DoD acknowledges that maintaining access to submerged lands is important. Although plans concerning access have not been developed, it is not the intent of DoD to totally restrict access to submerged lands. DoD looks forward to working with stakeholders in developing plans for access that balance operational needs, public safety concerns, and the continuing public use and enjoyment of submerged lands.

There is no suggestion in the EIS that a beneficial impact on the west

coast submerged lands would be comparable to or compensate for the impacts on the east coast submerged lands.

J-015-202

Thank you for your comment. Guam EPA was added to the table.

J-015-203

Thank you for your comment. Please see response to J-015-026.

J-015-204

Thank you for your comment. The EIS process has included an assessment of using an adaptive management approach to reducing adverse impacts caused by the proposed military relocation program. Examples of extending the timeline for construction and/or relocation of Marines have been included in this FEIS. This information is included in Volumes 1, 6 and 7 of the FEIS. As you mention in your comment, the extension of the timeline for accomplishing the military relocation would reduce impacts as described in the DEIS, particularly those that are related to an expected rapid increase in population growth during the construction phase of the proposed program.

J-015-205

Thank you for your comments. The Final EIS has been updated to reflect the wording change you have suggested. The method of Compact Impact fund distribution from the federal government is not part of the proposed action and is not analyzed in the FEIS.

Based on your comments, one of the major concerns is funding. We have addressed the issue of funding in previous responses to your comment/comment table.

J-015-206

Thank you for your comment. Table 4.3-22 shows that the number of currently vacant, for-rent units is 1,915; this number was based on information from the Guam Bureau of Statistics and Plans. Data (MLS) from the Bank of Guam was also applied in the development of the estimation of currently available units.

Your recommendation has been considered and the estimation from the 2009 Guam Comprehensive Housing Study has been noted in the Final EIS.

J-015-207

Thank you for your comment. Assumptions have been identified and provided either in the text or in the explanations in the tables. Also, two scenarios are analyzed in the SIAS; the unconstrained (maximal) and constrained. The DEIS uses the unconstrained scenario because the higher numbers would create a greater impact.

The impacts on the Guam public school system are discussed in subsection 4.4.2, page 4-42 of the SIAS. Table 4.4-4 in the SIAS provides the potential increase (maximal) of student population in the Guam Public School System from 2010 to 2020. Providing a brief summary, at the peak population year (2014), a total of 7,937 students could attend the public school system; by 2017, when the operational (long-term) conditions occur, the students generated could be 909. This is based on the direct and indirect (induced) populations resulting from the military relocation. The military dependents would be educated in the DoD school system and should not affect the public school system. Money generated through taxes from the increased population and federal payments to schools (based on student populations) should provide revenue to fund resources for the public schools.

Numbers of in-migrating workers are presented in Section 4.3.1 of the

SIAS. Dependent ratios are presented in Tables 4.2.1 and 4.2.2 of the SIAS.

J-015-208

Thank you for your comment. Relating to the population figure of about 80,000 people; it should be noted the figure represents a maximal figure when most of the construction workers are still on Guam and the military populations arrive (2014); once construction is completed, the operational population would be about 33,400 (2016) (see the SIAS, Table ES-1, on page iii). Mitigation measures (as appropriate) to address the significant impacts will be discussed in the Final EIS. Population density if averaged over the entire Guam land area is expected to increase as a result of the proposed action; however, population densities are likely to be greater in some areas (i.e., Finegayan) and lower in southern Guam.

As you note, there would be an expected decline in economic activity as the construction phase of the proposed action winds down. However, all economic variables analyzed are expected to be at higher levels of benefit for every year in the foreseeable future than they otherwise would be without the proposed action. For instance, please note Figure 4.3-1 of the Socioeconomic Impact Assessment Study (Appendix F in Volume 9 of the DEIS), which shows higher levels of demand for labor during every year, with the proposed action, compared to the baseline trend which shows demand for labor without the proposed action.



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February 16, 2010

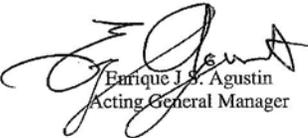
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Attention: GPMO:

Hafa Adai! Enclosed are the Port Authority of Guam's comments on the Draft Environmental Impact Statement/Overseas Environmental Impact Statement for the **Guam and CNMI Military Relocation**: Relocating Marines from Okinawa, Visiting Aircraft Carrier Berthing, and Army Air and Missile Defense Task Force.

Should you have any questions or concerns, please do not hesitate to contact this office.

Sincerely,



Enrique J. S. Agustin
Acting General Manager

cc: Board of Directors
PAG Planning Division
John Jackson, JGPO Forward, Director



Technical Memorandum



To: Glenn Leon Guerrero, Port Authority of Guam

From: Parsons Brinckerhoff: Matthew P. Smith, Andrea Rosenthal, Jeff Peck, This work was prepared by me or under my direct supervision

Date: February 15, 2010

Subject: FINAL Port of Guam Modernization Project - Review of November 2009 Joint Guam Program Office (JGPO) Draft Environmental Impact Statement (DEIS)

Disclosure Statement

PAG is advised that PB personnel were involved in developing four technical discipline assessments related to the Haul Road portion of the JGPO DEIS. Specifically, the four disciplines and individuals involved are as follows:

- Hazmat (Patrick Romero, Seattle office)
- Air Quality (Alice Lovegrove, New York office)
- Traffic Impacts (Kara Swanson, Denver office)
- Historic/Archeology (Jason Bright, Salt Lake City office)

This work was performed for the Department of Public Works under separate contract and is unrelated to the JGPO DEIS review work performed by PB for PAG.

Introduction

In November 2009, pursuant to National Environmental Policy Act (NEPA) requirements, JGPO published a nine volume DEIS discussing the potential environmental impacts of the proposed Guam and Commonwealth of the Northern Mariana Islands (CNMI) military relocations. The proposed actions discussed in the DEIS are complex and involve the U.S. Marine Corps, Navy, and Army and include the relocation of the Marine Corps and their dependents from Okinawa, Japan to Guam; construction of a new deep-draft wharf in Apra Harbor and related shoreside infrastructure improvements to support Navy transiting nuclear aircraft carriers; and development of facilities and infrastructure to support the relocation of Army military personnel and their dependents to establish and operate an Army Air Missile Defense Task Force (AMDTF).

The NEPA lead agency for the EIS process is the Navy. The Navy invited federal agencies that have jurisdiction or technical expertise for components of the proposed actions, or a potentially affected resource, to be cooperating agencies under NEPA. The agencies that are cooperating agencies for the DEIS are U.S. Fish and Wildlife Service (FWS), US Department of Transportation (USDOT) Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), U.S. Environmental Protection Agency (EPA) Region 9, U.S. Office of Insular Affairs, U.S. Department of Agriculture (USDA), U.S. Army Corps of Engineers (USACE)

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and the U.S. Air Force. The Guam Department of Public Works (DPW) is a participating agency for the roadway improvement sections for the DEIS.

PB conducted a strategic (i.e., not word for word) review of the DEIS to assess the extent that JGPO considered the effect of their actions on the Port and the planned Port Modernization Program including the Reconfiguration, Maintenance and Repair project. The technical review included the following areas:

- Cargo Forecasts
- Use of Port Property
- Dredging
- Port Projects Included in the Cumulative Effects Analyses
- Ecology
- Traffic
- Air Quality
- Noise
- Contaminated Materials
- UXO
- Security
- Utilities
- Visual Resources
- Socioeconomics
- Historic and Cultural Resources

Findings from the review of technical areas of the DEIS follow. Key findings from the review are summarized in the Conclusions and Recommendations Section at the end of this memorandum. The accompanying spreadsheet contains the individual comments and cites the source for each comment.

J-016-001

Cargo Forecasts

Overview and Analysis

Paragraph 14.2.1.2 addresses the Determination of Significance

Analysis indicates that the significance of impacts to Marine Transportation for vessel visits to Apra Harbor hinges on whether the number of visits exceeds, equals, or falls below historic highs experienced since 1995.

Paragraph 14.2.2.3 addresses construction and operations in Apra Harbor

14.2.2.4 Construction

Analysis indicates that dredging will add 127 vessel trips in the harbor related to the conveyance of Sierra Wharf dredge spoils to open ocean dumping site. It indicates that adding

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Thank you for your comments. In regard to the anticipated increase in break-bulk cargo, the FEIS presents the break-bulk cargo forecast in Volume 2, Chapter 14. For the most recent year for which data are available (2009), 192 vessels visited the Port of Guam (Port) carrying 133,000 tons of break-bulk cargo (Port Authority of Guam 2010a). This averages to 693 tons of break-bulk cargo per ship. According to the data provided in the Master Plan Update 2007 (dated April 2008), the peak year for the inbound shipment of break-bulk cargo to the Port is 2012 when 291,400 tons will be delivered. Using the average of 693 tons of break-bulk cargo per ship, there would be 420 break-bulk cargo ships in 2012. This is an increase of 228 break-bulk cargo ships in the peak year as compared to 2009. The peak year for the shipment of containers to the Port is 2015. As presented in the FEIS, in that year, 269 container ships will visit the Port as compared to a yearly average of 124 container ships. In that same year, the projected amount of break-bulk cargo that will be shipped to the Port will be 143,400 tons which would require 207 ships which is only 15 more break-bulk ships than visited the Port in 2009. In 2012, it is projected that 244 container ships will visit the Port; this is 120 more container ships than the average. Because of the projected difference in the years of peak break-bulk cargo (2012) and the peak containers delivered (2015), the requirements for ground space, use of cranes, and berthing space will be spread over a three year period. The carriers that provide shipping services to DoD in the future may include Matson, Horizon, and other shipping companies. This will not impact the number of ships used to support the proposed action. The area of the proposed dredging of Apra Harbor in support of the berthing of the aircraft carrier at Polaris Point is not located in the channel used by ships to access the Port facilities. This proposed dredging will have a less than significant impact to access to the facilities of the Port. In regard to the conditions of the existing facilities at the Port, as documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam, as well as



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these vessels to the 2008 vessel count would amount to a 12% increase in vessel traffic for that year. It rates the impact as less than significant.

14.2.2.4 Operations

Analysis indicates that a minimum of three ships carrying amphibious vessels, accompanied by 4 combatant escort ships, could deploy to Apra Harbor a minimum of two times a year for durations ranging between 6 and 21 days. The analysis indicates that adding these ships to the vessel visits would result in less than significant impact given the substantial reduction in the number of vessel visits to the Port of Guam as compared to 1995.

Analysis includes projected container traffic from 2008 through 2018. It identifies the Port as the source of the statistics. It includes commercial and military containers and projects an average of 156,636 containers per year during embarkation with a peak of 190,000 in 2015. The projected average number of containers is double the average number of containers from 1995 to 2008 but the DEIS incorrectly (see discussion below on Port dredging) states that this equates to less than double the number of ships due to increasing vessel capacity. The analysis also indicates that there will be an increase of 149 container vessels above the average visiting the Port of Guam over a one year period assuming **no increase in container capacity** for container ships and that this would still result in less than a significant impact on marine transportation in Apra Harbor due to the historic reduction of 1,902 vessels visiting the Port of Guam between 1995 and 2008.

Recommendations and Response

The Port agrees that historic highs for vessel traffic will not likely be exceeded as a result of the move of military forces from Okinawa to Guam. However, what is missing in the above analysis is the impact to Marine Transportation and traffic into and out of the Port for the following potential activities in Apra Harbor and at the Port:

Summary Points

- A massive increase in non-containerized breakbulk cargo utilizing smaller and higher numbers of cargo transport vessels
 - The increased marine traffic related to breakbulk shipments and expanded wharf operations is not addressed in the analysis.
 - The two Jones Act carriers, namely Matson and Horizon, currently provide shipping services for DOD. It is not clear whether there will be other carriers entering the trade to support the build-up, especially in the area of break-bulk cargo. The JGPO DEIS is silent on this issue.
 - In the early stages the largest increases in cargo traffic and ground-space impacts at the Port will be related to breakbulk cargo. Ground space requirements for handling the combination of breakbulk and container cargo will effectively require site reconfiguration and revised deployment of cranes

the interest of Government of Guam agencies and others to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam. Funding for the Port's improvements (modernization) and expansion is anticipated to come from various federal agencies, GovGuam, and private sources. The funds for capital improvements would likely be repaid through user fees that would then be passed on to consumers, businesses, and other entities (i.e., DoD). While DoD is not directing the Port improvements, an amendment to the 2010 Defense Appropriations Bill is proposed in Congress which calls for the transfer of \$50M of DoD FY10 funds to the Department of Transportation to fund Phase I of the port improvements.



J-016-001

and berthing spaces. Breakbulk shipments will compete with container shipments during the scheduling of port calls. There could conceivably be marine traffic impacts as this evolves over time and is concurrently impacted by Port wharf repair and dredging projects.

- Dredging a 600' wide channel through Apra Harbor in support of Air Craft Carrier Berthing at Polaris Point; said dredging to occur for a period of 6 – 18 months
- Potential marine traffic consequences of a change in cargo mix and deferring needed berth bulkhead repairs in favor of a planned (pending) upland maintenance and repair project.
 - In response to the military buildup and its escalating cargo throughput requirements, the Port has altered its normal planned maintenance and repair sequence and capital program expenditures in order improve its near-term cargo handling capabilities before attending to its critical in-water maintenance and repair needs. In a spirit of partnership with DOD, the Port is advancing an uplands maintenance and repair project that requires site expansion and reconfiguration (to support expanded grounding of cargo containers and breakbulk cargo) in order to enhance cargo handling capability in the face of massive growth. This is as opposed to an approach that would involve fixing existing facilities in place and dealing with the temporary reduction of cargo handling capability while berthing space and uplands laydown area is taken out of service to install marine structures.
 - The above-mentioned maintenance and repair approach requires that the Port mortgage (and exhaust its borrowing capacity) its future in order to handle the cargo increases near-term while taking the risk that funds will not be available to address critical bulkhead and fender system improvements following the uplands maintenance and repair effort. The result is that the waterfront facilities will be subject to ever increasing loading (vessel calls, crane usage, surface traffic on wharf) and wear and tear as it continues to deteriorate in material condition. With structural failure already experienced during a 1993 seismic event, risks of catastrophic failure will progressively increase unless and until funding is both identified and made available to finance bulkhead repairs. This risk could materialize in the form of devastating collapse and huge impacts to cargo handling capability and marine traffic for container and breakbulk cargo vessels that would end up queuing in the Harbor.
 - Site reconfiguration is needed along existing wharf structures because of significant change in cargo mix. Huge volumes of breakbulk cargo are projected to support horizontal construction for the military and other impacted infrastructure on Guam. Cargo handling will become more ground-space intensive and will limit the ground area available to process containerized



J-016-001

cargo using the existing wheeled operation. There is potential for significant delays in cargo offloading for both types of cargo if the requested (pending grant/loan package) funding for the uplands maintenance and repair project falls through. If this happens, the queuing of increasing numbers of vessels could occur in the Harbor. This will happen regardless of whether the number count on visiting cargo vessels stays below the historic highs dating back to 1995.

- Repair and replacement of a deteriorated sheetpile bulkhead at berths F4-F6.
 - This is a necessary and planned project needed to shore up the Port's wharves and berthing facilities to secure sustainable operations in the face of increased military cargo of all types.
 - This project will follow the aforementioned uplands maintenance and repair project. As previously mentioned funding for this project has not been identified. The Port's ability to fund it will be significantly impacted by diverting its limited capital program budget and borrowing capacity to the uplands project.
 - If this project is funded through Federal Grants and appropriations and capital recovery charges in the form of cargo tariffs, then the work can proceed in a timely and scheduled fashion. If the project is not funded and the facilities collapse, the repairs will be inefficient and more expensive, longer in duration and likely cause greater delays to marine cargo traffic in the Harbor.
- Reduced berthing access to the port caused by the dredging of the berthing areas between F4 and F6.
 - Dredging to a depth of -42' MLLW will allow fully loaded container cargo ships to visit the Port. This will enhance cargo-throughput using fewer numbers of ships, possibly alleviating temporary traffic impacts in the harbor.
 - Funding for this project is not yet identified. If this project is funded through Federal Grants and appropriations and capital recovery charges in the form of cargo tariffs, then the work can proceed in a timely and scheduled fashion although it may compete for dredging equipment resources with JGPO dredging. If the project is not funded and dredging is not performed, visiting container ships will have to remain light-loaded. Note that this contrary to what is stated in the DEIS about lesser numbers of ships being required due to increasing capacity.
 - The dredging in and of itself will take Port berths out of services for a limited period of time. This may result in temporary queuing of vessels in the harbor with concurrent impacts to other marine traffic.



Use of Port Property

Overview

Use of Port property by the proposed JGPO action was reviewed. The DEIS states use of some areas that are on Port property for the proposed action.

Analysis

The new power plant proposed at Piti and adjacent to the Port is proposed as a long-term alternative for power. The DEIS states that it appears that the property is owned by the Port. An impact analysis has not yet been conducted. The DEIS also identifies the Port as a feasible location for a dredged material dewatering facility and beneficial reuse of the dredged material at the Port as fill for the Port Modernization Program (see the Dredging section of this Technical Memorandum for information).

Summary Points

- Proposed power plant at Piti adjacent to Port appears to use property owned by the Port.
- The Port is identified as a feasible location for a dredged material dewatering facility.
- The Port is identified as a location to beneficially reuse dredged material as fill for the Port Modernization Program.

Dredging

Overview

Volume 1 of the DEIS summarizes the new deep draft wharf for transient aircraft carrier visits to be constructed at Polaris Point with shoreside improvements. The new wharf is discussed in detail in Volume 4 of the DEIS.

Analysis

The new deep draft wharf would be located at the entrance to Inner Apra Harbor channel. The navigational approach would be through Outer Apra Harbor. Ship navigation into the new berth would require a turning basin in front of the wharf. The existing Outer Harbor Channel would be widened to 600 feet with minor adjustments to centerline and navigational aids. No dredging would be required to widen the east-west portion of the navigational channel but due to a sharp southward bend in the existing channel towards Inner Apra Harbor dredging would be required to meet aircraft specifications. A new ship turning basin would be established and would require dredging to -49.5 feet plus 2 feet overdraft. The turning basin would be located near the wharf and north of the Inner Apra Harbor entrance channel.

J-016-002

Thank you for your comment. The long-term alternative is only presented at a programmatic level. Should this alternative be pursued, future NEPA review at the project specific level would be required. At that time, more in depth research on land ownership, a siting study, and other alternatives would be considered in greater detail.

J-016-002



J-016-003

During dredging, vessel access to the Port could be impeded. The later phases of the Port Modernization Program which includes dredging could encounter insufficient contractor resources to conduct Port dredging. The DEIS (Appendix K) also mentions locating a dredged material dewatering facility at the Port and beneficially re-using the dredged material for fill at the Port for the Port Modernization Program. The location of the dredged material dewatering facility is located in the northeast portion of the Port directly where new gates are proposed as part of the Port reconfiguration, maintenance and repair project and appear to extend into the areas where containers will be placed. The cost of the facility was stated as \$22 million. In addition, use of dredged material as fill at the Port could not be feasible from technical, cost and timeframe perspectives.

The 2005 Dredged Material Management Plan (DMMP) prepared by Weston Solutions found the Port site to be feasible for location of a dredged material dewatering facility. In making this conclusion it also stated that social impacts from noise and traffic are problematic but that management plans could be developed. However, the specifics of these management plans were not provided.

Summary Points

- Polaris Point dredging could impede vessel access to the Port.
- Depending on timing, Polaris point dredging could cause competition for contractor resources needed for dredging for the Port Modernization Program.
- The Port (Commercial Port Field 1) has been identified as a feasible location for a dredged material dewatering facility. The location, in the northeastern portion of the Port, directly conflicts with the location of the new gates and other structures and container storage areas proposed for the Port Modernization Program.
- The Port has been identified as a feasible location for the beneficial re-use of dredged material to be used as fill for the Port Modernization Program. Use of the material as fill at the Port may be infeasible due to cost, technical and timeframe reasons.
- Although the 2005 DMMP by Weston found the Port to be a feasible site for a dredged material dewatering facility and source for beneficial reuse of dredged material it also stated that social impacts from noise and traffic are problematic but that management plans could be developed. These mitigative plans are not included in the DEIS. feasible.

J-016-004

Port Projects Included in Cumulative Effects Analyses

Overview

The DEIS discusses cumulative impacts in Volume 7. Table 4.3-1 lists the past, present and reasonably foreseeable projects on Guam, states the timeframe of the project and whether it was dismissed or retained for the cumulative impact analysis. If the project was dismissed for the cumulative impacts analysis, the reason is given. The lead agency or proponent, point of

J-016-003

Thank you for your comment. Under "Dredging Overview" in the comment, it states the aircraft carrier would be at Polaris Point when Polaris Point is only one of two alternatives being evaluated in the EIS. The Former SRF site is Alternative 2.

The northern limits of dredging for either Polaris Point or the Former SRF alternative is south of the main access into the Commercial Port. If ocean disposal of dredged material is used, there would be an increase in barge traffic to and from the ocean disposal site during dredging but this would not impede access to the Commercial Port.

If the Port Modernization Program dredging coincides with the dredging for the proposed aircraft carrier berth and Inner Apra Harbor dredging, the availability of dredges on Guam could be an issue. Recognizing the volume of work involved, contractors may take the opportunity to relocate their dredge equipment to Guam to compete for the work and/or existing dredge contractors on Guam may increase the amount of dredge equipment they have access to.

Regarding the use of the Commercial Port Field 1 identified as a feasible upland dewatering site in the 2005 and updated 2008 Upland Disposal Management Study and possible beneficial reuse at the Port for the Navy's dredged material, the EIS does not include any non-DoD locations for dewatering of dredged material. For this reason, there are no concerns about the Navy's action impacting the new gates, container storage area and other structures as noted in the comment. If the proper permits, need, timing and funding is available for GovGuam and specifically the Commercial Port, beneficial re-use of dredged materials at the Port is a possibility.

Similar to the response above, the comments regarding potential noise and traffic impacts identified in the 2005 and updated 2008 Upland



J-016-004

contact at lead agency, project name/location, area of interest, construction years, status, description and timeframe for each project is given.

Table 4.3-3 is a summary of potential impacts to resource areas for each project included in the cumulative impacts analysis. If there is the potential for a cumulative impact in a resource area the box beneath the technical area is marked. The resource areas covered in this table include water/wetlands, air quality, noise, air space, land use/ownership, recreation, terrestrial biology, marine biology, cultural, visual, marine transportation, utilities/roadways, socioeconomics, hazardous materials, public health and safety, and environmental justice and protection of children.

Analysis

The Port is referred to in Table 4.3-1 as PAG and is mentioned three times in the table as number AH-8, AH-9 and AH-19. For AH-8, the lead agency or proponent is identified as PAG, GovGuam is the point of contact at lead agency, the project name is Guam Port, area of interest is Guam – Apra Harbor, construction years are 2009-2013, status is Request for Proposal issued and proposals reviewed and in process of awarding, description is owner/agent for construction of the Guam Commercial Port, timeframe is future, and the project is retained for the cumulative impacts analysis. AH-9 is the same except that the point of contact at lead agency is MARAD/GovGuam, status is request for proposal issued and proposals have been submitted, and description is construction and commissioning of the facilities, equipment and amenities (\$195 million) that are required to implement the preferred concept "Break-Bulk West" in order to meet minimum requirements of the military buildup construction logistics requirements, and as for AH-8, the timeframe is future and the project has been retained for the cumulative effects analysis. The status for AH-19 is that the DEIS Notice of Availability has been published in the Federal Register on 8/10/07.

For AH-19, the lead agency is PAG, the point of contact at the lead agency is GovGuam and the project name is Commercial Port Improvements, the area of interest is Guam-Apra Harbor, the construction timeframe is 2021-2025, the status is Draft EIS (Notice of Availability (NOA) published in Federal Register on 8-10-07, description is construct new wharf east of Hotel Wharf to accommodate deep-draft container vessels and cruise ships. Dredging and filling of GovGuam submerged lands required, timeframe is unknown and the project was dismissed i.e., not included in the cumulative effects analysis because it is beyond the timeframe for the cumulative impact analysis.

AH-8 appears to be the owners engineer contract that PB currently is performing for the Port. AH-9 appears to be the preferred solution from the 2007 Updated Master Plan. AH-19 appears to be the Deep Draft Wharf project that is on hold.

The Port reconfiguration, maintenance and repair project is not included in the table and therefore, was not included in the DEIS.

Disposal Management Study are not applicable to the current upland disposal/dewatering actions since all of the dewatering sites being considered at this time are on DoD lands and would not involve noise or traffic impacts related to dewatering on the Port lands.

J-016-004

Thank you for your comments. The cumulative project list is updated to address your comments.



J-016-004

Summary Points

- AH-8 appears to be the Port owners engineer contract held by PB and would in of itself not have impacts and therefore should be deleted from the DEIS.
- Port projects to be conducted under the Port owners engineer contract such as the ARRA/USDA Port Improvement Project should be mentioned in cumulative effects analysis, but not included in the analysis until details are available to permit an analysis.
- AH-9 represents the conclusions of the 2007 Master Plan Update. It is applicable to characterize the overall Modernization Program, but is a program not yet funded. Subsequent to the 2007 Master Plan Update, Master Plan Approval Documents were submitted to and approved by the Guam Legislature. The Modernization Program was separated into three projects labeled as Phase IA, Phase IB, and Phase II. The portion of this program that has near-term projected funding is the Phase IA project otherwise known as the ARRA/USDA Port Improvement Project. Funding for this project could be approved by February 17, 2010. Once technical information becomes available, this project should be included in the cumulative effects analysis. Future Port projects (Phase IB and Phase II) should be identified in the cumulative effects portion of the DEIS but not included in the cumulative effects analysis.
- AH-19 appears to be a proposed Deep Draft Wharf Project that is currently on hold and definitely not funded. Its viability for the future should be confirmed with the Port and should be mentioned but excluded from the cumulative effects analysis at this time.

Ecology Implications

Overview

The DEIS discusses the ecology of the Apra Harbor area and includes an Essential Fish Habitat Assessment (EFH) and other plant and animal species of concern in Apra Harbor.

J-016-005

Analysis

According to the DEIS, the east end of the Port area is vegetated and characterized as scrub forest. It mentions that the Route 11 roadway improvements at Cabras Island in the vicinity of the Port will encroach on scrub forest and tangantangan areas. It is inferred that part of this will be on Port property. According to the DEIS, a total of 43 acres of scrub forest and 14 acres of tangantagan will be impacted along Route 11. It is unclear from the discussion in the DEIS how much of this is on Port property and it is unclear whether or not this acreage is considered to be a substantial impact to vegetation communities.

J-016-005

Thank you for your comment. The vegetation displayed in figures and the acreage listed are included only as a general description for the vicinity of the proposed project. Vegetation would not be impacted because the road improvements planned for this area are pavement strengthening only.



J-016-005 | The 2008 Weston Solutions Final Report on Dredged Material Upland Placement Study located in Appendix K of the DEIS stated that this scrub forest area is feasible for use as a dredged material dewatering facility.

J-016-006 | In the direct vicinity of the Port, in the cove between the glass breakwater facility and fuel facilities and cement area, the DEIS identified a known sea turtle nesting area. Other plant and animal species identified by National Oceanic and Atmospheric Administration (NOAA) in the direct vicinity of the Port include sensitive coral, algae, macroalgae, turf algae and bigeye scad fish. Locations of these species are identified in Volume 2, Chapter 11 Figure 11.1-11. The NOAA also identified a coral area of special significance near the Glass Breakwater area. The Port area also was described by Navy studies in 2005 as containing the highest level of zooplankton (it is unclear in comparison to what) and also contains finfish larvae and mollusks.

According to the DEIS, the Western Pacific Regional Fisheries Management Council has characterized all of Apra Harbor as an EFH (refer to Figures 11.1-3 through 11.1-7 in Volume 2, Chapter 11). At the nearby Naval Base Guam, located just south of the Port, seven species of flora/fauna were identified as threatened, endangered or candidate species by US Fish and Wildlife Service, NOAA and Guam Department of Agriculture Division of Aquatic and Wildlife Resources (GDAWR). Additionally, the green sea turtle and endangered hawksbill sea turtle are special-status species reported generally in Apra Harbor according to COMNAV. Similarly, Spinner dolphin, currently listed as a species of greatest concern, has been noted on a regular basis in the general Apra Harbor region according to National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS).

J-016-007 | Due to the projected increased traffic among the islands from the movement of cargo, personnel and materials, the DEIS also describes potential harm to fragile ecosystems on Guam as a result of the introduction of invasive species.

Accidental transfer of invasive species to Guam due to shipment of supplies, equipment and household goods was discussed as a probable scenario. As a result, it also is probable that invasive species would be introduced through the Port.

Prevention of the spread of the Brown Tree Snake to a non infested area is a major concern on Port exports. In addition, as the DEIS states a comprehensive Micronesian Biosecurity Plan is in the process of development however it not available for review at this time.

Recommendations

It is directly and/or indirectly implied in the DEIS that several plant and animal species (including those listed as species of concern) are in the vicinity of the Port. The invasive species issue is of particular concern to the Port since movement of personnel and goods may introduce invasive species through the Port. The DEIS should specifically address how its dredging efforts in the channel and near Polaris Pt. and the management of invasive species and hazardous cargo shipments will mitigate potential impacts to these sensitive ecological resources.

J-016-006

Thank you for your comment. The DoD is committed to performing its mission in an environmentally responsible manner. The location of the new Navy wharf was chosen as the least environmentally damaging alternative in efforts to avoid the least amount of live coral in the area. The proposed dredge area within the active commercial harbor was previously dredged over 60-years ago and maintenance dredging continues.

Best management practices (BMPs) and potential mitigation measures will minimize the potential impacts of the proposed action. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

J-016-007

Thank you for your comment. The DoN is developing a Micronesia Biosecurity Plan (MBP) to address potential non-native invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the



Summary Points

J-016-008

- o In the direct vicinity of the Port, in the cove between the glass breakwater facility and fuel facilities and cement area, the DEIS identified a known sea turtle nesting area.
- o Other plant and animal species identified by NOAA in the direct vicinity of the Port include sensitive coral, algae, macroalgae, turf algae and bigeye scad fish. The NOAA also identified a coral area of special significance near the Glass Breakwater area. The Port area also was described by Navy studies in 2005 as containing the highest level of zooplankton (it is unclear in comparison to what) and also contains finfish larvae and mollusks.

J-016-009

- o Invasive species including the brown tree snake (BTS), flatworms, various insects and some plants may be introduced through increased cargo through the Port

Traffic Implications

Overview

J-016-010

Traffic conditions and roadway projects related to the proposed JGPO actions are described throughout the DEIS document. The most concentrated discussion of these items is largely summarized in Volume 6, more specifically in Chapter 2 (Proposed Actions) and Chapter 4 (Roadways). Key traffic areas covered in the DEIS are briefly listed below.

Traffic Items Covered in JGPO DEIS (Volume 6)

Chapter Two	Chapter Four
<ul style="list-style-type: none"> • JGPO action alternatives and land use 	<ul style="list-style-type: none"> • Existing traffic conditions
<ul style="list-style-type: none"> • Population trends and projections 	<ul style="list-style-type: none"> • Changes in traffic patterns
<ul style="list-style-type: none"> • Arterials requiring pavement upgrades 	<ul style="list-style-type: none"> • Transit and non-motorized networks
<ul style="list-style-type: none"> • Location/number of bridge replacements 	<ul style="list-style-type: none"> • Future traffic projections
<ul style="list-style-type: none"> • Construction timeline for improvements 	<ul style="list-style-type: none"> • Performance measures (Volume/Capacity, delays, etc)

Chapter 2 provides a detailed overview of the general JGPO alternatives under consideration and describes the recommended improvements to the Guam Roads Network (GRN). Included in these improvements are pavement upgrades, bridge repair/replacements, roadway widening and intersection treatments. Potential timing and phasing of construction activities for near term roadway improvements also are described in Chapter 2 in terms of planning-level timelines.

Chapter 4 provides a high-level overview of the existing transportation system and highlights the existing roadway network on the island with regard to on-base and off-base transportation infrastructure. This chapter also discusses existing traffic demands on these roadways, operational conditions (congestion) during peak traffic periods for key intersections, transit services and non-motorized facilities. The roadway system is divided into four geographic

National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). The plan is intended to be a comprehensive evaluation of risks in the region, including all Marine Corps and Navy actions on Guam and Tinian. For additional information on the MBP and existing and interim measures for non-native invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-016-008

Thank you for your comments. Text has been clarified regarding zooplankton levels.

J-016-009

Thank you for your comment. The DoN is developing a Micronesia Biosecurity Plan (MBP) to address potential non-native invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). The plan is intended to be a comprehensive evaluation of risks in the region, including all Marine Corps and Navy actions on Guam and Tinian. For additional information on the MBP and existing and interim measures for non-native invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial



J-016-010

areas, the North region of the island near Andersen AFB, the Central region, the Apra Harbor region which includes PAG facilities and naval base, and the South section.

Future traffic projections and congestion levels are then described in Chapter 4 which includes a discussion of the anticipated population and employment levels related to the military build-up and the potential volumes that may occur as a result. To assess arterial performance, volume-to-capacity (V/C) was used to measure potential levels of peak period congestion. Additionally, intersection-level traffic analysis was used to measure delays and level of service (LOS) at key roadway crossings. Of the roadways described in Chapter 4 that are critical to the PAG, Route 11 is highlighted as a study arterial and the intersection of Route 1/Route 11 is included in the list of intersections within the Apra Harbor region. The nearby intersection to the south at Route 1/Route 6 also is included in this list. Volume-to-capacity data for Routes 1 and 11 are provided for the 2014 and 2030 horizon as are peak period delays at key intersections such as Route 1/Route 11 and Route 1/Route 6.

Throughout the DEIS, two general horizon years are targeted for the purposes of describing transportation conditions: a short term 2014 timeframe and a longer range 2030 timeframe. These were likely selected to capture the peak (i.e. worst-case scenario) population levels due to the build-up and separately provide a snapshot of conditions in the longer term future.

Analysis

The proposed JGPO actions and related mitigation described in the DEIS appear to adequately discuss transportation issues from the perspective of the general roadway network. However, for the purposes of the Port modernization project some conflicting issues between the JGPO actions and the proposed PAG reconfiguration, maintenance and repair project may need to be resolved to ensure that potential cumulative impacts are fully addressed. The majority of these issues relate to the timing of roadway improvements as proposed in the DEIS and how they correspond to the Port reconfiguration, maintenance and repair project. In addition, the projected traffic congestion on specific roadways affecting the Port-based truck movements is also in question. These issues are summarized briefly below.

Chapter 2 Potential Gaps in Information

- o Guam Roadway Network (GRN) improvements No. 13 and No. 14 call for pavement strengthening of Route 1 near Routes 11 and 6. These improvements may disrupt commercial and construction-related truck movements into and out of Port facilities.
- o GRN improvements No. 4 and No. 5 would involve pavement strengthening of Route 11 from Route 1 to the Port entrance and intersection improvements at Route 1/Route 11, respectively. These activities may coincide with Port repair and maintenance work, hence affecting vehicle movements to/from Port facilities.
- o The timing of GRN improvements to Route 11 and to the intersection of Route 1/Route 11 shows implementation in 2011. Upgrades to Route 1 north and south of Route 11 are expected in 2013. These coincide and conflict with the Port repair and maintenance construction schedule (2010-2013).

species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-016-010

Thank you for your comment. The projects proposed for Route 11 and intersection of Route 1 and Route 11 were identified as high priority projects and scheduled to be complete prior to the peak period of the military build up in order to minimize traffic congestion on Route 11 and impacts to the port. For all projects, a traffic management plan will be developed during the design phase of the project to minimize traffic impacts during construction to all users of the roads/bridges. The Federal Highway Administration will coordinate the projects in the are of the port with the PAG.



J-016-010

- The discussion under Section 2.1.1.8 states that construction of the GRN improvements "would occur from 2010 to 2016 with peak construction in 2013". This coincides with the Port's repair and maintenance schedule of 2010-2013.
- Table 2.5-4 *Guam Roadway Network Construction Projects to be Completed Each Year* is further evidence of overlapping schedules between GRN activities and Port repair and maintenance work. Note Route 1 and 11 improvements shown as being completed in 2011.
- The proposed construction of a new power plant at the Cabras/Piti site (summarized in Table 2.1.3) may affect PAG truck movements on Route 11 particularly during high-intensity construction activity.

Chapter 4 Potential Gaps in Information

- The Route 1 volume-to-capacity (V/C) ratio shown in Table 4.2-5 *Alternative 1 and 2 Future ADT and Volume to Capacity Ratio Summary* would exceed 1.00 in Taumuning by 2014 which is an area where Port trucks (commercial and construction related) pass through. This relates to both Alternative 1 and Alternative 2 (Preferred).
- Similar to the above issue; the Route 1 V/C ratio shown in Figure 4.2-20 *Central Region 2014 PM Peak Congestion Levels for Alternatives 1 and 2* is far greater than 1.0 by 2014 (in fact > 1.15) which may affect Port truck movements. This again relates to both Alternative 1 and Alternative 2 (Preferred).
- The level of service (LOS) for the intersection of Route 1 and Route 11 is shown to be at Level E by 2014 during the PM peak hour which indicates heavy congestion and high delays. This high level of congestion may affect commercial truck movements to/from the Port.

Recommendations and Summary Points

In order to fully address Port interests as they relate to the JGPO actions and proposed mitigation measures described in the DEIS, the following actions are recommended:

- The DEIS should address impacts to Port truck movements (including military shipments) on the roadway network due to construction activity on Routes 1 and 11.
- The DEIS should formally address impacts to Port container movements (including military shipments) due to bridge replacements on Route 1 north and south of Route 11.



J-016-010

- o The DEIS should assess the impacts of constructing a new power plant at the Cabras/Piti site since it may have some effect on traffic flow on Route 1.1.

J-016-011

Air Quality Implications

Overview

The DEIS discusses potential air quality impacts by different regions on the island. The area of the island discussed in the DEIS that is applicable to the location of the PAG project is referred to as the Apra Harbor area. JGPO projects that have the potential to impact the PAG or add to impacts from the proposed PAG reconfiguration, maintenance and repair project are as follows:

- o Intersection of Route 1.1 and Route 1 improvements
- o Improvements to Route 1.1
- o New diesel power plant adjacent to existing Guam Power Authority (GPA) facilities near the PAG

The DEIS indicates that there could be significant impacts to air quality on the island of Guam due to the addition of power generating facilities. Additionally, the DEIS discusses temporary impacts to air quality occurring as a result of construction activities. However, impacts to air quality around the Port are not anticipated to exceed federal thresholds with the military buildup on Guam.

Analysis

The DEIS indicates that significant impacts could occur as a result of the need for additional power for the island with the military buildup. To accommodate the military buildup, part of the long range alternative is to construct another diesel fired power plant adjacent to the existing GPA facility near the Port. However, the scope of the DEIS does not include analyses of impacts to air quality on Guam from the addition of the new power plant. Therefore, the affects of adding a new power plant near the port would be addressed as part of the environmental permitting process associated with the new power plant project at a later date. Should further air quality analysis be included in the DEIS of the long range alternative (as part of the revisions after the comment period), this analysis should be included in the PAG project Environmental Assessment (EA).

The remaining projects associated with the military buildup discussed in the DEIS are not anticipated to affect the PAG project. Any cumulative impacts from the JGPO DEIS and the Port of Guam modernization would be entirely from the military buildup since the PAG project will not add additional cargo or other traffic into and out of the Port. Nevertheless, the DEIS does not discuss cumulative effects of their projects (specifically projects numbered 4, 5, 13 and 35 as shown on Figure 2.5-8 of the DEIS) near the Port. Also, the DEIS does not discuss impacts relating to accessing the Port while the JGPO projects are simultaneously under construction with the Port Modernization project.

J-016-011

Thank you for your comment. Based on the most recent GPA power study discussed in the FEIS, it is unlikely the long-term new power plant will be needed prior to 2017. However, as GPA is the energy provider on Guam, they would make the ultimate decision on a new power plant. Therefore, the FEIS presents only one preferred basic power alternative (Basic Alternative 1). If an analysis of long-term alternatives is required in a supplemental NEPA document, it would be distributed to interested parties, including the Port Authority of Guam (PAG). In a recent project cost and benefit analysis (BST Associates 2009) performed for port improvements, it was determined that proposed port improvement projects would reduce air emissions by reducing the number of hours at berth and the hours of use of terminal operating equipment. Projects that may potentially impact air quality were identified in the cumulative impacts volume (Volume 7, Table 4.3-3); however, detailed analyses could not be performed due to uncertainties associated with future projects. The cumulative impacts analysis does not include specific Guam Road Network (GRN) projects, although it is assumed that any GRN would include alternative access routes to the Port during construction efforts. BST Associates. 2009. Evaluation of Expected Project Costs and Benefits. Supporting Material for the TIGER Discretionary Grant Application Submitted by the Port Authority of Guam. August.



J-016-011

Finally, it appears that public beaches near the Commercial Port may not have been included in the DEIS. The addition of traffic and construction of JGPO related projects could potentially affect air quality at adjacent locations of frequent human use including public beaches.

Recommendations

The DEIS indicates that significant impact to air quality could occur as a result of the need to increase power generation at existing facilities. These impacts are not discussed in the executive summary. General impacts to air quality on the island of Guam should be included in the summary (Table ES-4).

The DEIS does not indicate how traffic into and out of the Port will be accommodated during the transition of military personnel, equipment and other needs to the island. There is concern that with increased traffic there could be queuing on port property and consequently issues with air quality. However, queuing is not discussed in the DEIS. A general discussion of queuing into and out of the Port should be addressed in the DEIS.

The DEIS also does not discuss cumulative effects from the associated projects and the Port's ability to function efficiently. This is particularly important considering modernization of the Port overlaps with the proposed JGPO projects. An analysis of any anticipated impacts that construction of the JGPO projects will have on the Port's ability to move traffic in and out efficiently should be conducted. Additionally, an analysis of how construction of the JGPO projects while the Port is under construction will affect loading/unloading of JGPO equipment and transportation of cargo should be conducted. It appears that the public beaches near the Port have not been analyzed in the DEIS. Beaches along Route 1 are discussed briefly in the document but there is some concern that beaches specifically near the Port were overlooked. If this is the case, information about these areas should be added in the DEIS.

The DEIS discusses best management practices (BMPs) to minimize effects of the military buildup on Guam. BMPs for air quality are not discussed as part of this effort. BMPs for air quality should be included as part of the DEIS document.

Summary Points

- o Impacts to air quality as a result of increase in power generation should be addressed in DEIS executive summary
- o DEIS does not address accommodation of traffic into and out of the Port during the overlapping period when the Port reconfiguration, maintenance and repair project will be constructed and the JGPO project will be taking place.
- o Increased queuing on Port property due to potential could result in air quality issues and should be evaluated
- o Impacts on air quality at the public beaches adjacent to the Port should be evaluated
- o Best management practices (BMPs) for air quality should be included.



J-016-012

Noise Implications

Overview

The DEIS discusses potential noise impacts by different regions on the island. The area of the island discussed in the DEIS that is applicable to the PAG project is referred to as the Apra Harbor area. JGPO projects that have the potential to impact the PAG or add to impacts from the PAG project are as follows:

- o Intersection of Route 11 and Route 1 improvements
- o Improvements to Route 11
- o New diesel power plant adjacent to existing GPA facilities near the PAG

The DEIS indicates that there could be noise impacts on Guam due to additional traffic. These impacts are anticipated to be somewhat temporary during the height of cargo traffic associated with the buildup. However, there could be permanent affects from the increased population on the island and consequent increase in traffic around the island. Generally, the JGPO DEIS regards the Apra Harbor area as having no land uses sensitive to noise. Therefore any addition of traffic, either temporary or permanent, is not anticipated to have an effect on the noise environment of the Apra Harbor area.

Analysis

The DEIS did not discuss the potential impacts from noise on the public beaches near the commercial part of the Port and on the 24-hour security personnel at the Port. The DEIS did not discuss potential noise impacts when the JGPO roadway projects near the Port (i.e. projects numbered 4, 5, 13 and 35 as shown on Figure 2.5-8 of the JGPO DEIS) are planned to be under construction simultaneously with the Port Modernization project. The additive effect of construction equipment on the noise environment could affect the 24-hour security personnel at the Port.

Recommendations

The DEIS does not analyze noise impacts to public beaches near the Port nor does it analyze impacts to 24-hour security at the Port. Analysis of these items should be conducted. Additionally, the DEIS should consider discussing cumulative effects of noise on sensitive areas (i.e. 24-hour security and public beaches) while the JGPO projects (i.e. project numbers 4, 5, 13 and 35) overlap with construction efforts of the Port Modernization project.

Summary Points

- o Noise impacts to public beach areas near the Port and on Port 24-hour security personnel should be evaluated.
- o Cumulative effects of noise on sensitive receptors during the overlap of construction timeframes from the JGPO project and the Port reconfiguration, maintenance and repairs project should be assessed.

J-016-012

Thank you for your comment. The methodology for analyzing noise impacts from traffic is provided in Chapter 8 of Volume 6, Section 8.2.6, and includes noise traffic modeling and overlaying the 66-dB contour line along the road project alignment to determine noise-impacted areas. This analysis did not identify any noise sensitive receptors within the Apra Harbor region. The 66-dB contour line takes into consideration the activity categories and corresponding noise abatement criteria (NAC) as shown in Table 8.2-2. Beaches are considered Category B for which the NAC is 67 dB (exterior) and the Port is considered Category C for which the NAC is 72 dB (exterior). Cumulative impacts are considered for their long-term effect. Noise impacts from construction of port facilities and roads are temporary and would cease upon completion of these projects.



J-016-013

Contaminated Materials Implications

Overview

An overview of contaminated materials affecting locations near the Port was provided. Potential items of concern to the Port include references to the adjacent Power Plant, potential PCB contamination in power poles and the transport of contaminated materials through the Port. Details of the more critical aspects of the contaminated materials review, including consideration whether or not PAG interests regarding contaminated materials are adequately addressed and correctly represented in the DEIS, is provided below.

Analysis

The DEIS suggests potential soil and/or groundwater contamination at the Guam Power Authority (GPA) Cabras Power Plant. In particular, documented site history and site conditions indicate that soil and/or groundwater contamination is likely (refer to Table 17.1-5 in Volume 2, Chapter 17). The table also includes a statement that there was significant non-compliance with former PCB disposal near (GPA) Cabras Power Plant.

PCB fluids for breakers were once used in pole and pad-mounted transformers and capacitors. A field review of power pole and pad-mounted transformers in the Apra Harbor region during inspections of substations and GPA utility buildings indicated that PCB contamination along Route 11 is likely.

The DEIS states that expanded Department of Defense (DoD) missions on Guam would result in an increase in the off-island transport and inter-island transfer of hazardous waste. Hazardous materials usage thresholds in Okinawa suggest similar usage and impacts on Guam following the Marine Corps relocation.

Within the aircraft carrier berthing project description, the DEIS states that accidental releases of petroleum could occur during project-related construction or operations from vehicles, watercraft and equipment which could potentially migrate throughout Apra Harbor. The DEIS describes some best management practices (BMPs) for smaller spills including spill prevention, control and countermeasure plans that will be detailed within stormwater and spill contingency plans.

Recommendations

- Fuel for the new power plant will come through the Port. With the arrival of fuel at the Port, the potential for spills on Port property exists. The DEIS document does not address nor delineate responsibility for cleanup of potential fuel spills on Port property. It is recommended that this be addressed.

The DEIS states that expanded DoD missions on Guam would result in the off-island and inter-island transfer of hazardous waste. It is assumed that this material will be coming through the Port, however, this should be clarified. Similarly, clarification should be determined as to which party is responsible for clean-up and remediation to Port caused by hazardous spills or

J-016-013

Thank you for your comment. The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, nuclear materials, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered "mitigation measures" because these actions are being done as part of existing laws and regulations and not as part of new "mitigation." However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to



J-016-013

other incidents as a result of JGPO project-related hazardous waste.

The DEIS section of the aircraft carrier berthing project briefly describes general BMPs pursuant to Navy response plans regarding small fuel spills on land and in water during construction (including containment booms and deployment of Navy oil response units). However, a statement in the DEIS concludes that larger spills have the potential to migrate within Apra Harbor. It is recommended that more detail regarding larger spill prevention and mitigation be provided.

Summary Points

- o It is recommended that delineation of responsibility of potential fuel spills on Port property as a result of power plant fuel transport be addressed.
- o Similarly, clarification should be determined as to which party is responsible for clean-up and remediation to Port caused by hazardous spills or other incidents as a result of JGPO project-related hazardous waste.
- o It is recommended that more detail regarding larger spill prevention and mitigation be provided in the event of a larger spill in Apra Harbor as a result of the aircraft carrier berthing project.

UXO Implications

Overview

In general, the DEIS describes munitions and explosives of concern (MECs), which includes UXO. A review of the DEIS was conducted to determine if unexploded ordnance (UXO) was identified at locations at or near the Port.

Analysis

According to the DEIS, the Department of Defense (DoD) is coordinating with Guam Environmental Protection Agency (GEPA) to conduct preliminary assessments and site inspections of specific Areas of Concern (AOCs) on the island of Guam in regard to munitions and explosives of concern (MECs).

The description of the aircraft carrier berthing in the DEIS also discusses public injury and/or deaths resulting from UXO encountered on land during construction and in water during dredging operations in Apra Harbor. It states furthermore, that a review of historical records will be performed to assess MECs in the locations where construction or dredging will be conducted. If the records indicate areas of concern, surveys will be conducted to remove MECs.

Additionally, in the DEIS portion of the document which outlines the aircraft carrier berthing, inconsistent information is presented regarding impacts from UXO during construction and operation. Tables 18.2-1 and 18.2-2 in Chapter 18, Volume 4 (aircraft carrier berthing) state that UXO will likely have "no impact" for both Alternatives 1 and 2. However, Table 18.2-3

ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated.

These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the environment from adverse impacts associated with the use of hazardous substances.



J-016-013

summarizes UXO impacts for Alternatives 1 and 2 as "less than significant impact". The general ranking for impacts according to the DEIS is as follows:

- o SI = Significant impact,
- o SI-M = Significant impact mitigable to less than significant,
- o LSI = Less than significant impact,
- o NI = No impact,
- o BI = Beneficial impact

Since there appears to be a difference between a "no impact" and "less than significant impact" ratings, the discrepancy in UXO impacts for Alternatives 1 and 2 should be clarified.

Recommendations

The report does not specifically address UXO on Port property. However, the possibility of UXO encounters during dredging operations (which are in relative close proximity to Port property) were addressed. Therefore, the locations of in-water AOCs identified by DoD and GEPA might be of interest to the Port.

In general, more information regarding where the DoD and GEPA will be conducting land and/or water site inspections for MECs should be provided in the DEIS. In particular, it is important to understand whether some of the AOCs are located near the Port, as this could potentially affect Port operations.

As mentioned, there appears to be conflicting information presented in three tables. In particular, the "no impact" versus "less than significant impact" discrepancy regarding UXO in the aircraft carrier berthing section of the DEIS documents should be clarified. Although this is a detail that may not directly affect the Port, it is something that should be generally clarified in the DEIS.

PB also recommends that a UXO expert review PB's findings and the DEIS document.

Summary Points

- o The DoD and GEPA Areas of Concern (AOCs) site inspections at or near the Port should be addressed.
- o The aircraft carrier berthing section discrepancy between "no impact" versus "less than significant impact" for UXO should be resolved
- o UXO expert should review findings in the DEIS document.



J-016-014

Security Implications

Overview

The DEIS document was reviewed with respect to physical security. Overall, the report was quite thorough. However, inconsistencies regarding the level of detail or level of reader-expected understanding with respect to the force protection descriptions were noted.

Analysis

In Volume 1, force protection language is used but not defined. There is an inherent assumption that all readers of the document know what force protection means.

Further in the document, some details regarding force protection are provided, such as set-off distances, fencing and access control. However, this information is not provided consistently with respect to all aspects of all of the alternatives. It was difficult to understand the environmental impact of a specific alternative without a comprehensive list of potential force protection mitigation efforts.

Recommendations

More detail in the document (without divulging too much sensitive security information to the general public) regarding specific mitigation efforts is likely needed. For example, a list of typical force protection responses should be included in the DEIS.

In addition, the DEIS should include discussion about what type of fencing material will be used throughout the proposed developed areas and how high the fencing will be (including barbed wire – or not). For example, the Port utilizes concrete masonry unit (CMU) walls for security. In general, CMU walls are less attractive to tree snakes, last longer than metal mesh, and help withstand the high surf in the area. From an environmental and aesthetic perspective, it is important to understand what type of fencing will be constructed (metal mesh or CMU blocks) and if barbed wire will be included around the proposed developed areas.

The DEIS mentions that the military expansion will impact cultural sites, tourism sites, and commercial shipping, but does not go into any detail about what the security mitigation measures might be. Perhaps the DEIS could share what type of security measures have been used in similar situations. This would provide more context without giving away too many details.

The DEIS mentions many public utilities and services, such as 911 service and libraries and that they are not sufficient for the military expansion. Will this project pay to expand those public utilities and services? Additionally, a statement regarding the power plant adjacent to the Port should be included, including whether or not additional security measures are necessary at the power plant.

In general, more detail including what type of security measures have been used in similar situations should be provided in the DEIS, without requiring a full evaluation of every security risk and specific security mitigation responses.

J-016-014

Thank you for your comment. General descriptions of physical security structures, such as fencing, are provided as detailed planning has not been completed and there must be some allowances for variance in the final design. Where details were available, the environmental effects were discussed in the document.



J-016-014

The Port was designated a Strategic Port in 2009. There will be a wash down area at the Port which will be used to wash down vehicles driven to the Port from the military staging areas before they are loaded onto ships. Additionally, the Port reconfiguration, maintenance and repair project is proposing setting aside the break bulk area for the military whenever they undertake a mission related to the Strategic Port designation. This will close off the break bulk area to commercial operations and impact Port operations. Within the DEIS, there should be a discussion about how JGPO security measures will impact the Port.

Summary Points

- o The DEIS should define what force protection measures mean and should be applied consistently.
- o Discuss how security measures at the Port will impact the Port.
- o Clarify how procedures for missions related to the Port's Strategic Port designation will impact the Port.
- o State whether or not additional security measures will be needed at the existing power plant as well as the proposed new power plant adjacent to the Port and whether these measures will affect the Port.

J-016-015

Utilities Implications

Overview

A review of utilities, including power generation, potable water and wastewater systems, solid waste and telecommunications was conducted to determine what was presented regarding the Port of Guam in the DEIS. Details of the utility review are provided in the following sections.

Analysis

As a result of the military buildup in Guam, the potential for increased utility usage is likely. For example, in the Executive Summary the DEIS states that some power generating facilities will have increased use under the preferred alternatives. The DEIS also states that wastewater flow increases from military buildup could result in more issues with wastewater and potable water system limits. In particular, upgrading of sewer capacities might be needed. Impacts to potable water was determined to have a "significant impact mitigable to less than significant impact" for Guam Water Authority (GWA).

It is not clearly presented within the DEIS how increases in power, water and wastewater usage due to the military buildup will potentially affect the adjacent Port or other public areas. However, the DEIS only mentions that the pavement strengthening and improvement projects will affect utilities in Apra Harbor along Route 1 and Route 11, including power, navy power, cable television, fiber optic, GWA and Navy sanitary sewer and water. Some utilities would require relocation due to pavement strengthening. It was not specifically stated

J-016-015

Thank you for your comment. The items identified in this comment are not part of the proposed action. The actions of improvements by the Port of Guam have been considered in the EIS as cumulative impacts. Should Federal funding become involved in the financing of those improvements, a separate NEPA document would be prepared by the Federal agency working with the Port. Information in this EIS would be shared with the Port's preparation of their improvement environmental document.



J-016-016

Thank you for your comments.

J-016-015

how the projects will affect utilities at the Port and details regarding when and where the utilities would be relocated were not provided.

Recommendations

It is not specifically addressed in the DEIS document what affect the military buildup will have on the adjacent Port (or other public areas). The DEIS should evaluate how utility demands and relocations as a result of the JGPO actions will affect current Port operations as well as future Port modernization including the reconfiguration, maintenance and repair project.

Summary Points

- o The DEIS should evaluate how utility demands and relocations as a result of the JGPO actions will affect current Port operations as well as future Port modernization including the reconfiguration, maintenance and repair project.

J-016-016

Visual Impact Implications

Overview

An overview of visual impacts was provided in the DEIS for the viewpoints from Asan Bay Overlook, Cabras Island Scenic Vista, Orote Point Scenic Vista and Mount Chachao Scenic Vista. These viewpoints cover the area that also was reviewed for the Port reconfiguration, maintenance and repair project.

- o Asan Bay Overlook: located in the War in Pacific National Historic Park on the southwest coast of Guam, this viewpoint provides a panoramic view of the shoreline.
- o Cabras Island Scenic Vista: Cabras Island is a finger-like reef island, which forms the shoreline of Apra Harbor. The viewpoint provides a view of the west coast of Guam
- o Orote Point Scenic Vista: located on the westernmost point of Orote Peninsula, the viewpoint provides unobstructed views of the deepwater port to the south.
- o Mount Chachao Scenic Vista: one of the designated units in the War in Pacific National Historic Park. Viewpoint from the summit shows and overview of Apra Harbor and Orote Point.

Although substantial changes to the visual environment were noted for specific areas of Guam, the DEIS states that these changes would be expected to be brought to a level of less than significant, with mitigations measures in place.

Analysis

The affected environment discussion in the DEIS is adequate and correct to establish potential environmental consequences such as substantial modification of natural-appearing landscapes located adjacent to public roadways and transforming the relatively open visual

J-016-017

Thank you for your comments.



J-016-016

character of some areas into densely developed areas with numerous buildings, roads, parking lots, sidewalks, and landscaping. Viewpoints in common with the Port reconfiguration, maintenance and repair project include the Asan Bay Overlook, Cabras Island Scenic Vista, Orote Point Scenic Vista, and Mount Chachao Scenic Vista. The environmental consequences discussion in the DEIS does not conflict with findings expected for the Port reconfiguration, maintenance and repair project. Issues are adequately addressed and no missing information was noted. The DEIS finding that no significant visual impacts are anticipated in the Apra Harbor area is consistent with the Port's analysis. Additionally, potential mitigation measures are sufficient and do not present adverse issues for the Port reconfiguration, maintenance and repair project.

Recommendations

Information provided in the DEIS concerning visual impacts appears to be consistent with the PAG reconfiguration, maintenance and repair project. Therefore, recommendations for further information or resolution of discrepancies do not appear to be needed.

Summary Points

- o Visual impact assessment appears consistent with the Port reconfiguration, maintenance and repair project.

Socioeconomic Implications

Overview

An overview of socioeconomic implications was provided in the DEIS. The analysis covered the following areas:

- o Historical and Economic Overview
- o Population Characteristics; overall trends and demographics, and military demographics.
- o Economic Characteristics: employment by industry, occupational profiles, income profiles, price adjusted income, unemployment, temporary workforce housing, and overview of current GovGuam capacity issues
- o Public Services

J-016-017

Analysis

The environmental consequences discussion in the JGPO DEIS does not conflict with findings expected for the Port reconfiguration, maintenance and repair project. Socioeconomic impacts are anticipated to be largely island wide in nature with little difference in effects among the various alternatives analyzed in the DEIS:

- o Population impacts: including active-duty Marines, dependents, and rotating transient Marines (about 19,500 people), the proposed actions would add about 65,000



J-016-017

residents to Guam's population in 2014 and a subsequent more stable population of approximately 31,000 by 2020.

- o Economic Impacts: most long-term economic impacts would be beneficial, though the construction boom would entail substantial growing pains related to rapid population influx and housing shortages. These impacts combined with others such as noise and traffic, would substantially impact the quality of life on Guam for several years, until the steady-state military operational phase is in place.
- o Public Service Impacts: many public services offered by GovGuam would need to increase professional staff to service the new population. Most of these agencies would need to rapidly expand their services and staff during the 2012-2014 peak, then cut them back as construction ends.

J-016-018

- o Sociocultural Impacts: the sociocultural impacts by their nature are complex and would have no single outcome measure. Established patterns of military outreach to Guam's civilian community are likely to minimize the sort of day-to-day irritants that affect the average citizen.

J-016-019

- o Significant impacts on environmental justice issues would occur according to the DEIS. However, the PAG reconfiguration, maintenance and repair project is not expected to adversely impact socioeconomics or impact environmental justice and therefore, would result in no additive cumulative impacts.

J-016-020

In general, socioeconomic issues in the DEIS are evaluated in an island-wide context and there is no specific indication or assessment that these issues could be temporarily impacted by actions or impacts at the Port, ie. say by temporary overloading of the cargo handling capabilities of the Port, or temporary disruptions to cargo flow out of the Port when congestion occurs with Port gate work, utilities work in Route 11 ROW, and ongoing work to strengthen Route 11 and make improvements to the Route 11-Route 1 intersection. It is unclear if issues related to cargo flow in and out of the Port would have impacts needing to be evaluated.

Recommendations

Potential mitigation measures identified without a concurrent Port project are sufficient. If the Port Improvement Project is successfully funded and moves forward, the assessment should be expanded to include or rule out cumulative socioeconomic impacts as relates to the Port reconfiguration, maintenance and repair project.

Summary Points

- o Information provided on socioeconomics appears to be consistent with post-construction impacts of the Port reconfiguration, maintenance and repair project

J-016-018

Thank you for your comment. While population increases can highlight cultural differences, they also present unique and new opportunities for cultural learning and sharing. As indicated in the FEIS (Volume 2, Section 16.2.5; Volume 4, Section 16.2.5), the DoD plans for cultural sensitivity orientation and awareness programs which will focus on mutual respect and tolerance and strive to educate all incoming and currently present military personnel on the rich and varied cultural history that has created the culture that is Guam today. Finally, the DoD plans to increase military civilian joint activities in order to foster strong and mutually beneficial military civilian relationships that include the sharing and understanding of culture.

J-016-019

Thank you for your comment.

J-016-020

Thank you for your comment.



J-016-020

- o Temporary economic impacts may occur during the period when the Port project moves forward and there are disruptions to Port cargo handling capability and the flow of goods into and out of the Port via the temporarily congested Route 11 and the Route 1-Route 11 intersections.

J-016-021

Historic and Cultural Resources Implications

Overview

The JGPO DEIS discusses cultural resources in Volume 2, Chapter 12, environmental consequences in Volume 4, Chapter 12 and cumulative impacts in Volume 7 Chapter 4. Impacts from connected actions such as roadways and utilities are in Volume 6, Chapter 14.

Analysis

Port interests regarding historic and cultural resources are adequately and correctly represented in the DEIS. No historic properties are identified on Cabras Island, and so no impacts are identified. Moreover, the likelihood of undocumented archaeological resources on Cabras Island is appropriately identified as low. Submerged cultural resources in Apra Harbor are identified, and the proposed actions should have no effect on them.

Regarding cumulative impacts, three Port projects are identified as future actions:

- Commercial Port Improvements (Identified as AH-19 in Table 4.3-1, which identifies a Notice of Availability for a Draft EIS published 8-10-7)
- RFP for construction at the Port (identified as AH-8 in Table 4.3-1).
- Construction and commissioning of facilities, equipment and amenities for "Break Bulk West" (identified as AH-9 in Table 4.3-1)

Project AH-19 is identified as outside the temporal horizon for their cumulative analysis. The JGPO DEIS estimates potential impacts from the remaining two projects (AH-8 and 9 above) and estimates no adverse impacts to cultural resources. Typically, only resources that could be adversely affected by a proposed action are considered for cumulative analyses.

Recommendations

The presentation of the specific JGPO Area of Potential Effects (APE) in Volume 4 Chapter 12 should be clarified. The chapter needs to illustrate the physical and geographical relationship between the JGPO APE, and the Port's property. The chapter identifies a "proposed channel" on its two figures, but nowhere does it state whether this is the entire APE or not. Known historic properties in Apra Harbor should be clarified on figures and in text to avoid any contradiction in the future. An unidentified red dot is plotted within the proposed channel in Figures 12.2-1 and 12.2-2, which is outside the No Training area. The document should identify this resource and how it is not impacted, if it is within the proposed channel. In the Apra Harbor section of the off-base roadway section, Route 11 on Cabras Island should be changed from a "Medium" probability for encountering undocumented archaeological resources during construction, to a "No/Low" probability area.

J-016-021

Thank you for your comment. The potential impact area is identified in Figures 12.2-1 and 12.2-2. The channel is considered to be the area of direct impact. Both direct and indirect impacts from channel dredging and operations are discussed in Section 12.2. Labels and actual locations of historic properties are not depicted on maps in public documents in accordance with the Archaeological Resources Protection Act. The location of Port property has been clarified in the figures and the area of Route 11 on Cabras Island has been changed to a "Low/No Probability" area.



Summary Points

J-016-021

- o Presentation of JGPO Area of Potential Effects and known historic properties in Apra Harbor should be clarified. The DEIS needs to be specific as to the Area of Potential Effects for each alternative in Chapter 4, and needs to precisely plot locations of known historic properties.
- o Route 11 on Cabras Island should be changed from a "Medium" probability for encountering undocumented archaeological resources during construction, to a "No/Low" probability area.

J-016-022

Overall DEIS Review Conclusions & Recommendations

PB's review of the DEIS found that the document often did not evaluate the potential for impacts of JGPO's proposed actions on Port operations and facilities. The DEIS is flawed regarding both potential use of the Port property and consideration of effects on Port operation, efficiency, and mission, as well as the economic burden potentially imposed on the Port. It is possible that some portions of the proposed actions could have significant effects on Port operations and access and conflict with the Port's proposed modernization program.

The JGPO DEIS also did not consider the effects of their proposed actions on the Port's proposed reconfiguration and maintenance and repair project, ie. the pending ARRA/USDA Port Improvement Project. This is significant because there is overlap between the timeframes of the proposed JGPO project (2010-2020, with peak in 2014) and the Port's proposed reconfiguration and maintenance and repair project (2010-2013). Furthermore, the DEIS has identified a direct conflict with this project in its discussions concerning the location for a dredged material dewatering facility and proposed the beneficial use of the dredged material resulting from the proposed actions as fill for the Port's modernization program. The proposed dredged material dewatering facility is located on Port property designated for the location of an expanded container yard, fumigation area, potential helipad for DOD, fencing, DOD access in support of the Strategic Port designation, and new gates, canopies and other supporting terminal infrastructure.

Below is a summary table of the key findings from PB's review of the DEIS:

J-016-022

Thank you for your comment. DoD will work with the Port of Guam to ensure that none of the suggested conflicts would occur. The use of dredged material from the proposed CVN berthing project and/or Inner Harbor dredging for beneficial reuse at the Port would be a decision by the Port of Guam. The proposed port improvement projects are documented in both indirect and cumulative impacts discussions contained in Volumes 6 and 7 of the EIS.



**JGPO DEIS REVIEW
SUMMARY OF KEY FINDINGS**

J-016-023

Cargo Forecasts

- Minimizing impacts to marine traffic in Apra Habor and roadway traffic into and out of the Port hinges on the Port being able to modernize its facilities. This itself hinges on the Port being able to obtain sufficient funding for its Phase IA and Phase IB maintenance and repair projects.
- Phase I A funding decisions should be released by February 17, 2010. If funding is sufficient to execute the Phase I A project, cargo handling capability should be significantly improved by 2013. If less than the full amount of Phase I A funding is authorized, the project will need to be redefined and redesigned in order to maximize the benefit of what can be accomplished within available funding.
- Following full or partial funding of the Phase I A project, Phase IB funding in the form of federal grants and appropriations and cargo tariffs will need to be identified. Failure to secure Phase IB funding will put the Port's main wharf structures at increasingly high risk of catastrophic failure in the face of ever increasing cargo throughput and the always present possibility of tsunamis and seismic events.
- The Port's efforts to perform standalone maintenance and repair work in a manner that allows for near-term expanded cargo handling capability mandates that uplands work be performed ahead of critical in-water work. This puts the Port at risk while it attempts to accommodate the cargo impacts of the JGPO projects on Guam.

J-016-024

Use of Port Property

- Proposed power plant at Piti adjacent to Port appears to use property owned by the Port.
- Use of the Route 11 ROW for relocating utilities needs to be coordinated with utility relocations being considered as part of the ARRA/USDA Port Improvement Project
- Proposed location of a dredge dewatering facility on property being used to reconfigure and expand the Port as part of the ARRA/USDA Port Improvement Project presents direct conflict between the projects.

J-016-025

Dredging

- Polaris Point dredging could impede vessel access to the Port.
- Polaris point dredging would cause competition of contractor resources needed for dredging for the Port Modernization Program.
- The Port (Commercial Port Field 1) has been identified as a feasible location for a dredged material dewatering facility. The location in the northeastern portion of the Port directly conflicts with the location of the new gates and other structures and container storage areas proposed for the Port reconfiguration, maintenance and repair project.

J-016-023

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of the Port of Guam and the interest to have DoD fund improvements to this facility. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam. While DoD is not directing the Port improvements, an amendment to the 2010 Defense Appropriations Bill is proposed in Congress which calls for the transfer of \$50M of DoD FY10 funds to the Department of Transportation to fund Phase I of the port improvements.

J-016-024

Thank you for your comment. The potential long-term alternative of a new power generating facility at Piti was only presented at a programmatic level, not project specific. This alternative has been deleted in the Final EIS. Coordination on the use of Route 11 right-of-way for utility upgrades would be coordinated with other projects anticipated in this area during detailed design and construction.

J-016-025

Thank you for your comment. The northern limit of dredging of the Polaris Point alternative is south of the main entrance into the Commercial Port so commercial traffic entering or leaving the Commercial Port should not be impeded as a normal course of action. Increased vessel traffic may occur due to the barges/scows that may be used for ocean disposal if that disposal method is permitted and employed.

If the Port Modernization Program coincides with the timing of the dredging for the aircraft carrier berth, there could be competition between the available dredges that would be needed for both actions at



J-016-025

- The Port has been identified as a feasible location for the beneficial re-use of dredged material to be used as fill for the Port Modernization Program. Use of the material as fill at the Port may be infeasible due to cost, technical and timeframe reasons.
- Although the 2005 DMMP by Weston found the Port to be a feasible site for a dredged material dewatering facility and beneficial reuse of dredged material it also stated that social impacts from noise and traffic are problematic but that management plans could be developed. These mitigative plans are not included in the DEIS.

J-016-026

Port Projects Included in the Cumulative Effects Analysis

- AH-8 appears to be the Port owners engineer contract held by PB and would in of itself not have impacts and therefore should be deleted from the DEIS.
- Port projects to be conducted under the Port owners engineer contract such as the Port reconfiguration, maintenance and repair project should be included in the DEIS.
- AH-9 and AH-19 appear to be from the Port Master Plan and are not accurately represented.

J-016-027

Ecology

- In the direct vicinity of the Port, in the cove between the glass breakwater facility and fuel facilities and cement area, the DEIS identified a known sea turtle nesting area.
- Other plant and animal species identified by NOAA in the direct vicinity of the Port include sensitive coral, algae, macroalgae, turf algae and bigeye scad fish. The NOAA also identified a coral area of special significance near the Glass Breakwater area. The Port area also was described by Navy studies in 2005 as containing the highest level of zooplankton (it is unclear in comparison to what) and also contains finfish larvae and mollusks.

J-016-028

- Invasive species including the brown tree snake (BTS), flatworms, various insects and some plants may be introduced through increased cargo through the Port potentially impacting the Port and the remainder of Guam. The DEIS does not discuss measures to prevent the introduction of invasive species.
- The marine environment in the vicinity of the Port is characterized as sensitive; containing species of social concern, threatened, endangered, candidate and, in the case of the Spinner dolphin, species of greatest concern. The area also is characterized as containing the highest level of zooplankton and also contains finfish larvae and mollusks. A coral area of special significance was identified near the Glass Breakwater area. The DEIS did not provide the precise location of these species and therefore, the actual occurrence of these species at the Port can not be

the same time.

The Commercial Port Field 1 was not included as an option in the Volume 4 analysis since only those confined disposal facilities on DoD lands are expected to be used for upland disposal of the dredged material should that method of disposal be employed. Therefore, no impacts to the new gates or other structures referred to in this comment would occur. No mitigative plans for Commercial Port sites would be needed as social and environmental impacts such as noise and traffic would be avoided.

Comment noted regarding use of dredged material for the Port Modernization Program. As described in Chapter 2, Volume 4, this is only one of several potential options for the use of dredged material generated from the proposed action. A final decision would be made during the permitting phase. The Navy has a memorandum of agreement with the Port Authority of Guam to provide fill from proposed dredging projects should the materials be deemed suitable and the timing and logistics of both projects work out.

J-016-026

Thank you for your comment. The Final EIS cumulative project list has been updated.

J-016-027

Thank you for your comment. See response to previous similar comments. The text in the EIS, along with supporting Figures showing general location, provides an appropriate level of information for the reader and impact analysis.



	determined from the DEIS.
J-016-029	<p>Traffic</p> <ul style="list-style-type: none"> The DEIS should address impacts to Port truck movements (including military shipments) on the roadway network due to construction activity on Routes 1 and 11. The DEIS should formally address impacts to Port container movements (including military shipments) due to bridge replacements on Route 1 north and south of Route 11. The DEIS should assess the impacts of constructing a new power plant at the Cabras/Piti site since it may have some affect on traffic flow on Route 11. Table 2.5-4 is further evidence of overlapping schedules between GRN activities and Port repair and maintenance work. Note Route 1 and 11 improvements shown as being completed in 2011. The timing of improvements to Route 11 and the intersection of Route 1/Route 11 shows implementation in 2011. Upgrades to Route 1 north and south of Route 11 are expected in 2013. These coincide and conflict with the Port reconfiguration, maintenance and repair project construction schedule (2010-2013). The DEIS states that construction of the GRN improvements "would occur from 2010 to 2016 with peak construction in 2013". This coincides with the Port's reconfiguration, maintenance and repair project construction schedule of 2010-2013. The level of service (LOS) for the intersection of Route 1 and Route 11 is shown to be at Level E by 2014 during the PM peak hour which indicates heavy congestion and high delays. This high level of congestion may affect commercial truck movements to/from the Port.
J-016-030	<p>Noise</p> <ul style="list-style-type: none"> Noise impacts to public beach areas near the Port and on Port 24-hour security personnel should be evaluated. Cumulative effects of noise on sensitive receptors during the overlap of construction timeframes from the JGPO project and the Port reconfiguration, maintenance and repairs project should be assessed.
J-016-031	<p>Air Quality</p> <ul style="list-style-type: none"> Impacts to air quality as a result of increase in power generation should be addressed in DEIS executive summary DEIS does not address accommodation of traffic into and out of the Port during the overlapping period when the Port reconfiguration, maintenance and repair project will be constructed and the JGPO project will be taking place. Increased queuing on Port property due to potential could result in air quality issues

J-016-028

Thank you for your comment. The DoN is developing a Micronesia Biosecurity Plan (MBP) to address potential non-native invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). The plan is intended to be a comprehensive evaluation of risks in the region, including all Marine Corps and Navy actions on Guam and Tinian. For additional information on the MBP and existing and interim measures for non-native invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-016-029

Thank you for your comments. The FHWA will coordinate all off-base roadway projects in the area of the port with the PAG.

J-016-030

Thank you for your comment. Noise impacts are expressed as noise levels at the nearest sensitive receptor. For each project analyzed in this EIS located near the port, the nearest sensitive receptor were residences or schools and located closer to the project than the nearest beach. Port 24-Hour security personnel, would likely receive elevated noise levels from port activities. Most activities associated with the proposed action would be similar. OSHA regulations require hearing protection, port



J-016-031

- and should be evaluated
- Impacts on air quality at the public beaches adjacent to the Port should be evaluated
- Best management practices (BMPs) for air quality should be included.

J-016-032

- Contaminated Materials**
- Likely soil and groundwater contamination between the Port and Route 1 due to Cabras Power Plant's (Piti) history of non-compliance with PCB disposal requirements and utility poles along Route 1 which potentially contain PCB transformer oil. The DEIS does not state the potential for contamination to affect Port property. The DEIS does not state who is responsible for clean-up of potential spills or other releases of contaminated materials from cargo containing contaminated materials on Port property. The DEIS also does not provide specific information on how spills or other releases of contaminated materials on Port property will be prevented.
 - It is recommended that delineation of responsibility of potential fuel spills on Port property as a result of power plant fuel transport be addressed.
 - Similarly, clarification should be determined as to which party is responsible for clean-up and remediation to Port caused by hazardous spills or other incidents as a result of JGPO project-related hazardous waste.
 - It is recommended that more detail regarding larger spill prevention and mitigation be provided in the event of a larger spill in Apra Harbor as a result of the aircraft carrier berthing project.

- UXO**
- The DoD and GEPA Area of Concern (AOCs) site inspections at or near the Port should be addressed.
 - The aircraft carrier berthing section discrepancy between "no impact" versus "less than significant impact" for UXO should be resolved.
 - UXO expert should review findings in the DEIS document.

J-016-033

- Security**
- The DEIS should define what force protection measures mean and should be applied consistently.
 - Discuss how security measures at the Port will impact the Port.
 - Clarify how procedures for missions related to the Port's Strategic Port designation will impact the Port.
 - State whether or not additional security measures will be needed at the existing power plant as well as the proposed new power plant adjacent to the Port and

employers require employees to wear hearing protection in high noise areas.

J-016-031

Thank you for your comment.

The DEIS executive summary provides a general overview of the nine volumes of the DEIS. It is not possible to include all issues of concern in the executive summary and Section ES-7 refers to the reader to the Volume 2-7 for impacts.

The traffic analysis covers traffic forecasts in Apra Harbor area, and therefore traffic in and out of the Port area was considered in the analysis. As the air quality impact analysis focused on the worst-case congested locations, an analysis of other less congested locations, such as in and out of the Port is not necessary as emission levels would be lower. Volume 6 provides details of impacts from roadway projects. impact analysis focuses on the worst-case congested locations and analysis of other less congested locations is not warranted. Volume 6 details the roadway project impact.

Marine vessel traffic forecasts, including material transporting vessels, were not considered because the emissions from these operations are not under the control of DoD and therefore not subject to the general conformity rule analysis. However, the results of the Port operation analysis, based upon the historical number of ships the Port handled and not on air emissions, was determined to be less than significant in the FEIS. In addition, the commercial port transporting service air emissions do not meet the indirect emissions criteria required for inclusion in the general conformity analysis. Port air emissions are not under the control of DoD, therefore, were not calculated in the air quality sections. The FEIS added an explanation indicating why commercial port transporting service air emissions were excluded.



J-016-033

whether these measures will affect the Port.
<ul style="list-style-type: none"> The DEIS should define what force protection measures mean and should be applied consistently. Discuss how security measures at the Port will impact the Port. Clarify how procedures for missions related to the Port's Strategic Port designation will impact the Port. State whether or not additional security measures will be needed at the existing power plant as well as the proposed new power plant adjacent to the Port and whether these measures will affect the Port.
Utilities
<ul style="list-style-type: none"> The DEIS should evaluate how utility demands and relocations as a result of the JGPO actions will affect current Port operations as well as future Port modernization including the reconfiguration, maintenance and repair project.
Visual Resources
<ul style="list-style-type: none"> Visual impact assessment appears consistent with the Port reconfiguration, maintenance and repair project.
Socioeconomics
<ul style="list-style-type: none"> Information provided on socioeconomics appears to be consistent with the the Port reconfiguration, maintenance and repair project.
Historic and Cultural Resources
<ul style="list-style-type: none"> Presentation of JGPO Area of Potential Effects and known historic properties in Apra Harbor should be clarified. The DEIS needs to be specific as to the Area of Potential Effects for each alternative in Chapter 4, and needs to precisely plot locations of known historic properties. Route 11 on Cabras Island should be changed from a "Medium" probability for encountering undocumented archaeological resources during construction, to a "No/Low" probability area.

J-016-034

J-016-035

J-016-036

J-016-032

Thank you for your comment. The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, nuclear materials, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered "mitigation measures" because these actions are being done as part of existing laws and regulations and not as part of new "mitigation". However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to

DEIS
REVIEW COMMENTS SHEET

No.	Ver	Chpt	Pg	Line, Tab, Fig	Comment	Commenter (last name)	Agency/Org
J-016-043		ES	15-5	Paragraph 2	Force protection and mitigating measures should be described at a lower level so that non security readers of the document understand what's required.	Walsh	PS
2	1	1	1-30	Section 1.8.3	DEIS omits the Ports Subcommittee for Guam Civilian Military Task Force (CMTF) working together on common tasks affecting Guam. Inference is military and those affected are commercial.	Perly/Boseenthal	PS
3	1	1	1-45	Table 1.11.1	CGM&O site is 8 km from Apra Harbor, includes usage by Port projects.	Perly	PS
4	1	2	2-12	(Dredging)	One of the scenarios evaluated in the DEIS involves DDEB beneficial re-use of the MERS dredged material for FAD's expansion program.	Perly/Boseenthal	PS
5	1	2	2-36	Section 2.6	Consider adding additional security measures necessary for public activities (activities) and services (such as electricity and roads) that serve the US military needs.	Walsh	PS
J-016-037		2	2-27	Section 2.6	Guidelines to support the US military need to be constructed in a defensible manner (beyond DPM and #10WA).	Walsh	PS
7	1	2	2-31	Section 2.7.2.4	Port.	Perly	PS
8	1	2	2-35	2.7.2.1	DEIS states that separate, close side and top rail would be imported from off island. It is assumed that this material would come through the	Perly	PS
J-016-038		2	2-36	2.7.2.2	DEIS states that grading equipment, trucks, cranes and steel equipment would be imported. It is assumed that this equipment will come through the Port.	Perly	PS
10	1	3	3-11	Figure 3.3.1	Purple area shown on the legend is not visible.	Walsh	PS
11	2	3	3-31	Figure 3.3.3	The proposed EIS boundary is not clear on the map.	Walsh	PS
12	1	3	3-12		Describe dredging at Pater's Point.	Boseenthal	PS

Page 1

ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the environment from adverse impacts associated with the use of hazardous substances. Regarding potential impacts associated with hazardous substances and the various potential actions (construction, operations, etc.) have been identified in Volume 2, chapter 17.

J-016-033

Thank you for comment. Additional information has been added to the discussion of the Commercial Port in Volume 6 of the Final EIS.

J-016-034

Thank you for your comment.

J-016-035

Thank you for your comment.

J-016-036

Thank you for your comment. The potential impact areas for each alternative are shown in Figures 12.2-1 (Alternative 1) and 12.2-2 (Alternative 2). The exact location of archaeological sites has not been depicted on maps distributed to the public in accordance with the Archaeological Resources Protection Act. The probability area at Route 11 on Cabras Island has been changed to "Low/No Probability."

DEIS REVIEW COMMENTS SHEET							
No.	Ref	Chpt	Pg	Line, Tab, Fig	Comment	Commenter (last name)	Agency/Org
J-016-039	2	2	2-99	Section 2.4.1.1	Emergency (biosecurity specific) Plan needed for ACT de-boards projects related to exports and imports. It is assumed this would impact Port.	Peck	PS
J-016-043	7	3-74	Paragraph 1		This seems to be one of the few locations in this volume that discusses specific force protection actions. Consider whether more areas/functions should have this level of specificity.	Walsh	PS
	3	2	2-93 and 2-92	Subsection: Driveway Material Disposal	DEIS states that PAS has prepared a Wharfer Plan with prepared 18 acres of land to support new commercial port cargo handling in Apra Harbor. Potential biosecurity evaluation project is an ambitious endeavor that may be complicated with cost, feasibility and ecological concerns and also requires full environmental documentation; up to 1.5 acre of fill may be needed. Also mentions PAS-Navy MDCs concerning Navy supply of fill.	Peck/Rosenthal	PS
	4	2	2-328	Paragraphs 1 and 2	This seems to be one of the few locations in this volume that discusses specific security measures. Consider whether more areas/functions should have this level of specificity.	Walsh	PS
	5	2	2-304	Subsection: Proposed Operations	This seems to be one of the few locations in this volume that discusses specific force protection actions. Consider whether more areas/functions should have this level of specificity.	Walsh	PS
	6	2	2-303	Section 4.3.2.3	Consider whether the force protection capabilities need to be described.	Walsh	PS
	7	3	3-13	Paragraph 1	Local function, reports entry access requirements on Gates located at the Port in 2003.	Peck	PS
	8	4	4-43	Section 4.3.4.1	DEIS states Apra Harbor is located port in MLC zoning. It is assumed that PAC is part of this.	Peck	PS
	9	4	4-43	Section 4.3.4.1; List Paragraph	Port Authority Reach is required that to berthing with greater than 30% of sea like receiving Goods Water Quality Standards. This is an environmental characterization of Port property.	Peck	PS
	10	4	4-54 and 4-53	Subsection: Surface Water	Under discussion of surface water, DEIS mentions Commercial Port Bridge along Route 11 is at the edge of the 100 year flood zone. Also mentions that most of Apra Harbor is within this zone and that there are no base flood elevation determinations. It is assumed that the Port is located (and this is correct).	Peck	PS
	13	4	4-83	Subsection: Non-DoD Land (Construction)	65,000 CY of soil fill imported for ranges complex. It is assumed that this is through the Port.	Peck	PS
	12	4	4-129 and 4-139	Section 4.2.8.3	Consider whether the force protection capabilities need to be described.	Walsh	PS
J-016-040	2	5	5-2	Paragraph 1	Portion of Guam within a 2.1 mile radius of Piti Power Plant in Piti is in the Port is within a non-attainment area for NO _x air pollution.	Peck	PS
	14	5	5-23	Table: Air Quality	The DEIS does not include modeling on their property step and out of the site as a result of an increase in capacity will occur.	Peck	PS
	15	5	5-24	Paragraphs 1 and 2	JGPO should analyze the cumulative effects of the Port reconfiguration, maintenance & repair project.	Peck	PS
J-016-041	2	6	6-54	Table: 6-1-6	JGPO DEIS did not evaluate noise impacts at the public beaches near Route 11 and the Port. Additionally JGPO DEIS did not evaluate noise impacts within the harbor vicinity entrance of the port.	Howe	PS
J-016-042	8	8.1		Subsection: Submerged Lands Characterization Subsection: Land/Submerged Land Ownership and Management	Mentions that shipping is addressed in Volume 2, Chapter 14 under Marine Transportation. It is assumed that shipping through the Port would be included.	Peck	PS
	18	8	8-36	Management	Mentions that PAS manages some of the submerged lands in Apra Harbor and Commercial Traffic in the Harbor.	Peck	PS
	19	8	8-72	Subsection: SO2 Area	Mentions that Exclusive Safety Clearity Distance (ESCD) Area may encroach the navigation channel through portions of water wharf at the Port Authority of Guam.	Peck	PS
J-016-037	20	8	8-47		Route 11 along Commercial Port is to be rehabilitated. Route 11 Intersection Improvements will also be occurring along with bridge replacement and pavement strengthening along Route 5. Timing of this with Port rehabilitation and repair and non-functional project was not considered. Roadway improvements are planned to assist Port access roads (including Route 11 and Route 11). Mentions sea-borne roadway rehabilitation project on Route 10 from the Port to Route 1. Intersection improvements will be made to Route 2 and Route 13. Bridge replacement and pavement strengthening will occur along Route 1 and Route 13. It was not clear whether DEIS considered the effect on the Port's establishment, repair and reconfiguration project.	Rosenthal	PS
	21	8	8-48	Paragraphs 1 to 3		Peck/Rosenthal	PS

J-016-037

Thank you for your comments. The US military's needs, particularly in the movement of military vehicles between military installations, were taken into consideration in deciding on the roadway improvement projects. Select bridges will be replaced to increase their carrying capacities and their widths. In addition, select roadways will be strengthened and widened.

J-016-038

Thank you for your comment.

DoD would coordinate capacity and throughput issues with the Port.

Dark purple is shown to highlight the preferred alternative.

The proposed SDZ is shown as a dashed line.

J-016-039

Thank you for your comment. DoD is committed to developing the Micronesian Biosecurity Plan and developing interim measures to prevent introduction of non-native invasive species.

J-016-040

Thank you for your comment. As noted in the comment, parts of Apra Harbor, including the area proposed for the aircraft carrier berthing, are within a SO₂ nonattainment area due to emissions associated with the operation of the Piti Power Plant (see Figure 5.1 of Volume 2). Under the GCR, emissions associated with all operational and construction activities from a proposed federal action, both direct and indirect, must be quantified and compared to annual de minimis (threshold) levels for pollutants that occur within the applicable nonattainment area.

DEIS REVIEW COMMENTS SHEET							
No.	Vol.	Page	Fig.	Line, Tab, Fig.	Comment	Commenter (last name)	Agency/Org.
J-016-042	2	8	8-55		Sub-section: Beneficial Invertebrate Species States that PAG Master Plan includes a proposed 18-acre area for expansion of fast land to support new commercial port cargo handling in Apra Harbor.	Peck	FB
J-016-043		10	10-61	Figure 10.1-23	Indicates east end of commercial port area is characterized as scrub forest / identifies vegetation commitment on Port Property.	Peck/Dykstra	FB
	24	10	10-69	Table 10.1-20	Indicates there are 7 species of Bonytutes that are listed as threatened, endangered or candidate species at Naval Base Guam.	Sykora	FB
	25	20	10-64	Figure 10.1-24	Figure indicates sea turtle nesting area near the Port.	Sykora	FB
	26	10	10-66	Figure 10.1-25	Shows 24 roadway improvements at Apra Harbor. Indicates improvements will encroach on fish habitat and target areas. Inference is part of this may be on Port property.	Peck/Dykstra	FB
J-016-039	2	10	10-67	Table 10.1-22	Indicates there is one endangered bird species (Marlene common swift) within Apra Harbor region BSA for proposed BSM project.	Sykora	FB
	10-80 and 10-81	81		Section 10.2.1.3 (Wildlife)	Identifies potential harm to fragile ecosystems on Guam from the introduction of invasive species due to increased traffic among the islands from the movement of personnel and materials. It is inferred that materials would move through the Port.	Peck/Dykstra	FB
	29	2	10-89	Section 10.2.1.3 (Wildlife)	States that existing control and containment activities at air and sea ports for BSA are insufficient to deal with the risk associated with the increased cargo and personnel movement from Guam to other vulnerable destinations. Inference is that this is an issue for Port security.	Peck	FB
	30	2	10-126	Paragraph 1	Discusses ecological transfer of freshwater species on Guam and other islands due to shipment of supplies, equipment and household goods. Inference is water would move through the Port.	Peck	FB
	31	2	10-136 and 10-137	Control (Batteries and St)	Navy would notify the point of destination port in the event of DOD related vehicles and equipment leaving Guam without inspection by USFA and Wildlife Service. Inference is that some of this could be shipped through Port.	Peck	FB
	32	2	10-137 to 10-139	Control (Batteries)	Sub-section: Invasive Species Avoidance, Mitigation and Control (Batteries) States the need for a comprehensive approach to control invasive species exports, imports, and spread. Inference is that some of these goods would go through the Port.	Peck/Dykstra	FB
	33	2	11-42	Hg 11.3-11	Indicates sensitive coral, sea urchin, mangrove and reef algae benthic habitats and potential sea turtle nesting areas and bigger sand fish surrounding the Port. Also, coral area of special significance to the area broadcast.	Peck/Sykora	FB
	34	2	11-43	Paragraph 6	All of Apra Harbor is designated an Essential Fish Habitat (EFH).	Dykstra	FB
	35	2	11-43	Paragraph 7	The Port area contains highest level of protection; other categories include British Navy, developed areas and intertidal (mollusks).	Peck/Dykstra	FB
	36	2	11-44	Paragraph 3	Threatened green sea turtle and endangered hawksbill sea turtle are special status species exposed in Apra Harbor.	Sykora	FB
	37	2	11-51	Paragraph 1	American Samoa 13 roadway improvements would impact Port traffic.	Peck	FB
	38	2	11-51	Sub-section: Other	Less than significant impact to marine flora, fauna, invertebrates and BSM for Alternative 1.	Sykora	FB
	39	2	11-53	Figure 11.3-3	Marine sea turtle nesting area Port.	Peck	FB
	40	2	11-71	Sub-section: Operations	Mentions that increased ship traffic may disturb organisms living in upper water column.	Sykora	FB
	41	2	11-71	Sub-section: Non-Native Species	Discusses Regional Invasibility Pests and Risk Analysis for terrestrial and marine biocommunity for commerce to Micronesia through Ports. Inference is PAG is a player in this.	Peck	FB
	42	2	11-73	Paragraph 1	Designated material disposal regions include 40 for the PAG expansion program.	Peck/Hosenthal	FB
	43	2	11-78	Table 11.3-13	Indicates that Navy determined no adverse impact on BSM during construction and operation for Apra Harbor.	Sykora	FB
	44	2	11-49	Paragraph 2	States what kind of Navy procedures must be followed to obtain access to Paget Cove. Unclear whether security measures be added to Paget Cove.	Walsh	FB

Attainment pollutant emissions from construction and operation activities associated with Air Carrier Berthing on Guam would be well below the significance criteria of 250 tons per year (TPY). The predicted nonattainment SO2 emissions would be below the 100 TPY de minimis level within the nonattainment area. Therefore, all project-specific air quality impacts are considered less than significant for all areas for this action.

J-016-041

Thank you for your comment. The noise analyses provided the noise levels to the nearest sensitive receptor. The closest sensitive receptors adjacent to the projects in the Apra Harbor area are mostly residences and schools. The beaches by Route 11 are farther away from the noise sources and would experience less noise than those described in the EIS. Construction workers and visitors in high noise areas, such as on a dredge, would require hearing protection in accordance with Occupational Safety and Health Administration (OSHA) regulations. If the Port 24-hour security enters into high noise level areas, hearing protection would be required.

J-016-042

Thank you for your comment.

Comment 20 states the impact of the proposed action roadway improvements on the timing of Commercial Port Projects was not considered. Volume 2 Chapter 8 of the Draft EIS focused on land use existing conditions and impacts. The planned port improvements are considered under the cumulative impacts section in Volume 7. The initial upgrades to the Port, which would largely deal with demolition of older facilities, reconfiguration of laydown areas, and traffic/security improvements to increase cargo flow, were scheduled to start in the near

DEIS REVIEW COMMENTS SHEET							
No.	Vol	Page	Fig	Line, Tab, Fig	Comment	Commenter (last name)	Agency/Org
45	2	13	13-45 through 13-50	All Pages	General observations: The affected environment discussion is adequate and correct. Viewpoints in comment with Port project include the Asian Bay Checkbook, Kapra Island Sewer Wastewater System, and Marine Checkbook items (Figures 13.3-1).	Stewart	PA
46	2	13	13-54	Table 13.3-12	General observations: The environmental consequences discussion does not conflict with findings requested for the Port project. Issues are adequately addressed and no missing information was noted. Agree with finding that no significant impacts are anticipated in the Apra Harbor environment; not considered a big issue.	Pick	PA
47	2	13	13-70, 13-71, 13-76, 13-79	13.3-1, 13.3-2, 13.3-5	General observations: Final mitigation measures are sufficient and do not present adverse issues for the Port project.	Stewart	PA
48	2	13	13-82	Table Page	General observations: Final mitigation measures are sufficient and do not present adverse issues for the Port project.	Stewart	PA
49	2	14	14-2	Section 14.1.1	Describe the affected environment at the Port.	Pick	PA
50	2	14	14-2	Subsection: Commercial Port Facilities	Provide a description of Port facilities.	Pick	PA
51	2	14	14-3 and 14-4	Table 14.1-1	Describe vessel traffic in terms of types, Port status, inter-island shipping, ship motions, and cargo. Provide history of vessel calls from 1995 through 2008.	Pick	PA
52	2	14	14-3	Paragraph 3	Discuss recreational vessel capacity of marina, approach and harbor of refuge. Does not state any impacts.	Pick	PA
53	2	14	14-7	Paragraph 7	Discuss number of vessels and impacts on marine transportation by stating if the maximum annual number of vessels that would visit the harbor during the embarkation period exceeds the annual maximum area 1995, then a significant impact to marine transportation may occur. If the maximum annual number of vessels that would visit the harbor during the embarkation period is equal to or less than the annual maximum number of vessels since 1995, then there would be a less than significant impact to marine transportation. Overall, does not address any potential impacts.	Pick	PA
54	2	14	14-8	Subsection: Construction	Number of vessel calls to the Port during construction (127 for dredge transport).	Reverahl	PA
55	2	14	14-8	Section 14.2.2.3	State an expectation of no impacts on marine transportation in Apra Harbor.	Pick	PA
56	2	14	14-8	Section 14.2.2.4	Identifies an addition of 127 vessel calls to transport dredge material with less than significant impact on marine transportation in Apra Harbor.	Pick	PA
57	2	14	14-8	Paragraph 4	Number of container vessels projected during operation is 234 each year between 1995 and 2008.	Reverahl	PA
J-016-044					Projects container traffic 2008 through 2018 and identifies Port as the source of the statistics. Includes commercial and military containers. Projects an average of 155,836 containers per year during embarkation with a peak of 150,000 in 2015. The projected average number of containers is double the average number of vessels from 1995 to 2008 but this data is less than double number of ships due to increasing vessel capacity. The increase vessel capacity is due to existing capacity.	Pick/Bowen/etal	PA
58	2	14	14-8	Table 14.2-1		Pick/Bowen/etal	PA
59	2	14	14-8	Table 14.2-1	Military container movements increase significantly through the Port of Guam near and maintenance construction period (2010-2013).	Lo	PA
60	2	14	14-8	Paragraph 2	States that due to decline in vessels visiting the Port since 1995, the number of ships of amphibious vessels and commercial ships to Apra Harbor will have less than significant impact on marine transportation in the harbor.	Pick	PA
61	2	14	14-8	Paragraph 4	States that due to decline in vessels visiting the Port since 1995, the number of ships of amphibious vessels and commercial ships to Apra Harbor will have less than significant impact on marine transportation in the harbor.	Reverahl	PA
62	2	14	14-9	Paragraph 1	States that due to decline in vessels visiting the Port since 1995, the number of ships of amphibious vessels and commercial ships to Apra Harbor will have less than significant impact on marine transportation in the harbor.	Pick	PA
63	2	14	14-18	14-1 through 14-3	General observations: the affected environment discussion clearly characterizes the demographic and employment characteristics of Guam including the Naval Base and Port area, which is identified as "Central."	Stewart	PA
64	2	15	15-36	All Pages	Personal activities would generate more demands on Guam for waste, water, sewer, and other necessary infrastructure. This impacts all sensitive users on Guam.	Pick	PA
65	2	15	15-3	Last paragraph		Pick	PA

term. However, the recent denial of grant funding from the U.S. Department of Transportation is forcing the Port to reevaluate its planned modernization. Longer term improvements, including pier refurbishment, construction of new deep draft piers, and dredging to support such construction, have yet to be programmed. The Final EIS continues to consider port improvements under the cumulative impact section in Volume 7.

J-016-043

Thank you for your comment.

J-016-044

Thank you for your comment. If the number of containers per ship remains the same as during the period of 1995 through 2008, then approximately 269 container ships would visit the Port of Guam during 2015. This number of container ships would be more than double the average number of container ships visiting the port annually. However, since there has been a substantial reduction in the number of ships visiting the port since 1995, there would be less than a significant impact on marine navigation in Apra Harbor.

The evaluation conducted in the EIS regarding the potential impact to marine transportation from the increase in number of container ships associated with the relocation of the Marines assumed that there would not be an increase in draft for vessels to navigate.

DBS
REVISION COMMENT SHEET

No.	Vol	Chpt	Pg	Loc. TM, Fig	Comment	Commenter (last name)	Agency/Grp
				16-87 through 16-89	General observations: the environmental consequences discussion does not correlate with findings reported for the Port project. Issues are adequately addressed and no missing information was noted. As noted, subsurface impacts would be limited aside to nature with little difference in effects among the various alternatives. As noted, significant impacts on environmental justice issues would occur. However, the Port project is not expected to impact environmental justice and therefore there would be no additional cumulative impacts.	Stewart	PS
66	2	16	16-89	Table 16.2-32			
67	2	16	16-29	Subsection Regional Issues	Request reevaluation of GFC and GFC related to public safety, such as storage of hazardous materials at the Port Authority would affect the number of additional staff that might need to be added.	Peck	PS
J-016-045	2	16	16-83	Entire Page	Will the military relocation program include upgrading local Guam facilities such as the 911, library, facilities, beaches and recreational facilities? Which?	Peck	PS
69	2	16	16-88	Section 16.2.4	States that under the no-build alternative, agencies planning infrastructure development such as at the Port, would have more time to achieve their specific objectives. Inference is that the completion of the development moves forward.	Peck	PS
70	2	16	16-2-33	Table 16.2-33	General observations: Federal mitigation measures are sufficient and do not appear to address issues for the Port project.	Stewart	PS
J-016-046	2	17	17-89	Figure 17.2-6	Appears that K10c Breakwater is outlined in the figure as a military installation. Unclear how this is important or relevant to hazardous material Aviate and/or UAG.	Sykora	PS
72	2	17	17-35	Figure 17.2-11	According to RPO, DoD is coordinating with EPA to conduct preliminary assessments and the Inspections of Areas of Concern (IAOC) on Guam in regard to monitoring and evaluation of concern (MVEC). This includes how to Guam. If anything is identified in the water, might potentially affect the Port.	Sykora	PS
73	2	17	17-34	Table 17.2-5	Table address potentially contaminated areas near Power Plant along Route 11 between the Port and Route 1. Suggestion of potential soil and groundwater contamination adjacent to the Power Plant. Suggestion of potential PCB concentrations to present given along Route 11.	Peck/Sykora	PS
74	2	17	17-41 17-43 and 17-47	Table 17.2-4 Table 17.2-5 and Table 17-3-5	Expanded DSD emissions on Guam would result in an increase in the off-island transport and inter-island transfer of hazardous waste. Hazardous materials usage thresholds in Oahu are suggest similar usage and projects to Guam following the relocation.	Peck/Sykora	PS
75	2	17	43	17-3-5	Discussion of cumulative impact for hazardous material handling on Guam. Inference is that none of this material will pass through the Port.	Peck/Sykora	PS
76	2	20	20-20	Land Use	Port Master Plan cited as a reference for Land and Submarine Land Use.	Peck	PS
77	2	20	20-20	Land Use	Port Master Plan cited as a reference for Air and Transportation.	Peck	PS

J-016-045

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions to these systems and services. DoD's ability to fund actions is limited by federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam.

J-016-046

Thank you for your comment. The figure number in question is unclear. Therefore, a response cannot be given at this time.

010
REVIEW COMMENT SHEET

No.	Ref	Chpt	Fig	Loc, TM, Pg	Comments	Discriminator (ref number)	Agency/Org
J-016-047	1	18	18-2		Explains how access control relates to environmental consequences	None	PG

J-016-047

Thank you for your comment. DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access will be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

DEIS
REVIEW COMMENTS SHEET

No.	Vol.	Chpt.	Pg.	Env. TDA, P#	Comment	Coordinator (last name)	Agency/Org.	
J-016-039	4	2	2-52	Subsection: Security/Emergency	First paragraph under Security/Emergency describes fences. Level of detail should be carried throughout the document for different areas/functions being considered.	Wolch	76	
	4	19	19-6	Paragraph 3	Accidental release of petroleum that could migrate within Area Harbor.	Sylvia	76	
	4	10	10-33	Bullet 1	Implied that invasive species enter through Port adjustment of apertures and equipment.	Sylvia	46	
	4	4	11	11-87	Table 11.1-5	Significant findings is listed as species of greatest conservation need, listed on regular basis in Area Harbor.	Sylvia	76
	5	4	13	13-4	Table 13.2-3	General observation: Aircraft berthing would occur in Area Harbor. Although screening elements would be introduced into the existing landscape and others could be removed, the result would be no significant impact. The environmental consequences discussion does not conflict with findings expected for the Port project. Issues are adequately addressed and no missing information was noted. Agree with finding that no significant impacts are anticipated by the Area Harbor area.	Stewart	76
J-016-045	5	16	16-30	Paragraph 2	Types of location restrictions that will be expected during certain projects and areas should be addressed.	Wolch	76	
	7	6	16	16-18	Table 16.2-2	General observation: The environmental consequences evaluation does not conflict with findings expected for the Port project. Issues are adequately addressed and no missing information was noted. Socioeconomic impacts would range from significant but mitigable, to beneficial. The Port project is not expected to adversely impact socioeconomic or environmental justice; therefore, there would be no additive cumulative impacts.	Stewart	76
J-016-046	6	4	18	18-7	Section 18.2.2.5	Discussion of death or injury to public could result if LNG accumulated on land during construction and in water during dredging operations in Area Harbor. Review of historical records will be performed; surveys will be conducted to remove munitions and explosives of concern (MEX) if present and/or necessary. Depending upon where LNG is located, this could potentially affect the Port area and access to the Port.	Sylvia	76
	6	18	18	18-3.3	18-11 and 18-12 Table 18.2-1, 18.2-2 & 18.2-3	Agrees to be incorporated information in Tables 18.2-1 and 18.2-2 indicate no impacts during construction and operation from LNG. However, Table 18.2-3 indicates "less than significant impact" from LNG.	Sylvia	76

DEIS
REVIEW COMMENTS SHEET

No.	Ref.	Chart	Pg.	Line, Tab, Fig.	Comment	Comments (last name)	Agency/Org.
J-016-048	3	2	2-5	Section 2.2.2.2	Types of physical measures that are necessary to meet the multiple storage force protection requirements should be provided.	Waltz	PA
	3	2	2-7	Figure 2.2.2.2	Figure is unclear.	Waltz	PA
J-016-049		12	12-2	Section 2.2.1.2	Under how the decision will be made as to security requirements for historic properties and when the military interests will supersede cultural and historic interests.	Waltz	PA
4	5	18	18-7	Table 2.2.1.2	General observations: Construction of the AMDF would be short term in duration and result in minimal impacts, both construction and operation. The visual setting for the Port project would not be affected by this construction. The environmental consequences discussion does not conflict with findings expected for the Port project. Issues are adequately addressed and no missing information was noted. Agree with finding that no impacts to historic resources would occur.	Stewart	PA
5	5	16	16-19	Table 2.2.2.2	General observations: for the AMDF, the environmental consequences discussion does not conflict with findings expected for the Port project. Issues are adequately addressed and no missing information was noted. Some comments would target items that are significant to benefit. The Port project is not expected to adversely impact socioeconomic or environmental justice. Therefore, there would be no additive cumulative impacts.	Stewart	PA

J-016-048

Thank you for your comment. Added statement regarding special design features. Figure was modified to make it more clear.

J-016-049

Thank you for your comment. The DoD has a vigorous program of managing and protecting archaeological resources on its lands on Guam. Properties managed by the Joint Region Marianas, which includes Navy and Air Force managed lands, complies with all federal laws relating to cultural resources. Each installation has an Integrated Cultural Resources Management Plan that stipulates the standard operating procedures for evaluating resources according to National Register of Historic Places criteria and long term management of these resources. Because these resources fall under federal jurisdiction and access to many of these areas is limited, they are, in general, protected from vandalism, collecting, or other forms of disturbance that could occur when areas are completely open to the public. If historic properties would be affected by future projects, all installations would comply with the National Historic Preservation Act and go through the Section 106 process to avoid, minimize or mitigate adverse effects to these resources.

GIS REVIEW COMMENTS SHEET						Comment	Commenter (last name)	Assess/Qty
No.	Vol	Chpt	Pg	Line, Tab, Fig				
						Military buildup would cause an increased demand for impacted goods and materials (especially construction supplies, equipment and materials) that would be shipped through the Port. It would also be required to support the construction workers and reduced population increases. Indicates the heavy usage of the Port and its capacity or possible. Also indicates that the Port had plans to expand and make improvements prior to the news of the military relocation but that the relocation adds impetus to any planned improvements and leaving the increased construction and population.	Peak	PS
J-016-051						States that the structural integrity of the Commercial Port Bridge was not evaluated because it is a culvert. Therefore, within the document we are essentially left to believe that we don't know its capacity to handle the increased traffic loads associated with the buildup. Identifies bridges impacted by building cargo from the Port to police throughout the island. Inference is increased and heavier cargo is coming through the Port.	Peak	PS
						Discusses roadways with widening requirements due to increased traffic and preference for use as haul routes for trucks handling cargo hauled from the Port to points north on the island. Inference is increased and heavier cargo coming through the Port.	Peak	PS
						Maps preferred truck heading routes leading away from the Port. Inference of increased and heavier cargo coming through the Port.	Peak	PS
						Discusses the Guam Road Network consisting of major routes for semi-trailer related transport transiting the Port of Guam with heavy and Air Force bases, the Pangelinan area, the Naval Magazine Site, concrete bunkers, rail, rail services and private concrete plant/fabricator sites associated with the military buildup on the island. Inference is key role of the Port plays in the logistical support infrastructure and as a point of origin to the Guam Road Network.	Peak	PS
						Guam Roadway Network (GRN) improvements No. 13 and No. 14 call for pavement strengthening of Route 3 near Routes 11 and 6 which may disrupt commercial and construction-related truck movements into and out of Port facilities.	Lo	PS
						GRN No. 4 and No. 5 would involve pavement strengthening of Route 2 from Route 2 to the Port entrance and intersection improvements at Routes 12/Route 11, respectively. These activities may coincide with Port repair and maintenance work, hence affecting congestion.	Lo	PS
						Table showing the Route 11 paving strengthening and Route 3/11 intersection improvements projects. This is to handle more and heavier cargo coming through the Port.	Peak	PS
						Timing of GRN improvements to Route 11 and the intersection of Route 3/Route 11 are slated for 2011. Upgrades to Route 2 north and south of Route 11 are expected in 2011. These coincide and conflict with the Port repair and maintenance project. Part paragraph states that construction of the GRN improvements "would occur from 2010 to 2016 with peak construction 10/23". This coincides with the Port's repair and maintenance schedule of 2010-2013.	Lo	PS
						Shows evidence of overlapping activities between GRN activities and Port repair and maintenance. Note Route 1 and 11 improvements shown as being completed in 2011.	Lo	PS
						States that there have been possible water problems in the Port.	Subora	PS
						Wastewater flow increases from military buildup could result in more issues with wastewater and potable water system limits.	Subora	PS
						There are references to Route 11 level of service on pages 27, 63, 207, 217, 213 and 261.	Peak	PS
						There are references to Route 11 congestion on pages 28, 29, 74, 77, 78, 80, 207-218, 219-224, 245-260, 255, and 264-267.	Peak	PS
						Notes to construction and population peaks in 2014. Notes cargo demand peak in same timeframe.	Peak	PS
						Island population increases significantly during Port of Guam repair and maintenance major urban period (2010-2016).	Lo	PS
						Route 1 vehicle-to-gate (V/G) ratio would exceed 1.0 by 2014 (in fact by 2014) which is an area where Port of Guam trucks (commercial and construction-related) east through. Refers to Alternative 1 and 2.	Lo	PS
						Similar to above - Route 1 V/G ratio is shown to be greater than 1.0 by 2014 (in fact > 1.15) which may affect Port truck movements.	Lo	PS
						Level of Service (LOS) for intersection of Route 1 and Route 11 is shown to be at "F" by 2014 during the PM peak hour. This high level of congestion may affect commercial truck movements to/from the Port of Guam.	Lo	PS
						States as above, but for Route 1/Route 11 is shown to be at "F" by 2014 for the PM peak hour. Such high level of congestion could influence truck movement efficiency.	Lo	PS
						Similar to Comment #1 where V/G ratio is shown to be greater than 1.0 by 2014 during the PM peak hour for Alternative #1. May affect truck movements to/from the Port of Guam.	Lo	PS
						GRN also will analyze the cumulative effects of the Port reconstruction, maintenance and repair project.	Peak	PS

J-016-050

Thank you for your comment. Volume 7, Chapter 4 describes the cumulative impacts of the proposed action. The port improvements are included in the cumulative project list.

J-016-051

Thank you for your comment. No as-built information is available for these structures and it is assumed that this culvert was constructed to the AASHTO design loads applicable at the time of design. The AASHTO live load design will accommodate the Guam legal loads. If a special vehicle is required to cross the culvert, a permit would be required and the loads would be analyzed.

An inspection of the culvert in early 2010 indicated the structure to be in good condition. The depth of the earth fill on top of the culvert will distribute the vehicle loads. An inspection and weigh station will be constructed at the port to monitor the weight of the vehicles to ensure the loads are within Guam's legal loads and design loads.

DEIS
REVIEW COMMENTS SHEET

Doc. No.	Vol.	Chpt.	Pg.	App. Title, Fig.	Comment	Commenter (last name)	Agency/ID#
J-016-043	6	7	2-16	Substation: Apra Harbor	The RPO 205 does not analyze queuing on Port temporary pads and out of the gate as a result of an increase in cargo that will occur.	Neal	76
	6	8	8-1	Line 11	RPO 205 did not evaluate noise impacts at the public beaches near Site 11 and the Port. Additionally RPO 205 did not evaluate noise impacts to the 24-hour security perimeter at the Port.	Neal	76
	6	15	15-24	Table 15.2.0	General observations: Offsite and off base roadway construction would occur within the same general timeframe as the Port project and it is anticipated that viewers on the island would receive a rapid increase in construction. The anticipated changes to the visual environment in the Apra Harbor area would be minimal. This expected result does not conflict with findings expected for the Port project. Issues are adequately addressed and no missing information was noted.	Stewart	78
	6	17	17-13 17-15 and 17-19 through 17-29	Table 17.2-17 Table 17.2-18 and Table 17.2-25	General observations: The environmental consequences discussion does not conflict with the findings expected for the Port project. Issues are adequately addressed and no missing information was noted. Socioeconomic impacts would range from significant to beneficial. However, the Port project is not expected to adversely impact socioeconomic or environmental justice and therefore there would be no additive cumulative impacts.	Stewart	78
	6	17	17-13 17-15 and 17-19 through 17-29	Table 17.2-17 Table 17.2-18 and Table 17.2-25	General observations: Potential mitigation measures are sufficient and do not present adverse issues for the Port project.	Stewart	78

DEIS
REVIEW COMMENTS SHEET

J-016-040
J-016-044

No.	Vol	Chpt	Pg	Inv. Title, Fig	Comment	Commenter (and date)	Agency?
1	7	2	2-1	Table 2-1-1	Item 3B: States that surveys will be conducted to identify and remove artifacts from the work sites previously in Volume 4. It was stated that surveys will be conducted only if review indicated a necessity. The table does not indicate BMP's to minimize potential effects to ACH, suggest adding these to the table.	Roberts	PS
		2	2-2	Table 2-1	Type of mitigation/avoidance that will be in place during aircraft carrier berthing should be addressed.	Neel	PS
		3	3-47	Index Page	Issues that establishing EOP, requirement prior to construction would mitigate the impact from EOP to "less than significant".	Deane	PS
		3	3-70	Section 3.2.2.1	Port maintenance, repair and repair of project is not included in the cumulative effects analysis and findings.	Rosenthal	PS
		4		Table 4-2-1	General observations: The cumulative impacts discussion does not conflict with findings expected for the Port project. Issues are adequately addressed and no missing information was noted. Agree with finding that overall impacts on visual resources would be minor and no significant impacts are anticipated in the Area Harbor area.	Stewart	PS
2	7	4	4-25	Index Page	General observations: Chapter 4 notes that the socioeconomic impacts of the preferred alternative would have a strong positive impact on the cumulative impacts impact and it is the intent of population to support the preferred alternative that mitigates the socioeconomic impact. However most of the cumulative projects, including the Port project are not expected to be growth inducing. The Port project is not expected to adversely impact socioeconomic or environmental justice and therefore it would not create additive cumulative impacts. The cumulative impacts discussion does not conflict with findings expected for the Port project. Issues are adequately addressed and no missing information was noted.	Stewart	PS
7	7	4	4-20 through 4-26	All Pages		Stewart	PS
8	7	6	6-20	Table 6.3-1	Lead agency/agent for construction of the Guam Commerce Port project, construction (Timeline 2009-2013), is retained for the cumulative impacts analysis. Lead agency/proponent is PAG & part of context is Gov/Guam.	Rosenthal	PS
9	7	6	6-20	Table 6.3-1	PA-9 construction and commissioning of the berthing, moorage and amenities (LSP facility) that are required to implement the preferred concept "Reak-Beh-Wait" in order to meet minimum requirements of the Military Building construction guidelines requirements. Construction (Timeline is 2009-2011) and project is retained in cumulative impacts analysis. Lead agency/proponent is PAG and the point of contact at lead agency is MATA/GoGuam.	Rosenthal	PS
10	7	4	4-11	Table 4.2-1	PA-15 construct new wharf east of Hotel Vihard to accommodate deep-draft container vessels and cruise ships. Dredging and filling of GoGuam submerged lands required. Construction timeframe is 2021-2025 and the project was not included in the cumulative effects analysis.	Rosenthal	PS

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pa	Line, Tab, Fig	Comment	Discussed (and where)	Agency/Org
					NONE		

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pg	Line, Tab, Fig	Comment	Commenter (last name)	Agency/Org
J-016-040	05	05	05-25	Table ES-4	The IPO DEIS indicates that significant affects to AGL could occur at some existing power generating facilities due to increased use under the preferred alternative. Suggest adding AGL impacts and potential mitigation measures to the summary table.	None	PS

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Page	Pg	Line No. / Pg	Comment	Comments (Best Answer)	Agency/ID
1	Appendix I				The JCPO DEIS states that the addition of a new power plant near the Port (P) is assumed to be a significant source of air pollution which will be able to be mitigated. However, detailed analysis has not been conducted. There are security guards at the entrance to the fuel tank facility which are considered another receptors for air quality and noise.	None	FB
2	Appendix A	29 of pdf		Federal, State, Local Agencies	Joseph Thomas, Acting General Manager for PMS, attended the Public Scoping Meeting in April 2007	Essential	FB
3	Appendix K	279 of pdf	ES-1		Commercial Port (Discussed in Field 1) cited in 2008 Weather Solutions Final Report Design Material: Updated Placement Study as a feasible location for a dewatering facility for dredged material. Facility located on northeastern portion of port extending into paved container area.	Essential	FB
4	Appendix K	312 of pdf	Chapter 5.2.3		Eliminate Commercial Port Field 1 as a Candidate Dredging Disposal Site, due to inadequate 275,000 cu yd of dredged material.	Essential	FB
5	Appendix K	323 of pdf	Figure 5.2		Commercial Port Field 1 Confined Dredging Disposal Site	Essential	FB
6	Appendix K	42 of document	32 of document	31 of pdf	States Navy and Governors agreed an MOU for the use of dm appropriate for fill and to establish procedures for use of material as fill by PMS. From facility will facilitate the use of dm for the Port expansion. DM will be brought to Port in sealed trucks	Essential	FB
7	Appendix K	43 of document	31 of pdf	Table 5	Construction Cost of Unexisting facility at Port - \$22,191,273	Essential	FB
8	Appendix K	44 of document			Port site identified as feasible in 2005 DMMP by Weston. Characterized existing conditions & noise, air quality & other impacts. States social impacts/risks and by PMS are problematic but management plans could be developed and therefore, location is feasible.	Essential	FB
9	Appendix K	44 of document			States a concept sketch of the port expansion was provided by PMS during Weston's Dec 2003 site visit.	Essential	FB
J-016-043	Appendix K				There is no table of contents for each subject/section forcing someone to page through thousands of pages to see what the contents are. The times and individuals who prepared the reports are not listed as purporting in the DEIS even though the information was used to determine impacts of the JCPO project.	Essential	FB

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REVIEW COMMENTS SHEET

Line	Item	Client	Page	Line, TA, PG	Comment	Commenter (Full Name)	Agency/Client
1	General Observation				Portion of JPO project evaluated in the DEIS may be awaiting funding.	Reverthul	PS
J-016-043	General Observation	in FAQs on website		http://www.guam.military.mil/faq/faq01.html	The preferred alternative evaluated in the JPO DEIS may not be the preferred alternative implemented. The final selection of the alternative to be implemented will be made in the ROD.	Reverthul	PS
	General Observation				Construction impacts beginning in 2010 appear overly optimistic & to begin shortly after the RDO in late summer, 2010.	Reverthul	PS
	General Observation				Absent carrier tracking - long shift all carrier wheel. Public Point dredging will create competition for available resources, have potential cumulative effects on marine environment resources for use JPO projects that require dredging or significant marine construction within the same ecosystem, and could potentially affect vessels which are trying to arrive to the Port.	Reverthul	PS
	General Observation				Now Power plant proposed at Port adjacent to the Port proposed as a long-term alternative. An impact analysis has not been conducted. Priority appears to be owned by PAC.	Reverthul	PS
	General Observation				Could impacts will be coming from the Port. The JPO DEIS does not state who will be conducting security screenings on the aggregate or unless how the screening aggregate could affect normally occurring Port operations and the proposed Port expansion and maintenance and repair project.	Reverthul	PS
J-016-046	General Observation				The JPO DEIS states that dredged material from dredging at Adirak Point could be removed by Gov. Guam including PAC.	Reverthul	PS
	General Observation				The JPO DEIS states that the PAC expansion plan may not be feasible.	Reverthul	PS
	General Observation				Just for the power plants will come at the Port. This creates the potential for spills on port property. Document does not address this or delineate responsibility for clean-up.	Reverthul	PS
	General Observation				JPO DEIS states that construction will be 2010-2013, with peak in 2014. Port PA assumes construction is 2010 to 2013.	Reverthul	PS
	General Observation				JPO DEIS states construction improvements proposed to major Port access roads Route 11 and Route 1, all roadway work will take place between 2013 to 2016, no specific given.	Reverthul	PS
	General Observation				Preferred Alternative in JPO DEIS may not be best alternative implemented. Presumably, the Port PA can only consider the preferred alternative as proposed in the JPO DEIS when evaluating cumulative impacts of the project.	Reverthul	PS
	General Observation				The DEIS does not address how Port construction for the maintenance and repair project and normal operations will be carried out while JPO construction is ongoing.	Reverthul	PS
	General Observation				The DEIS does not address how JPO roadway construction will affect construction vehicle (for maintenance and repair project) and regular vehicle access to the Port.	Reverthul	PS
	General Observation				The DEIS does not interrelate between the timing of increases in cargo related to construction of JPO's action while simultaneously reconstructing the Port.	Reverthul	PS
	General Observation				There is significant mention of issues having potential impacts to the Port. Many of these relate to the volume, weight, and type (in some cases contained or potentially contained) of cargo shipments. There is the absence of an assessment of how the port will handle the cargo when it has to be loaded while replacing the watercraft (bulkhead) structures and performing dredging. There is the absence of a cumulative impacts assessment between the JPO project and the Port project. The Port project is linearly dependent, i.e. they are referring to the Overall Modernization Program in the Master Plan rather than our only announced but currently unfunded project (Maintenance and Repair Project). There is no assessment of the duration to receive traffic destined for the Port during that 18 month period of dredging a 100' wide channel through Apra Harbor. There is enough discussion about biohazard and invasive species to suggest that the Port will have to contend with changed and increased levels of security and responsibility when dealing with the influx of cargo impacting these issues. There is no assessment of traffic impacts to the Port when hours 11 and 12 are 100' intertidal work is completed. There is no impact assessment of how the competition for resources could affect workforce availability, the price of labor, and the price of materials for our respective projects.	Peak	PS



GOVERNMENT OF GUAM



DEPARTMENT OF PUBLIC HEALTH & SOCIAL SERVICES
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February 16, 2010

JGPO c/o NAVFAC Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Attention: GPMO

REF: Submission of DPHSS Comments on the Draft Economic Impact Statement

Hafa Adai! Submitted herewith are the Department of Public Health and Social Services (DPHSS) comments on the Draft Economic Impact Statement.

Should you have any questions regarding the attached documents, please feel free to contact Ms. Bertha Tajeron, Program Coordinator III at 735-7125 or via email at bertha.tajeron@dphss.guam.gov

Respectfully,


J. Peter Roberto, ACSW
Director, DPHSS

Enclosures

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Vol.	Ch.	Pg.	Line, Tab, Fig.	Org.	Commenter (last name)	Comment	Response	Author/Date	Vol. Status/Checked			
J-017-001	1	2	16-20	16.1.8.8	DPHSS	The criteria for agencies selected is not only too narrow, but subsequent agencies in this roster were narrowed to "permitting" as it relates to construction. The criteria needs to be broadened beyond permitting, so that analysis can also include access to healthcare and social welfare services by the increased populations attributed to military build up.						
						16-38	16.2.1.1	DPHSS	The section addresses impacts to GovGuam agencies and cites sources of information in its method of analysis. The information obtained was used to determine additional staff associated exclusively with the proposed action. Conduct an analysis which addresses other public and private organizations, not just Gov Guam, as the impact of the proposed action not only impacts GovGu agencies. The ratio of professional staff to service population included several other health and social service programs impacted by the military construction. Thus, the ratio of professional staff is inaccurate. Conduct a more comprehensive review of services and not make a "back-of-the-envelope" of health and social service populations and needed professional, para professional staff needed to support the proposed action.			
						16-72	16.2.3.9	DPHSS	Analyze the capacity of private and military health care facilities to address the overflow resulting from the proposed action. Table 16.2.3.9 assumes ratios and service population which does not reflect the right system of services, service populations. Guam submitted proposed cost for new construction A&E assessment for Central Public Health facility, which will also house reference laboratory, environmental health lab to support proposed action impacts. Further, conduct facility assessment for additional expansion or new construction for community health clinics to support proposed actions for northern area.			
J-017-002	4	2	16-74	16.2.4.1 & 4.2	DPHSS	Draft impact statements in these tables represent an inaccurate description because the data source used did not include other critical services and service populations. Conduct a more complete assessment, using more comprehensive data and educate appropriate authorities how the writer arrived at the baseline assessments.						
J-017-003	6	2	16-88	Par 4-6:	DPHSS	On the contrary, Guam does produce annual reports and there is reliable data to indicate such violence against women and children. The proposed action - which considers civilian populations supporting construction - will have an impact on violence against women and children, and the need for health and social services. Conduct a more thorough assessment and arrange to meet with the reports in this field. Detailed reports, off island studies, and police records are not a reliable source to assess this impact.						
J-017-004	6	2	16-98	16.2.3.3	DPHSS	The additional 192 new key staff, dropping to 52 is an inaccurate calculation, thus impacting the financial cost to address the healthcare and social service burden to support the proposed action. If this number were used, it would greatly underestimate the actual key staff needed to support the proposed action. Coordinate an educational outreach program, meet with key agency and organization heads to support this study with reliable data to support the proposed action. Title positions of professional staff, qualifications and staff by staff to be identified.						

J-017-001

Thank you for your comment. Impacts to the health service provided by DPHSS are included in the impact analysis under GovGuam Public Service Agency Impacts. Impact analysis was limited to GovGuam agencies that provide traditional social services to the public. The SIAS and the DEIS are documents that have identified the probable impacts of the proposed action and alternatives based on the best available information. Existing data and information was gathered and supplemented with interviews with federal and Guam agencies. To provide the public and various governmental agencies with an opportunity to review and comment on the methodologies and assumptions used, the SIAS was included as Appendix F, Volume 9 of the DEIS. Comments provided on the DEIS will also be included to provide the decision-makers with the public views in support and/or opposition of the proposed action and alternatives.

It is also noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.

J-017-002

Thank you for your comments. Our data was checked per your comments and the appropriate edits were made in the FEIS.

J-017-003

Thank you for your comment. The SIAS and the DEIS are documents that have identified the probable impacts of the proposed action and alternatives based on the best available information. Existing data and information was gathered and supplemented with interviews with federal

Vol	Ch	Fig	Line, Tab, Fig	Org	Commenter (last name)	Comment	Responder	Response	Author Date	Vol/Manager Checked		
J-017	005	7	2	18-1	18.1.1	DPHSS	The health and safety analysis is confined to areas in the vicinity of the proposed action. Unlike the United States, metropolitan areas or even suburbs, Guam's geographical size is considerably much smaller than the impact near a locale of training and construction sites can actually impact the entire island. Avoid limiting the analysis to the vicinity of military operations and testing sites, and expand the analysis to the entire island of Guam					
J-017	006	8	2	18-4	18.1.4	DPHSS	Update the information on notifiable diseases. The information is very limited. Coordinate a meeting with the epidemiologist or appropriate public health administrator. Document how the impact of the proposed action will affect notifiable diseases and program sections: public welfare, senior citizens, in addition to notifiable diseases (public health) and permitting (environmental health)					
J-017	007	9	2	18-9	18.1.8	DPHSS	The affected roadways also have a direct impact on direct care services requiring transportation. (ambulance services, direct observation therapy, restaurant inspections, home care visits, etc. Conduct an assessment leading to the impact it will have on these services. Also, roadway construction will impact emergency transportation, increases in DUI and other injuries affecting the public health and emergency care.					
J-017	007	10	2	18-10-15-16	18.2.2	DPHSS	Proposed alternatives assessed only DoD's capacity to respond to potential threats. Assess GovGu infrastructure to assist DoD in joint emergency response efforts. DoD and GovGu through the DoD coordinating officer and Homeland Security Advisor, have joint responsibilities to support outbreaks or emergencies with poses a threat not only to the DoD, but the civilian community. All Alternatives to support the proposed action in this section remain in question until a further assessment of the emergency response infrastructure is assessed.					
J-017	008	11	2	18-18-19	18.2.2.2 - 18.2.2.5	DPHSS	The current table's from doctors, nurses, to include tables in this section are deduced from data gathered. However, it remains uncertain that these table's address a close approximate of service provider and service population. The methodology, organization and planning in retrospect was confusing and haphazard. Various approaches, interviews would undoubtedly provide mixed responses. Many respondents to the surveys and questions asked of them were not clear about the approach of the study and the impact it would have to the findings. For many, they had a vague sense what the study was about except that it was part of the military build up. Furthermore, during the period of this study, it was ongoing around the same period of EIS scoping period, as well as many other co-occurring AGPO issues. In short, there was no educational outreach, effective coordination and planning to engage respondents toward the mission, vision and objectives to which this "stand alone" study was attempting to accomplish. There were no focused groups, except to complete a quantitative at					
J-017	008	12	2	18-21	18.2.6.5	DPHSS	The assumptions in this section are inaccurate and false. No existing baseline of services for health and social services exists on Guam. From a quantitative study of data provided, all sorts of assumptions can be made. From the existing service demand, the assumption to support the proposed action in this section is a false. Do the study over or update the information, and arrive at a baseline. Have an educational outreach to explain how the baseline was achieved. This information is so important that it will drive resources and ability to meet the service requirements for health and social services.					

and Guam agencies. To provide the public and various governmental agencies with an opportunity to review and comment on the methodologies and assumptions used, the SIAS was included as Appendix F, Volume 9 of the DEIS. Comments provided on the DEIS will also be included to provide the decision-makers with the public views in support and/or opposition of the proposed action and alternatives.

J-017-004

Thank you for your comments. Our data was checked per your comments and the appropriate edits were made in the FEIS.

J-017-005

Thank you for your comment. Volume 5, Chapter 18 discusses the potential public health and safety impacts of as a result of population growth associated with the Army AMDTF. Based on the small buildup associated with the Army AMDTF, less than significant impacts are anticipated to public health and safety. Volume 5, Chapter 16 discusses the potential impact of an increased patient to health care provider ratio as a result of population growth associated with the Army AMDTF. Potential cumulative effects of the Army AMDTF action with other build up actions is addressed in Volume 7.

J-017-006

Thank you for your comment.

Notifiable Diseases

Incidents of notifiable diseases (including AIDS) for Guam were collected from the Government of Guam, Department of Public Health and Human Services, Office of Epidemiology and Research. Statistical information collected from this agency were used to determine the per capita rate for the diseases and calculate the potential increase in disease incidents

J-017-009

Vol.	Ch.	Page	Line, Title, Pg.	Org.	Commenter (last name)	Comment	Responder	Response	Author/Date	Vol. Manager/Checked
13	2	9	18-20	18.2.3	DPHSS	Much of the information provided in this Chapter utilized data from Appendix F. Although the data, sources, and studies could be challenged, this Chapter is generally flawed. Recommendation is to conduct another SEIS study, provide an educational outreach to the public and to also include non profit service providers and private healthcare providers. The SEIS must involve a process to invite people in the villages to come out and voice their concerns, recommendations and alternatives.				
14	9	1-5	Lack Of Data	DPHSS		The SEIS is a failed report in all sections with respect to health and social services. Any cost estimates, programmatic conclusions and assumptions should not be endorsed by the DPHSS				
15	6	1-5	Lack Of Data	DPHSS		SEIS acknowledges that due to budget cuts, the writers choose a "stand alone" study, generally quantitative in nature, probably limited key stakeholders from interviews, informed the professional and lay community about its mission, vision and objectives. It appears that the SEIS may have been deceptively administered, releasing its quantifiable data to government agencies without input from community, during the SEIS ongoing period. The SEIS public scoping comments should not support the need for an SEIS, which at a minimum, requires input from a community being impacted by the proposed action. The SEIS at best achieved minimal input but relied heavily on questionable data, a selective category of public agencies based on DoD's preferences, with little to no input from community providers, private healthcare providers. Conduct a more inclusive SEIS study and lay out strategic alternatives to meet the challenges brought forth by the proposed action.				
16	9	1-5	Lack Of Data	DPHSS		Based on the limited information, skewed population surveyed, no community input, SEIS was a failed attempt to complete a task to meet a deadline and budget constraints, leaving the social and economic fabric concerning the health, social welfare and quality of life for island residents in harm's way. Conduct				
17	9	1-5	Lack Of Data	DPHSS		Require the DoD to conduct the SEIS as an independent process, separate from the EIS - not as an appendix to support the EIS. The EIS and SEIS needs to be mutually exclusive, with the objective of separately addressing the proposed action, rather than the SEIS supporting the EIS				
18	9	1-5	Lack Of Data	DPHSS		No educational outreach to the community on the SEIS occurred, island residents through media campaigns were not informed that DoD was conducting a SEIS, village mayors, members of the community villages were not provided the opportunity to voice their concerns about the impact on health and social services. Many residents voiced concern that the EIS was the SEIS. The process never took place, with exception to select interviews, data gathering, etc.				
19	9	1-5	Lack Of Data	DPHSS		Rather than support and partner with the CJTF-HSB Subcommittee to organize and strategic community mobilization for participation and educational outreach in the SEIS, the process took another direction thus questioning the reliability of data resource and limited representation of important stakeholders in the community. Thus, data is less direct, skewed and not a representation from island residents in the SEIS concerning the health and social welfare.				
20	9	1-5	Lack Of Data	DPHSS		Do the SEIS process over again and this time, work with island and community leaders to involve the community through an educational campaign, focused groups, planning, etc. to provide data that is more inclusive and more appropriate to the proposed action, to include clear strategies to address impact to Guam's health and social services.				

Comments

Page 3 of 3

DPHSS Comment

due to the buildup on Guam (military, construction worker, and natural population increase). Volume 2, Section 18 specifies that potential public health and safety concerns (for notifiable diseases) were addressed based on anticipated changes in the population of Guam, both from natural increases and from population growth created by implementing the proposed action and alternatives. The Guam average per capita incidents for notifiable diseases were used to calculate the potential increase in these incidents as a result of implementing the proposed action or alternatives. The construction workforce visiting Guam from other countries to support construction requirements (peak construction force of 18,374 in 2014) would also have the potential to contribute notifiable disease incidents during the construction period. Volume 2, Section 16 provides a brief discussion of the overarching factors that affect health and human services on Guam. It also outlines the key public, nonprofit, private, and military agencies that provide primary health and human services to Guam's population. This section also discusses possible measures that the DoD could take to support increased staffing of required positions. These measures include seeking federal funding for necessary positions; increasing the number of private staffing and service contractors currently working for service agencies; and supporting a one-time hiring bonus of 20% of base pay for GovGuam agency positions, to increase interest in GovGuam agency employment. These measures could aid in increasing the number of health care professionals on Guam. The EIS does not identify specific funding sources.

Traffic

DoD recognizes the importance of reducing adverse effects on the people of Guam, its natural resources, and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short-term impacts of

Division of Senior Citizens-DPHSS:

J-017-010

The Division of Senior Citizens (DSC) is concerned with the impact the military build-up may have on aging services. There does not appear to be any representation of an assessment in the Draft Environmental Impact Study (DEIS) in relation to the aging community, thus, requests the DOD obtain input from the Division of Senior Citizens, members of Guam's Aging Network and through focused group discussions with the seniors of Guam.

In the 2000 census, it is anticipated that in 2010 approximately 11% or 20,342 of the population of 180,692 on Guam would be 60 years of age or older. By 2014, the number of seniors on Guam would be 13% of the population and by 2019 we would reach 15% of the population. As these increases are steady, it does not account for those migrating to Guam due to the military build-up, potentially staying behind to make Guam their new home, and inviting or petitioning for their elder family members to relocate.

Thus, the DSC would like to request DOD identify:

1. Of the military personnel, how many of those relocating to Guam have family members who are sixty (60) years of age and older? This data will be needed for military and their dependents and the non-military labor force that will work on base or directly support base operations.
 - a. Of this number, how many are coming with the intent to assist or provide with child care responsibilities of military families and non-military families?
 - b. Of this number, how many are under Medicare? Currently, anyone relocating to Guam from another service area and were enrolled in a Medicare plan that was only applicable to the area they lived in may have to dis-enroll in their plan and re-enroll in a plan available to their new service area. Would DOD advise them there may be changes attached to their Medicare Options and coverage when they relocate to Guam? If not, the Division of Senior Citizens offers information and assistance in applying or referring Medicare beneficiaries to the appropriate agencies or plan sponsors. An increase in the number of individuals requesting for assistance would require the Division of Senior Citizens to expand it hours of operations and possibly human resources to respond to the increase demand for services.
2. We would request the DOD to coordinate with all employers of the non-military labor force coming to Guam as a result of the military build-up to continuously assess, manage and quantify, how many in the labor force, will be with family members, age sixty (60) years of age and older?
3. We would request the DOD to implement a mechanism to track how many "stay behind" once activities plateau related to the military build-up, as this would impact the future needs for aging services on Guam and consequently the Division's capacity to serve those new seniors anticipated to access our programs. Currently,

J-017-011

construction are managed effectively and that the long-term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam. As discussed in Volume 2, Section 18.2.2.7, there would potentially be more vehicles on the roadways resulting in more potential for accidents as a result of the increase in military personnel and their dependents. The Navy uses focus group sessions with personnel to strategize potential measures to reduce the number of liberty incidents, including traffic incidents. Traffic accident data for the years 2001 through 2005 indicated that, despite the population increase over the 5-year period, the number of traffic accidents has decreased. In addition, the Guam Territorial Transportation Improvement Plan contains 14 island-wide traffic hazard elimination projects that include school zone signs, village road safety and warning signs, seashore protection, pavement markers, anti-skid surfacing, and guardrails. The Navy understands the importance of emergency response for traffic accidents and care services requiring transportation and will work with GovGuam to ensure DoD participation in planning transportation improvements as appropriate for roadways on Guam.

J-017-007

Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

approximately 25% of individuals 60 years of age and older living on Guam access DSC aging programs.

J-017-012

4. With the increase in population, there would be an increase in demand for services, thereby putting a strain on the seniors as they compete with the rest of the population. For example, traffic delays would be exacerbated which may be a contributing if not key factor in causing delays in the delivery of meal services to home-bound clients, transporting seniors timely to the senior citizens centers and back home, or to their medical appointments. We recommend DOD assist in the design and development of a carpool lane or service lane to reduce or mitigate the effects of traffic congestion for this population. In addition, personnel of DOD could be required to have a different work schedule so as to minimize the number of vehicles on the road during the traditional 8:00am to 5:00pm work day. DOD personnel could report to duty at 7:00am or 9:00am and expire for the day at 4:00pm or 6:00pm. The hour difference in the morning or afternoon could help provide some relief to the traffic congestion that is anticipated as a result of more individuals operating vehicles are on the road at the same time.

J-017-013

5. Seniors will be competing for services in general; however, a key area critical to "all island residents", seniors and non-seniors is our limited resource of health care facilities, providers and specialists. As it stands now, many travel off-island for health care services, wait days for a room at the Guam Memorial Hospital, and make appointments weeks in advance to access primary care services, thus, an increase to the demand side and no increase to the supply side will do nothing more than lower our standard and quality of care provided to Guam residents. In order to ensure that Guam's health care infrastructure from both the structure and provider sides is sufficient to meet the increase in demand, Guam needs to build its infrastructure to an acceptable national level of practice standards prior to the military build-up so that maintenance levels provided by DOD would be reflective of what currently exists on Guam.

J-017-014

6. An increase to the current demand on our infrastructure (water and power) without improvements made to the current system will result in island residents having to experience load shedding, an experience we on Guam have gone through as a result of the system being overwhelmed and needing repairs that did not happen soon enough. Who will be expected to pay for the costs associated with the improvements needed to generate water and power for all island residents, including military and non-military? Although this issue may likely be mentioned by another subcommittee or agency, it is a concern nevertheless, important to all including our seniors.
7. In Fiscal Year 2009, the DSC had approximately 457 caregivers enrolled in its National Family Caregiver Support Program. These are caregivers serving elderly individuals, grandparents and other elderly caregivers serving children, and caregivers of adult children with disabilities ages 18-59. With the anticipated "employment boom" resulting from the military build up, the DSC is concerned that

J-017-008

Thank you for your comments. Our data was checked per your comments and edits made as appropriate in the FEIS.

The SIAS and the DEIS are documents that have identified the probable impacts of the proposed action and alternatives based on the best available information. Existing data and information was gathered and supplemented with interviews with federal and Guam agencies. To provide the public and various governmental agencies with an opportunity to review and comment on the methodologies and assumptions used, the SIAS was included as Appendix F, Volume 9 of the DEIS. Comments provided on the DEIS will also be included to provide the decision-makers with the public views in support and/or opposition of the proposed action and alternatives.

J-017-009

Thank you for your comment. The SIAS and the DEIS are documents that have identified the probable impacts of the proposed action and alternatives based on the best available information. Existing data and information was gathered and supplemented with interviews with federal and Guam agencies. To provide the public and various governmental agencies with an opportunity to review and comment on the methodologies and assumptions used, the SIAS was included as Appendix F, Volume 9 of the DEIS. Comments provided on the DEIS will also be included to provide the decision-makers with the public views in support and/or opposition of the proposed action and alternatives.

It is also noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.

J-017-015

more caregivers may opt to leave their caregiving role and responsibilities for financial opportunities; thereby leaving those they care for, particularly those requiring supervised care, unattended, at home. DOD is requested to reflect on this impact as it has adverse consequences to the seniors, children, and adults with disabilities that require home care.

J-017-016

8. For Guam, I would propose an aging policy be put forth addressing the socio-economic factors facing Guam's aging community. It would be the responsibility of this policy to ensure that seniors are not displaced due to the military build-up and the quality of their life is maintained. We would need a social services support system to assess seniors who for the most, are living on "fixed incomes" to receive some degree of subsidy to ensure they are able to maintain basic life necessities, such as, power, water, housing, transportation, etc.... The policy should be designed to ensure all Guam seniors who meet residency and income requirements are safeguarded from falling victim to being impoverished as a result of the military build-up. Instead, seniors are registered into a system that ensures they maintain a dignified quality of life.

J-017-010

Thank you for your comment. For demographic information on the expected in-migrating populations, please see Section 4.2.2 of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS). The demographic analysis provides median ages for in-migrating populations. The expected median age for in-migrating workers is 32 years old and the expected median age of military personnel and their dependents, relocating to Guam, is 24 years old. The analysis does not provide a statistical breakdown by age because it is unknown, exactly, who will make up the in-migrating populations; there is not enough information to provide analysis with that sort of detail.

J-017-011

Thank you for your comment. Public comments on the DEIS are an important part of the decision-making process. This information becomes part of the FEIS and is evaluated when DoD prepares the FEIS and issues a Record of Decision at the end of the NEPA process.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-017-012

Thank you for your comment. Traffic management techniques such as alternative work schedule are recommended to help manage traffic impacts associated with the additional military personnel and dependents. Development of car pool lanes, or dedicated bus lanes, would be require significant right-of-way and result in more environmental impacts along roadways if new lanes were pursued. Development of existing travel lanes into carpool lanes along major arterials would significantly increase congestion levels for due to the loss general traffic carrying lanes.

DoD Comments for Relocation Only - Not Resolvable through FOIA				EIS/IS Comment Matrix (July 2018)		Guam and CNMI Military Relocation EIS/OEIS			
Vol	Ch	Py	Line, Title, No.	Org	Commenter (Last Name)	Comment	Response	Author Date	Mgr/Checked
J-017-017			1	DPHSS/CPW	usulco	No address of housing facilities for construction workers, how are these workers to be accommodated by staying their stay on Guam?			
	2	1	OV	DPHSS/CPW	usulco	No address of providing noise reduction measures to existing military communities in the area of construction.			
	3	1	OV	DPHSS/CPW	usulco	The address of a number of other noise facilities to be built and operated with noise. Need to ensure preparation to be reflected in Guam's environmental impact statement.			
	4	1	OV	DPHSS/CPW	usulco	Should address a second protocol to accommodate influx of construction workers to the project area. Construction of a new housing area underway prior to the proposed Guam Coast relocation and are not included in the EIS/OEIS. This needs to be addressed because local housing not able to handle influx in the event existing Navy housing facilities.			
	5	1	OV	DPHSS/CPW	usulco	No address of construction workers will be allowed to be treated in military hospital or clinic. If not allowed, how might they be accommodated if they are not able to accommodate EIS/OEIS.			
	6	1	OV	DPHSS/CPW	usulco	The address of social impact on community. How is background knowledge to be prevented. Are the construction workers to be restricted within construction compound only? If not, is Guam's legal and police department to manage private organizations?			
J-017-018			7	DPHSS/CPW	usulco	Regarding the diamond-enclosed, unincorporated enclaves proposed in Andersen AFB, note that all the enclaves are located on the Northern part of the island, what is plan to preserve the land?			
J-017-019			8	DPHSS/CPW	usulco	No address about the availability of the land for roadway construction. Is there any nearby streets?			
J-017-020			9	DPHSS/CPW	usulco	With construction plans, are impact on impact of residents existing along by construction areas, would the residents be accommodated for the noise, dust, loss of privacy due to existing etc.			
J-017-021			10	DPHSS/CPW	usulco	In construction of new facilities to benefit non-military community about should be addressed.			
J-017-022			11	DPHSS/CPW	usulco	There appears to be a contrast take care of land is, land required for the housing and housing, including, roadway, storage, etc. Guam appears to be becoming a base island and no longer a preserved island for the Chamorro people.			
J-017-023			12	DPHSS/CPW	usulco	No mention of the Bureau of Management Support under the Division of Public Works. No mention of the program and support provided by the division.			
	13	2	16	DPHSS/CPW	usulco	Are we require the contractors to ensure that high workers use personal safety and safety training?			
	14	2	16	DPHSS/CPW	usulco	Given an impact, what that that risk, where are the medical staff to receive this?			
	15	2	16	DPHSS/CPW	usulco	What would be responsible to ensure that there will be a health responsibility of workers? Where is this to be done?			
	16	2	16	DPHSS/CPW	usulco	What other additional working requirements may not be available with the required safety plan.			
	17	2	16	DPHSS/CPW	usulco	No mention of the Bureau of Management Support under the Division of Public Works.			
	18	2	16	DPHSS/CPW	usulco	Analyze restricted in transportation and vehicles. No true value to existing projects.			
	19	2	16	DPHSS/CPW	usulco	General provisions would also include requirements to provide medical, dental, vision, transportation and safety training. No mention of insurance that Guam community to be responsible to provide and support services.			
	20	2	16	DPHSS/CPW	usulco	Assumption of military spending on base to benefit Guam economy, however, spending in base does not affect community market.			

J-017-013

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-017-014

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam.

J-017-015

Thank you for your comment.

J-017-016

Thank you for your comment. The items identified in this comment are not part of the proposed action and are therefore not addressed in the EIS.

J-017-017

Thank you for your comment. Workforce housing would be provided by

Final Deliverable for Discussion Only - Not Releasable through FOIA				EIS/DEIS Comment Matrix (July 2008)		Guam and CNMI Military Relocation EIS/DEIS		
Vol	Ch	Page	Line, Title, Fig	Commenter (Last Name)	Comment	Response	Author Date	Vis. Change Checked
J-017	024			DPHSGDPAW	No current knowledge of interest for EIS/DEIS with staffing in an adjacent statement.			
		23	4	DPHSGDPAW	It is expected that the Guam community will be responsible for the progress of Public Safety Services.			
J-017	025			DPHSGDPAW	Increases in overall crime in a serious impact expected. To say that there would be less based on overall crime rate is an overstatement.			
		24	4	DPHSGDPAW	Domestic violence is a serious impact expected and Big Guam community may not be able to handle the numbers and crime.			
		25		DPHSGDPAW	Is that going to provide shelter and services for the victims of intercommunity violence. If yes, are shelter and services to be provided by the community or military? (LAW ENFORCEMENT)			
J-017	026			DPHSGDPAW	Is that going to provide shelter, food and medical assistance to the victims? (LAW ENFORCEMENT)			
J-017	027			DPHSGDPAW	What is the plan to prevent homelessness? Would services and medical assistance would be provided to the pregnant teenager and child?			
		26						
J-017	028				The DEIS indicates that impacts to Guam's overall household composition will be fairly negligible. With the number of the military personnel plus their families moving to Guam, the estimate is incorrect. The military households per household size may be larger than average Guam households, however, the number of military households coming to Guam may significantly offset the number of departures on Guam. The CDS only 1.1% of military households live below the poverty line. Thus, Guam's overall poverty rate will be lowered. Most of the military households meet above the poverty line since most of them are dependent working households. If these military households will come to Guam, the population of Guam will have to compete for jobs against military families, thereby, making Guam's population living below poverty line.			
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the contractors as described in Volume 2, Chapter 16, "Socioeconomics and General Services." DoD would not provide workforce housing, but design/construction contracts would require the contractor to accommodate the workforce in accordance with specified health and safety standards. Various proposals are being developed by potential contractors in anticipation of winning a contract. The timing and location are unknown for construction and/or renovation of housing to accommodate the construction workforce, but it is possible that some of the workforce housing projects would begin independently of DoD's Record of Decision.

There are no plans to allow contractors to locate workforce housing on DoD-controlled land. Therefore, it is anticipated that should workforce housing needs require the construction of new housing, such workforce housing would be located on either private or Government of Guam lands. In either instance Guam officials would control the underlying land use and permit decisions associated with the siting of such housing. DoD would work with Government of Guam land use and natural resource officials to identify any contractor plans or efforts to construct workforce housing and DOD shall ensure that contractors are informed of their responsibilities to comply with Government of Guam land use restrictions. In particular, the Guam Land Use Commission recently issued GLUC 2009-1 which specifically addresses the issue of zoning for workforce housing.

In the Socioeconomic Impact Assessment Study (SIAS), found in Appendix F of Volume 9 in the DEIS, the number of off-island H2B visa foreign laborers was estimated. Two scenarios were reviewed: the maximal number (unconstrained) and a constrained scenario. In Section 4.4 of the SIAS, there is detailed discussion and analysis of impacts to public services; some of the public services would be impacted by temporary workers and some would not. The Navy would require contractors who work on DoD projects to provide healthcare for their

DEIS
REVIEW COMMENTS SHEET

No.	Vol.	Chpt.	Page	Comments (last name)	Comments	Agency/Chpt.
J-017-029				Volume 1: Overview of Proposed Actions and		
J-017-030					1. Assurances that the roads outside the military facilities can handle the increase in population. 2. Sustainability and maintenance should be significantly considered during all planning to meet the needs without compromising the future. 3. Enforcement of proper practices on the toxic and nuclear materials that can affect the health of the residents to include monitoring, accountability and penalty on improper disposal. 4. No plan on how to recruit professionals such as doctors, nurses, teachers, and other critical workers.	
J-017-031					5. Increase in ship embarkments would create congestion and destroy the natural resources. The amphibious vehicles would generate noise that has impact on the surrounding residents. No plan on how to resolve this issue. Should create a roadway from residential areas.	
J-017-033					6. Addressing the health/medical services needs by restoring and sustaining medical practices, obtaining and maintaining quality medical equipment, and expanding the facilities for the 75K civilian workers and the future.	
J-017-034					7. Provide training to Guam residents to acquire the workforce than hiring off-island workers (75K).	
J-017-035					8. Methods for ensuring that enforcement, manpower, and facility are thoroughly address simultaneously in the safety component to include tighter customs and quarantine control and DOR checkpoints.	
J-017-036				Draft Socioeconomic Impact Assessment Study	1. Road safety, what are the plans to prevent additional traffic accidents in addressing the lighting, reflective, traffic signs, potholes, uneven surfaces, and driver's orientation/education 2. Construction of roads would have an adverse impact on Guam residents. Should change the hours of operation on some establishments to reduce the traffic congestion. Heavy equipments should not be allowed on the roads at certain hours. Create more bus transit and encourage it use. Government offices and some private companies should create a designated employee parking lot away from the traffic area and provide it own bus transit to alleviate the traffic congestion due to increase of population. 3. With the supply and demand and currently increasing rate of gasoline, power, water and waste collection, off-island workers would be compensated the comparable salary to the States but the basis are not commensurate to these increasing expenses. 4. Increase in population corresponds to an increase in workload requiring pay raises or recruitments. 5. Building permits should be based on the value of the structure to assist in resources needed. 6. Drivers license orientation on road protocols for off-island drivers to deter accidents and provision license for additional revenue. 7. Increase in alcohol and tobacco tax in establishing responsibility and control and also provide funding for rehabilitation or weekly sobriety checkpoints. 8. Plans on identifying, preventing and controlling the increase of drugs, OAH, prostitution and other related crimes. Should increase the manpower of Law Enforcement Agency. 9. Land lease with the provisions of percentage increase on a yearly or every two years to cover increase in the standard of living expenses. 10. Land lease with the provisions of percentage increase on a yearly or every two years to cover increase in the standard of living expenses.	
J-017-037						
J-017-038						
J-017-039						
J-017-040						

employees, including off-island/H2B workers. A small percentage may seek health and/or social services provided by Guam. However, workers would also contribute to the Government of Guam revenues in form of personal income and gross receipts taxes; corporations would pay corporate income taxes (See section 4.3.3, page 4-24 of the SIAS). The additional money would flow into Guam's revenues and, depending on executive and legislative branches decisions, could be used to provide for additional public health and social services.

Relating to the population figure of about 80,000 people; it should be noted the figure represents a maximal figure when most of the construction workers are still on Guam and the military populations arrive (2014); once construction is completed, the operational population would be about 33,400 (2016) (see the SIAS, Table ES-1, on page iii). Mitigation measures (as appropriate) to address the significant impacts will be discussed in the Final EIS.

Please see Volume 2, Chapter 9 for information on noise impacts.

On -base childcare and hospital facilities are not addressed in the EIS.

J-017-018

Thank you for your comment. As described in the Final EIS, runoff from the earth-covered magazines would be conveyed via LID infrastructure and BMPs prior to recharging the NGLA.

J-017-019

Thank you for your comment. The extension that you mention was a concept that would connect Navy facilities near Apra Harbor with Andersen Air Force Base. The proposal had been included in previous planning documents and was conceptually evaluated in the development of the 2030 Guam Transportation Plan. This route would primarily serve as a transportation corridor for only the military, would impact the

Val	Ch	Pr	Line No.	Org	Commenter Name	Comments	Response	Author	Date	Val	Ch	Pr	Line No.	Org	Commenter Name	Comments	Response	Author	Date	
J-017-041			4-11	DPHSS	Tiniano	The labor capacity for Guam may not be enough to meet demand for work, so transient construction will be required for. While work will be available to set up the military building, work may eventually decrease and people will be out of jobs again. We need to ensure sustainability and activities that occur are given priority and continue to build capacity.														
			4-12	DPHSS	Tiniano	For housing, the military is likely to secure construction housing for public personnel and dependents. In addition to military housing, commands will be placed on the outside base again requiring use of public housing which may be impacted by both temporary base. This will cause a departure housing backlog housing that will be needed. In addition, some activities may be spent on building between both the military and civilian demand, thereby competing for available which may not be available on island. This will impact people for the community's needs.														
			4-13	DPHSS	Tiniano	Reverends will likely increase, not decrease as the military moves out of the base are reduced. We need to be able to look at availability.														
			4-14	DPHSS	Tiniano	The DoD will likely be favorable if we accept the population increase.														
			4-15	DPHSS	Tiniano	This will be favorable if the military contributes to operations and assumes that they contribute to facility improvements and maintenance and become concerned.														
			4-16	DPHSS	Tiniano	No Comment.														
			4-17	DPHSS	Tiniano	No Public Service Impact. That will mean additional work and personnel. There should be a Lessons Learned from the Cleanup of Fine Association which is serving Guam. Somebody can see how living in military housing. If we do not improve limitations and restrictions of certain things be held, etc. It is just the residents of Guam and other a believe, Guam will absorb more bases.														

environment and would be very costly to construct. In order to benefit Guam's roadway network and make better use of limited funds, the Department of Defense (DoD) and the U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA) plan to improve existing routes instead.

The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the USDOT FHWA. The DAR Program provides the means for the DoD to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and FHWA are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to seek solutions to island-wide traffic issues.

J-017-020

Thank you for your comment. The EIS addresses the fact that there would be short impacts during the construction phase of the proposed military relocation program.

J-017-021

Thank you for your comment. Facilities construction is solely for training activities on Tinian.

J-017-022

Thank you for your comment. DoD acknowledges that the issue of land

Small Distribution for Discussion Only - Not Releaseable Through FOIA

ERDC/HS Comment Matrix (July 2008)

Guam and CNMI Military Relocation EIS/OEIS

Val	Ch	Fig	Line, Title, #/Pg	Org	Commenter (last name)	Comment	Response	Author (last name)	Ver Manager
J-017-042	1	1	2	2.1.1.2	DFW/OS	Peretz	The value of the engaged laborers, who are essential to the project, will not be reduced by a reduction in the number of workers at all. These individuals may apply for services under Public Assistance. The amount of public assistance will be based on the number of workers in our office and an increase in demand for an already high demand.		
	2	1	2	2.1.1.2	DFW/OS	Peretz	Contractors must of the earnings from these laborers will not stay in the island. This would likely affect the economy.		
	3	1	2	2.1.1	DFW/OS	Peretz	"Stay Behind" workers - who will no longer have work because the project has been completed, may end up on our rolls.		
	4	1	2	2.1.2	DFW/OS	Peretz	Social Disorder will impact all our social services. There is a need for medical insurance, cash assistance, food assistance. Increased incidence of teen pregnancy and out-of-wedlock pregnancy will also impact our public assistance services.		
	5						The increase in participation into our social programs will require and increase of staff to address the needs of these individuals.		
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REV: 06/04/07/08

acquisition is a complex and sensitive issue, particularly related to prior acquisition of land in Guam by the federal government. Prior land acquisition policies and procedures are not reflective of current land acquisition laws and DoD policy.

DoD was required to determine whether military relocation requirements could be met by excess, underutilized or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action.

J-017-023

Thank you for your comments and opinions.

It is noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action. The data used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing levels. It is acknowledged that it is not possible for this analysis to capture all requirements of GovGuam agencies, including impact on support staff. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service impacts, and provide a more detailed indication of fiscal impacts to GovGuam agencies.

The Guam Department of Labor, Alien Labor and Processing Certification Division is responsible for monitoring construction workforce housing.

J-017-043

J-017-044

Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment	Responder	Response	Author Done	Yet Manager Checked
1	2	18	p. 13-14	DEH		Under the heading, "Electromagnetic Safety", the report states that "Electromagnetic emissions on public health and safety would not result in any greater safety risk. Therefore, no impact to public health and safety related to electromagnetic emissions would occur." The division assumes that emissions may include lighting calculation. If so, DEH does not have the ability to regulate such activities due to the authority of the Radiological Health Program. Absence of this program, DPHSS will not have the capability to control the report's conclusion that there would be no impact. The program needs funding for personnel and training for its implementation.				
2	2	6		DEH		Noise pollution will evidently occur through construction activities and/or military operations. Although the report indicates that adverse noise will be insignificant, or can be made insignificant through mitigation, the possibility still exists that will impact the general public. Unfortunately, there is no DoD authority that directly regulates "noise," however, no authority exists to even address this matter locally. DPHSS does regulate public nuisances, which could include noise pollution; however, by policy it does not. In light of the potential problem, Guam needs to spend legislation specific to noise pollution. Such legislation must include funding for staff and training.				
3	2	18	18-4	18.1.3.2	DEH	As indicated in the section, DEPA/USEPA does regulate drinking water quality. DEH indirectly regulates water quality by enforcing the operation of water facilities for manufacturing and testing facilities. Additional funding to DEH for personnel is necessary for routine inspections of these facilities.				
4	2	18	v	Figure ES-1, ES-2	DEH	Figures ES-1 and ES-2 reflect the labor force and housing demands, respectively. These figures show the increase and decrease due to the height and distance towards the equatorial population. In terms of cost of living, individuals will likely see a rise in cost of goods and services faster than their income. This may impact DEH from the import of less costlier and cheaper quality commodities which may not be in compliance with local and federal standards governing foods, drugs, cosmetics, medical devices, and other commodities. Main funding for DEH is necessary and the support of federal regulatory agencies (i.e., USDA, USDA, and USDOC).				
5	2	15	vi	Table ES-4	DEH	The proportion of those serviced by DEH compared to the rest of DPHSS is unknown; however, DEH anticipates there will be increase in the services provided by the division. Any additional services to be provided by DEH will require increase in funding for the division.				
6	2	15	vii	Table ES-6	DEH	Table ES-6 provides the number of additional staff needed in DPHSS to service the projected increase in services (See Table ES-4). For the years 2010 and 2014, the unconsolidated scenario cases are 245 and 56, respectively, while the consolidated scenario numbers indicated are 158 and 51. How the numbers were derived and what percentages is for DEH are all unknown. However, based on the calculations performed by DEH, additional 15 personnel are needed in the pre-construction of the build-up.				
7	2	13	ix	Table ES-6	DEH	Table ES-6 states that DEH would need additional staff (enhanced by growth in permit requests for construction and development) as follows: unconsolidated scenario for peak year and 2020 is not 2, while consolidated scenario for peak year and 2020 is 4 and 2. Based on the division's need analysis, a total of 15 staff would be needed during the pre-construction phase. These staff would be directly involved in the preliminary processing and inspection of permit applications, while the remaining 12 staff would be needed for compliance review inspections.				
8	2	18	1-3	1.2.3 and 1	DEH	Although various socioeconomic concerns were raised by the public, there were no discussions of other significant issues, such as vector disease and biosecurity, public and private sanitation, radiological health, commodity safety, and food safety. Increase in DoD and non-DoD population as a result of the buildup will result in greater demand for environmental health services. Resources (staffing, training, etc.) must be provided to DEH to effectively respond to the needs of the entire population.				
9	2	18	2-7	2.2.3 and 1	DEH	DEH anticipates increase of imported goods with the build-up. There is the potential for increased number of non-compliant commodities reaching the population. In addition to increase staffing of DEH, the physical presence of federal counterparts are needed (i.e., resident posts for USDA, USDA, USDOC, etc.) for loans.				

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Construction contractors who bring in H2B workers for work will be responsible for health screenings of the workers, the screenings are generally done before workers arrive on Guam.

Economic impact analysis does not assume that on-base spending will benefit the Guam economy. All on-base spending is removed from analysis and not included in measure of economic impacts.

J-017-024

Thank you for your comment.

This staffing information is in reference to GDPHSS BCDC in particular, not GDPHSS in total, and was based upon survey results received from the bureau.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-025

Thank you for your comment. There are many reasons why the Marines (about half) are being moved from Okinawa. This discussion is provided in section 3.5.2 of the Socioeconomic Impact Assessment Study (SIAS) that is Appendix F, Volume 9 of the Draft EIS. Serious crimes by military personnel in Okinawa are committed at lower rate than the overall civilian population in Okinawa, despite reports to the contrary. Many serious crimes are based on singular incidents that are reported multiple times so that it appears to be multiple incidents.

	Vol	Ch	Pg	Line, Tbl, Fig	Org	Commenter (last name)	Comment	Response	Author	Mgr	Checked
J-017-045	10	2	10	2-10		DEH	There could be a public health concern related to poor sanitation as a result of over-crowded housing and homelessness. More funding and staffing for DEH will be needed to address the problem.				
	11	2	10	3-47	Table 3.3-2	DEH	Table 3.3-2 shows the required employment composition of Guam's economy and trends from 2000 to 2006. For these years, it is interesting to note that the agricultural industry grew 42% (289 to 415) along with the recreation industry at 59% (6,730 to 8,700) followed by wholesale and manufacturers at 6% (1,342 to 2,053) and 4% (1,618 to 1,993), respectively. These growth trends are only positive with the backup, specifically, DEH is concerned about residual pesticide of local and imported agricultural products, temporary workers from neighboring, and sanitation of wholesalers, manufacturers, and retailers. It's imperative that adequate funding be provided to DEH to respond to the anticipated demands for these and other environmental health services.				
J-017-046	18		4-147	Table 4.2-1; 4.2-2; 4.2-3; 4.2-4		DEH	DEH DEH fails to assess the potential employment of military dependents in the private sector. Thus a study should be conducted to assess what impact it would have on the island (and DEH), if any.				
	13	2	10	4.5	N/A	DEH	Temporary Foreign IGBI Visa Workers arriving on Guam will be housed in dormitories which will be inspected by DEH. The vast number of dormitories that will be constructed will impact DEH. Planning for personnel will be necessary to ensure regular inspections of these facilities.				
J-017-047	14	2	18	4.91	N/A	DEH	The draft DEIS mentions Massage Parlor establishments. These regulated establishments will be inspected by DEH. It is assumed that the number of massage parlor will increase with the arrival of 42 workers and the military, thus creating the need for more inspections. Therefore, it is recommended that DEH be included in any conditions created to address massage parlor, and funding of staff to conduct inspections.				
			16	16-24		DEH	Under the heading, "Division of Environmental Health," the report indicates that the division issued 22,273 health certificates in FY2006. This is incorrect; the division issued 30,290 health certificates. This needs to be corrected.				
J-017-048	15	2	Appendix F	3-12		DEH	Under the heading, "Division of Environmental Health," the report indicates that the division issued 22,273 health certificates in FY2006. This is incorrect; the division issued 30,290 health certificates. This needs to be corrected. Also in the same section, p. 3-12, second paragraph, last sentence: "If a facility does not pass sanitary inspections, further inspections..." needs to be corrected to read, "If a facility does not pass pre-opening inspections, further..."				
			17	16-54 to 16-56		DEH	Under the heading, "Temporary Workforce Housing," the report comments about how employers will likely provide workforce medical and dining facilities. Although the division site regulations governing dining facilities, it does not have regulations for medical facilities, and the correct regulations for temporary workforce housing is in effect. DEH must promulgate regulations for medical facilities and make existing regulations for food facilities and temporary workforce housing.				
J-017-049	16	2	16	16-72 to 16-75		DEH	Under the heading, "Public Health and Human Services," the report makes no comments about the need for additional environmental health practitioners in DEH to respond to the pre-construction and post-construction build-up. The division is only recognized for its permitting activities (p. 16-63 to 16-64). The various environmental health programs and services provided by DEH need to be considered and funded accordingly.				
	19	2	18	p. 18-16 to 18-17		DEH	Under the heading "Infectious Diseases," the report mentions of mosquito control. Mosquito surveillance and control is one of the responsibilities of DEH. Currently, the program is only partially active. DEH will not be able to adequately respond to a major vector-borne outbreak without sufficient personnel, equipment, and training. Furthermore, the division diagnosed with the report's comment that there will be no impact from the build-up. A single imported case of Dengue Fever or malaria can cause a local outbreak since the island has the mosquito species that vector transmits these diseases (Anopheles and Aedes).				

The impacts of crimes on Guam are discussed in Volume 2 of the Final EIS. As noted in the SIAS: "A critical distinction when analyzing crime impacts is between the total numbers of crimes ("volume of crime") and the actual crime rate (numbers divided by population). Population increases always bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely to commit crimes."

The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by an increase in overall crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct and enforce laws to protect the citizens of Guam and our military personnel.

DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-017-050

Vol	Ch	Pg	Line, Tab, Fig	Org	Commenter (last name)	Comment	Response	Response	Author Done	Vol Manager Checked
20	2	Appendix F	a. 4-111 Table a.4.4.00	DEH		The Division is uncertain how the numbers were derived. Also, the report assumes that there will be increases of activities in only the permitting of facilities and monitoring, which is incorrect. In the construction (and details portion of the construction phase) activities of 10 Division staff will be necessary to issue permits, inspect facilities, and require imported contractors in response to the anticipated off-island construction workers. Additional personnel will be needed if the military personnel, its dependents, and all other population are included in the count.				

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J-017-026

Thank you for your comment. Workforce housing would be provided by the contractors as described in Volume 2, Chapter 16, "Socioeconomics and General Services." DoD would not provide workforce housing, but design/construction contracts would require the contractor to accommodate the workforce in accordance with specified health and safety standards. Various proposals are being developed by potential contractors in anticipation of winning a contract. The timing and location are unknown for construction and/or renovation of housing to accommodate the construction workforce, but it is possible that some of the workforce housing projects would begin independently of DoD's Record of Decision.

There are no plans to allow contractors to locate workforce housing on DoD-controlled land. Therefore, it is anticipated that should workforce housing needs require the construction of new housing, such workforce housing would be located on either private or Government of Guam lands. In either instance Guam officials would control the underlying land use and permit decisions associated with the siting of such housing. DoD would work with Government of Guam land use and natural resource officials to identify any contractor plans or efforts to construct workforce housing and DOD shall ensure that contractors are informed of their responsibilities to comply with Government of Guam land use restrictions. In particular, the Guam Land Use Commission recently issued GLUC 2009-1 which specifically addresses the issue of zoning for workforce housing.

J-017-027

Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social

J-017-051

No.	Vol	Chot	Pg	Line, Tbl, Fig.	Commenter (last name)	Comment	Agency/Dept
					Arciaga	Guam TB Incidence Rates per 100,00 Population:1997-2006 1997: 64.9; 1998: 59.7; 1999: 45.5; 2000: 34.8; 2001: 39.9; 2002:40.4; 2003:37.3; 2004:30.7; 2005:37.9; 2007:53.0	DPHSS DPHSS
						Our data show that the increase of active TB cases from a low of 34.8/100,000 population to a high of 53.0/100,00 population. Although medical care and follow-up is provided to all military personnel and their dependents there could still be civilian contacts that could have been exposed that needed to be followed up all of whom require follow-up at the Guam Department of Public Health and Social Services.	DPHSS
						With the impending influx of contract workers coming from countries where Tuberculosis is endemic in preparation for the USA Military build up here on Guam, then we may see a steady increase in the number of TB cases. Unless stringent measures are implemented in the health screening requirements of all contract workers upon arrival and funding sources are available to continue our Tuberculosis surveillance activities then we may see a 10-20% increase in the number of TB cases in the next 2-5 years .	DPHSS DPHSS

services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-028

Thank you for your comment. Please see Section 4.2 of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS) for information on the expected impacts on population that would result from the proposed action.

Analysis of Labor Force Demand (Section 4.3.1.1 of the SIAS), under both the unconstrained and constrained scenarios, assumes that some military dependents would be employed as civilian military workers - up to about 940 dependents working as civilian military workers. Analysis in the constrained scenario further estimates that other military dependents would participate in the Guam labor market, and would compete for jobs with other Guam residents.

J-017-029

Thank you for your comment. Overall traffic congestion and resulting travel times will increase as organic (non-military) population increases on Guam. The increase in population associated with the military build-up will also add traffic and increase congestion. The FEIS identifies a number of roadway improvement projects for the 2030 planning horizon, that if implemented, will offset the increased congestion attributable to the military at many locations.

J-017-030

Thank you for your comment. The sustainability and maintenance of

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No.	Vcl	Chpt	Pg	Line, Tbl, Fig	Commenter (last name)	Comment	Agency/Orig
J-017-052						1. Ensuring the sustainability and maintenance are address in any upgrade, improvement, and recruitment.	
J-017-053						2. Increase in population corresponds to an increase in the request for the Certificates of Birth, Death, and marriage which corresponds to an increase of workload requiring pay raises or recruitments.	
	1	Volume 2: Marine Corps-Guam Public Health and Safety			Division of Public Health/Office of Vital Statistics	3. Increase in population would ultimately increase marriages therefore issuance of marriage license applications to be issued from OVS.	
						4. The military build-up would definitely put a huge increase in the need for supplies, equipments and manpower to efficiently service the public without having long lines of people waiting to be serviced.	
						5. The need to re-evaluate salaries for the Office of Vital Statistics has to be revisited and adjusted to ensure compensation is equitable to other similar positions (I.e., Customer Service Rep.).	

DoD facilities on Guam is a mandate of Joint Region Marianas. Maintenance budgets are annually programmed and approved. Sustainability principles with respect to conservation of resources is incorporated into the design. DoD is committed to low impact development (LID) and would achieve Leadership in Energy and Environmental Design (LEED) level of Silver.

J-017-031

Thank you for your comment. Volume 2, Section 18.1.1 indicates that this section discusses the potential public health and safety issues related to implementation of the proposed action and alternatives on Guam. The region of influence (ROI) for public health and safety concerns includes the entire island. The health and safety issues discussed in this section include operational and construction safety, environmental health effects, notifiable diseases, mental illness, traffic accidents, unexploded ordnance (UXO), and reduction in access to public services.

The FEIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-032

Thank you for your comment. The Socioeconomic Impact Assessment Study (Appendix F of the DEIS) provides expected employment

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pg	Line, Tab, Fig	Commenter (last name)	Comment	Agency/Org
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J-017-054

18	4-8				Morris	When commenting on public health issues, the DEIS deals only with treatment aspects of public health (notifiable diseases) and speaks little to nothing of the necessity to address prevention efforts such as obesity reduction, smoking cessation and early prenatal care. Nor does it address the attention which needs to be devoted to environmental intervention (e.g., safe places to exercise, youth programs, accessibility to nutritious foods across all socio-economic groups, etc.), without which health improvement impacting the entire population will not take place. When speaking of health care providers, it mentions only physicians and nurses and does not address the necessity of increased infrastructure with all the other allied health professionals and the need for health planning consultation to address the population's health care holistically. Overall the DEIS needs to incorporate the things listed above.	DPHSS
16	20-24				Morris	While giving a small mention (i.e., to prevention) to the role of Health and Human Services in "treatment and prevention (page 20 of Chapter 16)" in an introductory statement, the DEIS proceeds to speak almost exclusively of the treatment aspects of health care. It is interesting that of all the Bureaus within DPHSS, it mentions only those who have a major role in the treatment of disease: Primary Care Services, Communicable Disease Control and Nursing Services. With a few exceptions, it comments primarily on the services within these bureaus which deal with treatment to the exclusion of prevention. It makes no mention of the coverage areas of the Bureau of Nutrition or Professional Support Services whose public charge deals primarily with prevention efforts to provide individual and population-based health education, environmental health planning approaches and allied health professional support and consultation in the areas of Nutrition, Physical Activity, Cancer, Heart Disease, Stroke, Diabetes and Maternal and Child Health. An Environmental Impact Statement, tends to speak to where available health resources should be devoted (whether explicitly or implicitly). Given this, I am concerned at what seems to be a disproportionate amount of focus on treatment, with little regard to prevention. The DEIS needs to incorporate the present status and future need of increased educational, environmental, population-based health planning and increased allied health professional support to address the issues of military expansion in Guam.	DPHSS

requirements for guam public service agencies. It is not part of the scope of the EIS to develop a recruitment plan.

J-017-033

Thank you for your comment.

J-017-034

Thank you for your comment. The Final EIS identifies approximate numbers of civilian employees to be hired by the DoD. Specific hiring procedures, however, are not addressed in the EIS. DoD follows standard Federal hiring procedures to fill DoD civilian positions. Those can be reviewed at <http://www.opm.gov/>

Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

J-017-035

Thank you for your comment. Volume 2, Section 17 outlines the regulatory framework for managing hazardous materials and hazardous waste. The Navy manages the storage, handling, and disposal of hazardous materials/waste to ensure compliance with Federal, local, and Navy hazardous materials management regulations and instructions/directives. Appropriate procedures have been established to identify training requirements for personnel routinely handling hazardous materials and to ensure a safe working environment and proper reporting/response in the event of a release.

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pg	Line, Tab, Fig	Commentator (last name)	Comment	Agency/Org
J-017-055			18		Manibusan	As the population grows, overcrowded conditions may lead to pollution, stress, the emergence of new diseases, traumatic injuries and violence. Those with low socio-economic conditions, suffer with the burden of mortality and morbidity.	DPHSS
J-017-056			18		Manibusan	The Community Health Nurses as well as the Central Region Health Clinic sees those without health insurance. There are only three home visiting nurses to cover the entire island of Guam. Moreover, the clinic has only two Registered Nurses and two Licensed Practical Nurses to run ten clinic services per day. The clinic has Maternal child Health Clinics which includes Child Health, Family Planning, Women's Health, STD Clinics, Communicable TB Clinics, Immunization Clinics. All of these clinics are free services. The clinics will be affected by running out of supplies, medications diagnostic test, etc. The x-ray machine is old and need to be replaced or repaired. The clinic is in dire need of repair and remodeling. With the increase in population, the clinic will be more dilapidated.	DPHSS
J-017-057			18		Manibusan	The improvement of quality of living through health promotion, effective health care delivery systems, and enhancing the environmental infrastructure will consequently prevent increased diseases.	DPHSS
J-017-058			18		Manibusan	The stressors, such as lead poisoning, pesticides, air pollution, will directly affect human health. There will be an increase of cars on the roads, which consequently increase carbon monoxide and will affect unborn fetuses. We need to prevent an increase of Children with Special Health Care Needs.	DPHSS
			18		Manibusan	Additionally, we should not forget small pox. With the military build-up, what are we doing to protect our population if this ever emerges? The majority of nurses are not trained to do small pox vaccination if an epidemic ever occurs.	DPHSS
			18		Manibusan	Community Health Nurse face many challenges. These include being responsive to emerging needs and health care issues within their aggregates, developing multidisciplinary models for practice that hold fast to the principles of primary prevention in health care. There is a need to do more research in practice implementations to achieve higher level of health and well-being.	DPHSS

J-017-036

Thank you for your comment. Alternative work schedules are a great way of reducing traffic impacts during the peak hours and should be considered by all businesses on Guam. A transit plan is included in the Guam 2030 Transportation Plan. A maintenance of traffic plan will be included in the design of the roadway projects to minimize the disruption of traffic during construction.

J-017-037

Thank you for your comment. Relating to cost of living and the proposed military buildup, it is noted that the history of inflation and recession of Guam's economy from the 1970s to present was provided on page 3-47 of the Socioeconomic Impact Assessment Study (SIAS). In subsection 4.3.1.4 (beginning page 4-10) of the SIAS, the subject of impact on the standard of living is addressed, stating: "Standard of living is a measure of purchasing power. If the standard of living increases for a person it means they can purchase more goods and services. If the standard of living declines for that person, he or she can purchase fewer goods and services. Changes in a person's standard of living are determined by their income and the prices of the goods and services they tend to purchase. A person's standard of living will increase if their income rises faster than the prices of goods and services they tend to purchase. A person's standard of living will decline if the prices of goods and services they tend to purchase rise faster than the person's income. In both the construction and operational components, the average wage of workers would increase as a function of greater demand for labor. However, the price of goods and services purchased by individuals would rise as well. It cannot be definitively predicted whether wages or the price of goods and services would increase at a faster pace. If wages earned by a particular household rise more quickly than the price of goods and services, then the standard of living would increase. If the price of goods and services rises more quickly than wages, the standard of living would decrease. For households on fixed incomes, the result would be reduced

J-017-

Vol	Ch	Page	Line, Tab, Fig	Urg	Commenter (last name)	Comment	Response	Response	Author Date	Yr Made	Check
059	18	21			DPHSS-DPH	In 2005, Guam had a total of 244 physicians serving its population, including physicians at the Guam Memorial Hospital and fanned military physicians working on a part-time basis. (Western Pacific Region Health Database 2007)	M. Louialhat	Guam has over 300 physicians that provide services at Guam Memorial Hospital. Some of these physicians do not actively live on Guam, but, come to Guam for quarterly basis to provide much needed specialty services such as strabismic surgery.			
2	2	16	95	18.2.3.3	DPHSS-DPH	For health and human services, this chapter considered impacts on various aspects of the GCHA, the GDPHSS, the GOMHSA, and the GPHSS. These agencies would need a combined 192 new key professional workers by 2014, dropping to a combined 52 a few years later.	M. Louialhat	To combined GDPHSS with other health care agencies with regards to new key professional workers not a true reduction of the staffing needs of the agency. GDPHSS requires additional nursing, allied health, and medical professionals to be able to handle the increase in population pre-construction and post-construction.			
3	2	18	21	18.2.6.5	DPHSS-DPH	No increases in demand for health care services would occur as a result of additional military relocations on Guam. However, the natural increase in population would result in a slight increase in demand for these services. As a result of natural population increase on Guam, approximately 1 additional doctor and 3 additional nurses would be required to maintain the current service ratios. These additional health care professionals would be hired in order to maintaining current service ratio.	M. Louialhat	At present, with the current health care staffing at GDPHSS, additional military activities (e.g. construction) will certainly increase the demands on health care services. Without an increase in the number of health care professionals that provide direct and indirect patient care, would result in delay in response times to patients; longer wait times; fewer or no available providers on island for chronic or acute issues; and complications or death from delayed treatment.			
4	2	18	21	18.2.2.2	DPHSS-DPH	During the peak construction years (2014) 15 additional doctors (25% increase) and 91 additional nurses (26% increase) would be required to maintain the current service ratios; the number of additional doctors drops to 2 (4% increase) and nurses drops to 12 (3% increase) after construction activities are completed.	M. Louialhat	Again, combining GDPHSS with other health care agencies with regards to the need of additional health care professional needs, is not a true reduction of the current staffing needs of GDPHSS. GDPHSS provides health care services to the unincorporated and under-served; an additional 30% of new physicians, nurses, and allied health professionals are required to handle the increase in population during the pre-construction and post-construction phases.			
5	9	4	41	Table 4.4.1	DPHSS-DPH	Summary of Agency Survey Comments of Existing Facility and Staffing Challenges	M. Louialhat	Unsure why there was no response from GDPHSS with regards to facility capacity and staffing problems. However, GDPHSS current facility to provide health care services to the current population as well as the projected increase in population with the military build-up, will require either facility expansion or new like other health care agencies, health care professionals are difficult to recruit due to salary compensations.			
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purchasing power. Those with the ability to quickly renegotiate their wages will have a better chance at maintaining or increasing their standard of living." On page 4-11 of the SIAS, the discussion continues and discusses the income of military related construction and operational jobs that will, on the average, be higher than the present average wages on Guam. It concludes: "In terms of cost of living, from 2000 to 2008 Guam workers have seen their standard of living decline by 30% and there is no reason to expect the military buildup to reverse that trend – Guam workers will likely to continue to see the cost of goods and services rise faster than their incomes. While the proposed action may not represent a reversal of this trend, it will slow the rate of decline in the standard of living that has been prevalent since 2000."

J-017-038

Thank you for your comment. Please see Section 2.3.2, Page 2-12, of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS) for information on permitting analysis methodology.

J-017-039

Thank you for your comment. Volume 2, Section 18.1.8 discusses public safety efforts to ensure roadways on Guam are safe. The Guam Police Department has instituted traffic safety checkpoints and safety education programs across the island. Traffic accident data for the years 2001 through 2005 indicated that, despite the population increase over the 5-year period, the number of traffic accidents has decreased. Guam DPW is conducting a safety and hazard elimination study to identify the most hazardous traffic locations on Guam. In addition, the Guam Territorial Transportation Improvement Plan contains 14 island-wide traffic hazard elimination projects that include school zone signs, village road safety and warning signs, seashore protection, pavement markers, anti-skid surfacing, and guardrails. As discussed in Volume 2, Section 18.2.2.7, there would potentially be more vehicles on the roadways resulting in more potential for accidents as a result of the increase in military

Draft Deliberative for Discussion Only - Not Releasable through FOIA				EIS/OEIS Comment Matrix (July 2009)		Guam and CNMI Military Relocation EIS/OEIS					
Line No.	Vol	Ch	Fig	Line, Tab, Fig	Org	Commenter (last name)	Comment	Responder	Response	Author Done	Vol Manager Checked
1	2	18	17	18.1.4.9	DPHSS	Schumann/Cat	reflect subpopulations impacted by STDs or HIV infection.	Schumann	population increase:		
2	18	16		18.2.2.3	DPHSS		Chlamydia Among Guam's reportable STD infections, Chlamydia has by far the highest incidence. During years 2007-2008, the highest incidence rate (Guam per 100,000 population) was among 20-24 year-olds. In 2008, there was a reduction of Chlamydia cases, with an incidence rate of 1421.43 as compared to the 2007 incidence rate of 2256.84. Between 2007 and 2008 the 20 to 29 age group experienced an increase in incidence while the incidence in the 40 to 50 age group decreased.		<ul style="list-style-type: none"> There is recognition that the STD/HIV Program, Bureau of Communicable Disease, DPHSS continues to face complex and regional challenges. There are no current studies/projections to determine the STD/HIV and other communicable diseases health burden impact as a result of the population change. 		
3	2	18	17	18.2.2.3 Table 18.2.1	DPHSS		A Chlamydia incidence rate of 1185.71 for persons from the FSM (Esp. Chuuk, Pohnpei, Kosrae) living on Guam in 2007 was the highest recorded on Guam. In 2008, Micronesians still ranked the highest with an incidence rate of 1003.83. This may be due to problems encountered in working with this population including lack of prenatal care, missed opportunities to provide STD/HIV prevention services to Micronesian clients diagnosed with STD, their sexual partners. Effective communication such as language barriers with this population remains a challenge.		It is not known the impact of STDs and HIV infection of an unprecedented magnitude on Guam's population. The impact of STD/HIV infection based on population by 20% increase by 2015 - 208,200 is not known.		
4	2	18	18								
5	2	18	22								
6	2	18	25				The incidence rate for gonorrhea by age breakdown in 2007 was highest among those 20-24 years of age while in 2008 it was highest among those 25-29 years of age. Gonorrhea rates overall decreased by 29% from 2007 to 2008. While most age groups experienced a decrease in the number of cases, there was an increase of 39% in the age group 25 to 29. Gonorrhea incidence by ethnicity showed an increase of 52% between 2007 to 2008. Social and cultural factors such as acceptance of multiple sex partners and polygamous relationships provide for increased risk of STD's transmission within this group. Focused strategies and interventions targeted to the Micronesian group are being developed. The STD/HIV Program staff also continues to work closely with the military clinics to ensure reporting for Gonorrhea, Chlamydia and Syphilis are maintained, proper services are initiated. This main concern is the pool of STD infections already occurring locally, and with transient population of migrants, military, tourists and local population, the spread of STDs and HIV infection are most likely to increase to potential epidemic levels.				
7	2	18	28								
8							Syphilis		<ul style="list-style-type: none"> The STD/HIV Program, HCDC requests that an accurate burden of STDs, HIV and other communicable diseases are included in projected estimates based on the increase of population. Also, the STD/HIV Program seeks additional resources should most of those workers status will be H-2B (temporary) work force who are expected to originate from developing nations such as the Philippines, China and other neighboring Asian countries. 		
9							The incidence rate for syphilis by age in 2007 and 2008 was highest among those 20-24 years of age. Overall, there was an 18% increase in the total number of syphilis cases reported to the STD/HIV Program from 2007 to 2008.				

personnel and their dependents. The Navy uses focus group sessions with personnel to strategize potential measures to reduce the number of traffic incidents. Several common factors contribute to traffic incidents including; young personnel, late night, impaired driving, and alcohol/drugs. Some of the measures that would be implemented to reduce traffic incidents include awareness training regarding the consequences of drugs and alcohol use; increase Shore Patrol activity; and provide free shuttle bus runs to/from town.

Overall traffic congestion and resulting travel times will increase as organic (non-military) population increases on Guam. The increase in population associated with the military build-up will also add traffic and increase congestion. The DEIS identifies a number of roadway improvement projects for the 2030 planning horizon, that if implemented, will offset the increased congestion attributable to the military at many locations.

The 2030 Guam Transportation Plan outlines recommendations for an improved mass transit system on Guam. These recommendations included forming the Guam Mass Transit Authority and implementing high-capacity bus service on the island. In late 2009/early 2010, the Guam Regional Transit Authority (GRTA) was formed and will now be responsible for all public transit functions. The GRTA approved the Guam Transit Business Plan in January 2010, which includes purchasing new buses, constructing a bus maintenance facility, and modifying the bus schedule.

The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the U.S. Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual

Vol	Ch	Page	Line, Title, Para	Org	Commenter (last name)	Comment	Responder	Response	Action Done	Vol-Manager Checked
J-017-061						Syphilis rates by ethnicity were most prevalent among the Micronesians group, most notably among the Chamorro. An increase from 2007 to 2008 by 18% was noted in the FSM group. The FSM group continues to reflect the highest number of reported syphilis cases for both years. A recent study demonstrated that the percent of Micronesians mothers who received no prenatal care during their pregnancies had increased by more than 4 times (483%) over the study period. Lack of medical insurance (24.3% of respondents) and lack of transportation (22.6% of respondents) were the leading reasons given for not receiving prenatal care during their pregnancies. Nearly half (48.2%) of respondents indicated they would prefer to receive prenatal care at public health clinics, the number including Marcha, Chank, or Southern clinics roughly reflecting population numbers of the areas served by those clinics (1)				
						Preliminary results from the Guam Second Generational Surveillance Study conducted in 2007-2008 of approximately 150 Chamorro reflects that there was a 12% positive rate for Chlamydia and a 5% positive rate for Gonorrhea. During the recruitment of the SGS Study, young female Chamorro were recruited to complete the survey and opted to also test for syphilis/HIV. Although none tested positive for HIV, primary and secondary infectious syphilis were detected among participants and their sex partners, mainly a cluster of 7 new syphilis cases. The STD/HIV Program initiated disease investigations of the syphilis clusters being partners to remote Chamorro Islands, Guam, Hawaii and Military Commands.				
						U.S. DHHS, CDC STD Surveillance				
						According to the 2007 Sexually Transmitted Disease Surveillance Report by the Division of STD Prevention, the Chlamydia rate for Guam was 473.9 per 100,000 and ranked 6 th in the nation among all states and outlying areas. Among Guam women, the chlamydia rate was 797 per 100,000 per population. The gonorrhea rate for Guam women was 78.7 per 100,000, the Healthy People 2010 target for gonorrhea is 19.0 cases per 100,000.00		Additional observation of an increase of STDs and HIV infections from the outer Micronesia Islands, the Federated States of Micronesia, and Marshall Islands based on current epidemiological disease trends.		
						STDs as a co-morbidity for increasing transmission of HIV infection				
						Although HIV infection is considered low and stable among the six (6) U.S. Pacific Island Jurisdictions (PIJ), the incidence of infectious cases continues to be a concern as HIV infection spreads across the PIJ. The Ryan White Statewide Coordinated Statement of Need and Comprehensive Plan Epidemiologic Profile of HIV/AIDS on Guam summarizes the current situation of HIV/AIDS cases in the jurisdiction.		SUMMARY		
						Nineteen people with HIV/AIDS died on Guam from 2004 to 2008. Two people initially diagnosed with the disease on Guam subsequently left the jurisdiction and died on their home islands.		Based on the current level of STD and HIV cases, current trends demonstrate that the impact may be significant if resources are not increased.		
						Since 1985, 105 or 50% of the 208 HIV cases in the HIV surveillance registry were MSM or MSM/IDU (Injection Drug Users) cases, followed by 47 or 23% Heterosexual Contact (HC) or HC/IDU cases. Other cases included 6 (2.9%) IDU, 2 (1%) Perinatal transmission, and 7 (3.4%) Factors VTE, blood transfusion, and occupational exposure transmissions. Military personnel also testing HIV positive do not remain in Guam and				

defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The Department of Defense, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to seek solutions to island-wide traffic issues.

J-017-040

Thank you for your comment. DoD acknowledges that the issue of land acquisition is a complex and sensitive one with both historical and contemporary contexts. Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value.

DoD is confident that all parties can reach agreement on any potential land acquisition. Further, any proposed major DoD land acquisition, such as those associated with the preferred alternatives for the main cantonment and live fire ranges, must be approved by the Congressional defense committees.

Specific areas being considered for acquisition are identified in the Final EIS.

J-017-041

Thank you for your comment and opinions. As you note, there would be an expected decline in economic activity as the construction phase of the proposed action winds down. However, all economic variables analyzed are expected to be at higher levels of benefit for every year in the foreseeable future than they otherwise would be without the proposed

Draft Deliberative for Discussion Only - Not Releasable through FOIA					ERDEIS Comment Matrix (July 2008)		Guam and CNMI Military Relocation EIS/OEIS	
Vol	Ch	Fig	Line, Tab, Fig	Org	Commenter (last name)	Response	Response	Vol. Manager Checked
18							<ul style="list-style-type: none"> Mitigation of the impact from Federal partners—largely in the terms of funding for the STD/STI Program, DPHSS and other communicable diseases (Tuberculosis, Hepatitis B, HIV) and related programs such as Family Planning, Adolescent, Child Health and Community Health Centers, Mental Health and Substance Abuse, and Housing/Urban Development. 	
19					In the past 5 years (2004-2009) there have been 4 HIV infections recorded among pregnant women; of these women 3 were pregnant before receiving an HIV positive result and 1 tested positive before becoming pregnant. (In 2008 there were 3,466 deliveries recorded on Guam)	<ul style="list-style-type: none"> Secure social and health professionals to expand programs to vulnerable populations such as migrants, injection drug users, commercial sex workers and adolescents. 		
20						<ul style="list-style-type: none"> Enhance the current STD/STI surveillance system and evaluation capacity among Guam and other U.S. Affiliated Pacific Islands Jurisdictions. 		
21					References			
22					1. Lockwood AL, Murphy-John M, Navea CL, Castillo C. Lack of prenatal care re-emerging health problem on Guam. <i>Hawaii Journal of Public Health</i> (2008) 10(3):6-84	FUNDING SOURCES:		
23					2. Carrasco Nina, Bureau of Statistics and Planning, Government of Guam			
24					3. Subramanian, Ramesh P. Guam SGG preliminary results (2008), STD/STI Program, DPHSS Division of Public Health, Bureau of Communicable Disease Control, Government of Guam.	The STD/STI Program activities are supported by U.S. domestic and international funding sources. The STD/STI Program collaborates with numerous partner agencies that are striving to achieve a delivery of high quality HIV and STD services in the jurisdiction.		
25					4. Haddad RA, Aerial Laboratory of Notifiable Diseases Mobility Reports (2007), Office of Epidemiology and Research, DPHSS, Government of Guam.			
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action. For instance, please note Figure 4.3-1 of the Socioeconomic Impact Assessment Study (Appendix F of the EIS), which shows higher levels of demand for labor during every year, with the proposed action, compared to the baseline trend which shows demand for labor without the proposed action.

The EIS anticipates that military housing would be built within the main cantonment area. It is anticipated that the majority of Marine families would rent units in the military housing and generally would not compete with Guam residents for available housing units. After the construction period, housing and rental prices could decline because the construction labor force (not including the H2B who will live in dormitory type quarters) would leave Guam. Civilian military workers may vie for Guam housing; however, residential housing needed for these long-term workers would likely be about 3,200 units (maximal) by 2020 (SIAS, Table ES-3, page v).

J-017-042

Thank you for your comment.

In the Socioeconomic Impact Assessment Study (SIAS), found in Appendix F of Volume 9 in the DEIS, the number of off-island H2B visa foreign laborers was estimated. Two scenarios were reviewed: the maximal number (unconstrained) and a constrained scenario. In Section 4.4 of the SIAS, there is detailed discussion and analysis of impacts to public services; some of the public services would be impacted by temporary workers and some would not. The Navy would require contractors who work on DoD projects to provide healthcare for their employees, including off-island/H2B workers. A small percentage may seek health and/or social services provided by Guam. However, workers would also contribute to the Government of Guam revenues in form of personal income and gross receipts taxes; corporations would pay corporate income taxes (See section 4.3.3, page 4-24 of the SIAS). The

Draft Deliberative for Discussion Only - Not Releasable through FOIA										ERDEIS Comment Matrix (July 2009)		Guam and CNMI Military Relocation EIS/OEIS	
Vol	Ch	Fig	Line, Tbl, Fig	Org	Commenter (last name)	Comment	Responder	Response	Author Date	Vol	Number Checked		
58						Amount	\$238,000						
59						International Greater							
60						Secretary of the Pacific Community							
61						Pacific Response Fund							
62						Amount				\$32,000			
63						TOTAL AMOUNT				\$914,400			
64						ANNUAL STABILITY PROGRAM BUDGET							
65						Other Local/State Programs Included by U.S. TRIS							
66						Community Health Centers (Pirihua/Southern Clinics)				\$1,100,000.00			
67						ORISA-4895							
68						Not available- Only vaccine funded for high risk populations (CDC)							
69						Registre B							
70						Immigration Program 217	\$ 469,000.00 (TRIS)						
71						Family Housing	\$413,000.00 (CCC-4895)						
72						Publications Program							
73						Maternal Child Health	\$76,256.90 (MCH-4895)						
74						Guam Public School System				\$166,000.00			
75						TRIS-Youth Risk Behavior Survey							
76						Division of Adolescent School Health, U.S. CDC				\$1,254,292.00			
77						Other TRIS Funding For Local/State Programs							
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additional money would flow into Guam's revenues and, depending on executive and legislative branches decisions, could be used to provide for additional public health and social services. Relating to the population figure of about 80,000 people; it should be noted the figure represents a maximal figure when most of the construction workers are still on Guam and the military populations arrive (2014); once construction is completed, the operational population would be about 33,400 (2016) (see the SIAS, Table ES-1, on page iii). Mitigation measures (as appropriate) to address the significant impacts will be discussed in the Final EIS.

Your concern about low capture rates is addressed in the Socioeconomic Impact Assessment Study (SIAS, which is Appendix F of the DEIS). Economic Impacts in the SIAS assume that only a small percentage of income will be spent in the Guam economy. Even with these low rates, there are substantial economic benefits projected for the Guam economy to be associated with the proposed action.

H2B workers are required to leave Guam once their jobs is finished. There may be some stay-behind workers but it is impossible to project an accurate number.

J-017-043

Thank you for your comment. Radiofrequency energy (RFE) emission sources are evaluated to determine relevant primary exposure limits to protect health and safety. Two types of exposure limits are considered: 1) occupational/controlled exposure limits in which persons are exposed as a consequence of their employment and are aware of the possible exposure, and 2) general population/uncontrolled exposures in which the general public may be exposed and are not aware of their potential exposure. Specific populations are not surveyed for RFE hazards.

J-017-044

Thank you for your comment. Please note that these comments on

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Vol.	Ch.	Pg.	Line, Tab, Fig.	Org.	Commenter (last name)	Comment	Responder	Response	Author Done	Vol. Manager Checked
J-017-062	5	5	18.1.4.2	DPA-SS	Dugules	Tab: 18.1.3. Note: One (1) of the 4 cases in 2000 contracted disease of island.				
2	2	18	5.6, 17, 18.1.4.3 & 18.2.2.3	DPA-SS	Dugules	Although all reported cases of dengue were contracted off-island, the mosquito vector <i>Aedes albopictus</i> is predominant on island. With increased construction activities and influx of workers coming from endemic areas, there's potential risk for this disease to increase. It only takes one infected case and viable vector for transmission to occur.				
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associated with an Early Release DEIS (July 2009) that was provided to several Federal and Guam agencies. These comments and DoD subsequent responses and additional analyses were contained in the Draft EIS published in November 2009.

J-017-045

Thank you for your comment.

J-017-046

Thank you for your comment. Please see the Socioeconomic Impact Assessment Study (SIAS, which is Appendix F of the DEIS) for information on economic impacts related to the proposed action. Analysis of Labor Force Demand (Section 4.1.1 of the SIAS), under both the unconstrained and constrained scenarios, assumes that some military dependents would be employed as civilian military workers - up to about 940 dependents working as civilian military workers. Analysis in the constrained scenario further estimates that other military dependents would participate in the Guam labor market, and would compete for jobs with other Guam residents.

J-017-047

Thank you for your comment. The potential for an increase in massage parlors have been highlighted as a public concern during the public comment period.

Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

Vol	Ch	Fig	Line, Tab, Fig	Org	Commenter (last name)	Comment	Responder	Response	Author Date	Message Checked
J-017	063	8	6	18.1.4.6	DPHSS	Aguiñ		Table 18.1.6, Note: a. The one case in 1999 contracted disease off-island; b. One (1) out of the 3 cases in 2004 contracted disease off-island.		
	2	2	18	7	DPHSS	Aguiñ		What about HIV infection? There is no information and data for this serious problem on Guam.		
	3	2	18	18	18.2.2.3	DPHSS	Aguiñ	Yet to review Section 16 regarding health screening, but one concern is whether the construction workers from the foreign countries will be properly immunized and screened before coming to Guam. The introduction of notifiable diseases from these workers, prior to the arrival of the military personnel and their dependents, is a major concern. What is the disease rate of these diseases among the construction workers from the various foreign countries? Will these workers be re-examined upon their arrival on Guam to certify their health status?		
J-017	064	4	2	16	16	First paragraph	DPHSS	Aguiñ		
J-017	065	5	2	16	28		DPHSS	Aguiñ		
	6							743 more traffic incidents is not small. These incidents will occur on local, public roads so it will be the local police and EMS services responding which will greatly impact the Guam Police Department and Guam Fire Department. Both of these agencies are already experiencing shortages in personnel, equipment and supplies.		
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J-017-048

Thank you for your comment. Our data was checked and amended as necessary.

J-017-049

Thank you for your comment. Workforce housing would be provided by the contractors as described in Volume 2, Chapter 16, "Socioeconomics and General Services." DoD would not provide workforce housing, but design/construction contracts would require the contractor to accommodate the workforce in accordance with specified health and safety standards. Various proposals are being developed by potential contractors in anticipation of winning a contract. The timing and location are unknown for construction and/or renovation of housing to accommodate the construction workforce, but it is possible that some of the workforce housing projects would begin independently of DoD's Record of Decision.

There are no plans to allow contractors to locate workforce housing on DoD-controlled land. Therefore, it is anticipated that should workforce housing needs require the construction of new housing, such workforce housing would be located on either private or Government of Guam lands. In either instance Guam officials would control the underlying land use and permit decisions associated with the siting of such housing. DoD would work with Government of Guam land use and natural resource officials to identify any contractor plans or efforts to construct workforce housing and DOD shall ensure that contractors are informed of their responsibilities to comply with Government of Guam land use restrictions. In particular, the Guam Land Use Commission recently issued GLUC 2009-1 which specifically addresses the issue of zoning for workforce housing.

In the Socioeconomic Impact Assessment Study (SIAS), found in Appendix F of Volume 9 in the DEIS, the number of off-island H2B visa

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REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pg	Line, Tbl, Fig	Commenter (last name)	Comment
2	18	4-8			Zabala	The Medical Social Services (MSS) will be inundated with additional requests for Medic Intervention. Medical Social Workers are needed to provide social work Intervention t diagnosed with high-risk medical conditions and/or psycho-social problems requiring s management services. Currently, MSS is understaffed and may not be able to handle t Funding to support the hiring of additional Social Workers, larger office space, furnitur supplies would enable MSS staff to provide Intervention services to the anticipated inc
2	18	4-8			Zabala	The Medical Records Section will also be tasked to prepare volumes of new patient rec requests for maintaining the existing workload. Medical Records Section is currently si and lacks the capability to handle the additional caseload. Therefore, funding to supp additional Medical Records Clerks and to purchase larger office space, furniture, equip needed to provide medical records support to the anticipated increase of patients.
			4-8		Zabala	The Pharmacy Section will be in need of additional pharmaceutical and medical suppli equipment, supplies, office space, and storage. There is only one Pharmacist and Phar occupy approximately 500 square feet of office space which houses all Pharmacy pers; equipment, pharmaceutical and medical supplies which is inadequate for existing prog be able to support future program needs. The current supply is barely enough to supp current patients being served. Funding to support the costs of increasing all aforemen
2	18					

foreign laborers was estimated. Two scenarios were reviewed: the maximal number (unconstrained) and a constrained scenario. In Section 4.4 of the SIAS, there is detailed discussion and analysis of impacts to public services; some of the public services would be impacted by temporary workers and some would not. The Navy would require contractors who work on DoD projects to provide healthcare for their employees, including off-island/H2B workers. A small percentage may seek health and/or social services provided by Guam. However, workers would also contribute to the Government of Guam revenues in form of personal income and gross receipts taxes; corporations would pay corporate income taxes (See section 4.3.3, page 4-24 of the SIAS). The additional money would flow into Guam's revenues and, depending on executive and legislative branches decisions, could be used to provide for additional public health and social services. Relating to the population figure of about 80,000 people; it should be noted the figure represents a maximal figure when most of the construction workers are still on Guam and the military populations arrive (2014); once construction is completed, the operational population would be about 33,400 (2016) (see the SIAS, Table ES-1, on page iii). Mitigation measures (as appropriate) to address the significant impacts will be discussed in the Final EIS.

J-017-050

Thank you for your comment. Please see Section 2.3.2 of the Socioeconomic Impact Assessment Study (Appendix F of the EIS) for the approach to analysis for permitting agencies.

It is noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of

Impact Statement

Health Care Services

The proposed military buildup will have potential impact to the Bureau of Professional Support Services in the health care services arena:

- 1) The Medical Social Services (MSS) will be inundated with additional requests for Medical Social Workers intervention. Medical Social Workers are needed to provide social work intervention to clients who are diagnosed with high-risk medical conditions and/or psycho-social problems requiring specialized case management services. Currently, MSS is currently understaffed and may not be able to handle the additional caseload.
- 2) The Medical Records Section will be also be tasked to prepare volumes of new patients records and additional requests for maintaining the existing workload. Medical Records Section is currently severely understaffed and lacks the capability to handle the additional caseload. Therefore additional Medical Records Clerks are needed to provide medical records support to the anticipated increase of patients.
- 3) The Pharmacy Section will be in need of additional pharmaceutical and medical supplies, personnel, equipment, supplies, office space and storage. There is only one Pharmacist and one Pharmacist Technician who occupy approximately 500 sq. ft. of office space which houses all its personnel, furniture, equipment, pharmaceutical and medical supplies which is inadequate for existing programs needs, and will not be able to support future program needs. The current supply is barely enough to support the needs of the current patients being served.

With the anticipated increase in Guam's population and subsequent increase in demand for services as a result of the military buildup, the bureau's growth must be addressed to include requirements for larger office facilities to house additional personnel, furniture, equipment and supplies, and clients.

Prepared by:


Rosalie V. Zabala, MSW
Health Services Administrator
Bureau of Professional Support Services

January 29, 2010

the proposed action. The data used in the analysis were derived from surveys and interviews performed in conjunction with the EIS, and serve as a point-in-time indication of staffing levels. It is acknowledged that it is not possible for this analysis to capture all requirements of GovGuam agencies. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service impacts, and provide a more detailed indication of fiscal impacts to GovGuam agencies.

J-017-051

Thank you for your comment. Incidents of notifiable diseases (including TB) for Guam were collected from the Government of Guam, Department of Public Health and Human Services, Office of Epidemiology and Research. Statistical information collected from this agency were used to determine the per capita rate for the diseases and calculate the potential increase in disease incidents due to the buildup on Guam (military, construction worker, and natural population increase).

Volume 2, Section 16 specifies that the DoD would rely on construction contractors, who have significant expertise in the areas of workforce housing and logistics, to support temporary foreign workers. There would be health screening of all workers to reduce health risk to the Guam population. Contractors would also be required to provide health care either by supplementing local Guam staff and resources or building their own clinic.

Volume 2, Chapter 16 also discusses the impact of an increased patient to health care provider ratio as a result of population growth with implementation of the buildup. The impact analysis in Chapter 16 identifies significant adverse impacts to public service agencies

J-017-066

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pg	Line, Tab, Fig	Commenter (last name)	Comment
J-017-067		18.2.6.5	18-21		Linda Unpingco-DeNorcsey	The EIS states the following: "No increases in demand for health services would occur as a result of additional military activities on Guam. However, the natural increase in population would result in a slight increase in demand for these services. As a result of natural population increase on Guam, approximately 1 additional doctor and 3 additional nurses would be required to maintain current service ratios. These additional health care professionals would be hired in order to maintain current service ratios". There would be an increase of 2 family practitioners, 1 certified nurse midwife, and 1 nurse practitioner, 3 nurses, 4 nurse aides, and 8.65 other support staff in 2014, the peak of the military build-up construction as compared to 2010. However, according to the EIS draft, Chapter 18.2.6.5 (page 18-21), it states that approximately 1 additional doctor and 3 additional nurses would be required to maintain current service ratios. Thus, there is definitely a discrepancy of 1 physician and 2 mid-level providers, 4 nurse aides, and there is no mention of additional support staff (i.e., medical record clerks, lab technicians, pharmacists, and pharmacy technicians). Interesting enough, the Guam Community Health Centers has just recently completed the 2009 Uniform Data System Report (UDS) and data reveals an increase of 6% in the percentage of patients (from 13,377 in 2008 to 14,187 patients in 2009) and a 9% rise in medical visits (from 36,705 in 2008 to 40,083 in 2009).
		18.2.6.5	18-21		Linda Unpingco-DeNorcsey	Furthermore, the EIS draft Section 18.2.6.5 Health Care Services (page 18-21) states: "These additional health care professionals would be hired in order to maintain the current service ratios." The EIS draft on page 18-22 states: "Without corresponding increases in health care providers potential health and safety impacts could include: longer wait/response time for patients, fewer or no available providers on island for chronic or acute issues, complications or death from delayed treatment, and/or requirements for patients to travel off-island to receive adequate treatment. However, because corresponding increases in doctors and nurses is anticipated to occur to maintain existing service conditions, no impact on health services from the no action alternative are anticipated." There is nothing in the draft EIS that provides any suggestive strategies or the recruitment of health professionals and the hiring of health professionals is a very crucial problem not only on Guam, but the entire U.S. The draft EIS assumes that the increases in doctors and nurses are anticipated to occur, but there is no information on the draft EIS of how Guam would get more nurses and doctors. For the draft to also state that there would be no impact to health care services is not at all supported with any documented data and information. Thus, as the CHC Executive Director, please allow me to justify my disagreement with the statement that there would be no impact to health care services.

influenced by population increases. These impacts would be mitigated by assisting GovGuam in funding for health services personnel. Possible measures discusses that the DoD could take to support increased staffing of required positions include seeking federal funding for necessary positions; increasing the number of private staffing and service contractors currently working for service agencies; and supporting a one-time hiring bonus of 20% of base pay for GovGuam agency positions, to increase interest in GovGuam agency employment. These measures could aid in increasing the number of health care professionals on Guam. The EIS does not identify specific funding sources.

The FEIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-052

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and

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18.2.1.3

18.21 Linda Unpingco-DeNorcy

Guam has been classified as a "Health Professional Shortage Area (HPSA)" with a HPSA score of 11 due to several factors: a population to primary care physician ratio of 2,883:1 (2,883 people per every 1 primary care physician) that exceeds the U.S. typical standard of 1500:1; 51% of the population are below 200 percent of poverty level; 34% of the population have no form of health insurance coverage; and the high need for primary health care services. The shortage of health professionals is primarily attributed to the difficulty in recruiting providers due to Guam's remote island setting, small scale, and territorial status (i.e., not linked to any larger state entity), the physician salary not comparable to U.S. rates, and the high cost of malpractice insurance on Guam. According to the 2008 Health Professional Licensing Office data, Guam has 58 full-time equivalent primary care physicians (24 family practitioners, 13 pediatricians, 3 general practitioners, and 18 interns). With a population of 167,216, 58 FTE primary care physicians are simply not enough for the entire island. The island has only a limited number of specialists, which includes 1 cardiologist, 3 nephrologists, 2 orthopedic surgeons, 6 general surgeons, 6 OB/GYNs, 2 Ear Nose and Throat (ENT) specialists, 2 neurologists, 1 oncologist, 1 neurosurgeon, 2 infectious disease specialists, 0 pulmonologist, and 0 gastroenterologist. Additionally, there are 50 dentists practicing on Guam including 1 oral maxillofacial, 1 periodontist, 2 endodontists, 2 orthodontists, and 5 pediatric dentists. Most of the dental clinics are located at the central and northern part of the island (Seventh Day Adventist Clinic, Family Health Plan Dental Center, Gentle Care Dental Associates, Ordot Dental Clinic, Ida Dental, Mafa Adal Family Dental, Hightower Dental Clinic, Pediatric Dental Center, and dozens of sole private practicing dentists. Moreover, Mental Health Services are primarily available at the Department of Mental Health and Substance Abuse and the island has 3 psychiatrists.

J-017-068

that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-017-053

Thank you for your comment. Our data was checked and updated as possible.

J-017-054

Thank you for your comment. Statistical information collected from the Office of Epidemiology and Research were used to determine the per capita rate for the diseases and calculate the potential increase in disease incidents due to the buildup on Guam (military, construction worker, and natural population increase). The Navy understands the importance of preventing diseases and will work with GovGuam to ensure these health issues are appropriately addressed during and after the buildup. Volume 2, Chapter 16 discusses the impact of an increased patient to health care provider ratio as a result of population growth with implementation of the buildup (health care providers provide treatment as well as preventative care). The impact analysis in Chapter 16 identifies significant adverse impacts to public service agencies influenced by population increases. These impacts would be mitigated by assisting GovGuam in funding for health services personnel. Possible measures discusses that the DoD could take to support increased staffing of required positions include seeking federal funding for necessary positions; increasing the number of private staffing and service contractors currently working for service agencies; and supporting a one-time hiring bonus of 20% of base pay for GovGuam agency positions, to increase interest in GovGuam agency employment. These measures could aid in increasing the number of health care professionals on Guam. The EIS does not identify specific health services or funding sources.

Thank you for your comment. The FEIS has been updated (Volume 2)

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REVIEW COMMENTS SHEET

Some of the aforementioned private health and dental clinics do accept Medicaid or MIP patients sporadically. This usually happens in the beginning of the fiscal year when the government insurance programs have funds appropriated, but they close their doors midway through the year when funds have dwindled, or are no longer available and there is no more reimbursement. Therefore, most of the private health clinics cannot be counted upon to serve MIP and Medicaid patients in a consistent manner. Additionally, they accept a few uninsured or underinsured patients who can afford to pay up front. Private providers who are quite sufficient in caring for the medically underserved patients because they are busy enough with insured patients. Most decline to accept new patients, particularly the uninsured and those with government insurance. Government insurance pays nearly far below the private insurance rates, pay late, has cumbersome billing procedures, and so they have no incentive to do so. It should be noted that many of the specialists on Guam (i.e., orthopedics, neurologist, adult cardiologist, ENT, nephrologist, ophthalmologist, surgeons) do continue to care for uninsured, MIP, and Medicaid patients in need of their specialty care, realizing that these patients have nowhere else to go. In fact, many of these providers offer reduced rates to the uninsured, self-pay patients. With most private providers unwilling to accept MIP, Medicaid, and uninsured patients, particularly those who cannot make payment upfront, thousands of indigent patients literally have nowhere to turn to for their primary health care needs. Thus, Guam's medically underserved population urgently need better access to comprehensive primary medical care. The Northern Region Community Health Center, Southern Region Community Health Center, and the Guam Memorial Hospital are the "safety-net" providers for the medically underserved population. In fact, the CHCs are the sole source providers in the northern and southern areas of the island and CMHA ER has become an urgent care center for poor people as their options for medical care are limited. Other than the shortage of providers, there are gaps in tertiary care services, inpatient care services, and off-island referral services. Although Health Services of the Pacific is the only JACHO accredited facility providing home health care and hospice care on Guam, there is no tertiary care facility on island as in the U.S. so this gap exists. In addition, gaps in the provision of comprehensive care for patients requiring hospitalization occur even though CMHA has 7 FTE hospitalists (3 full-time OB/GYNs of which 2 also work part-time at the CHCs, 1 FTE pediatrician, and 3 FTE internists). Although the hiring of these hospitalists has helped to bridge the gap to some extent, it is not enough, thus private physicians take rotating "house calls" to ensure appropriate coverage 24/7 for admissions. The lack of specialists and the limited number of full-time hospitalists also means physicians on "house call" sometimes spend long hours in the hospital, away from their clinics, caring for intensively ill patients until they are transferred to a regional tertiary care center on the U.S. mainland or the Philippines. Since Guam's referral hospitals in Hawaii, California, and the Philippines are several hours away by commercial jet, transfers are not made quickly due to extensive coordination that is needed for medical evacuation and the uncertainty about the acceptance of the medically underserved patients by these institutions. Off-island hospitals may not necessarily accept MIP and Medicaid patients due to delays in payments by those government insurance plans, which is often the main source of funding for the off-island health care cost of these patients. Other than the physician shortage, the island lacks dentists largely due to licensure "trif" battles and salary constraints. Guam's licensure laws requires dentists already licensed in the U.S. to retake a comprehensive dental board exam, which cost \$2,500 and the dentist must pass this written exam along with a practical exam in order to be licensed on Guam. The difficulty in recruiting dentists to work at the CHCs is also attributed to a very low salary offered by the Guam Department of Public Health and Social Services, Guam CHCs.

to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-055

Thank you for your comment. The FEIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-056

Thank you for your comment. Our data will be checked and updated as possible.

J-017-057

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and

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Additionally, the draft EIS Section 18.2.1.3 Issues Identified during Public Scoping Process (Page 18-12), which states: "As part of the analysis, concerns related to public health and safety that were mentioned by the public, including regulatory stakeholders, during the public scoping meetings were addressed. These include: potential increases in diseases including AIDS, cholera, dengue, Hepatitis C, Malaria, Rubella, Tuberculosis, Typhoid fever, STDs other than AIDS, potential increases in mental illness, potential increases in traffic incidents, and potential contact with UXO." There is no mention of the potential increase of any chronic diseases (i.e., diabetes, hypertension, cancer, etc) which are very prevalent not only in Guam, but throughout the U.S. Chronic diseases including diabetes and cardiovascular diseases are increasingly common on Guam as lifestyles have become westernized and sedentary; and the overindulgence of food being an integral part of cultural practices further predisposes people to such diseases. Over the past decade, type II diabetes has become an increasingly serious problem on Guam and continuously prevails as one of the top 5 leading causes of death, accounting for a mortality rate of 27.3 per 100,000 population, although this rate is a significant underestimate of the actual data since many deaths are attributed to complications of diabetes such as heart disease, rather than diabetes itself. Hospital admission rate for long-term diabetes complication is also another health indicator, which reveals diabetes as an ongoing health problem. In 2008, Guam Memorial Hospital Authority (GMHA) reported Guam's diabetes long-term complication hospital admission rate of 512 per 100,000 population (512 hospital admission for diabetes per 100,000 population). Clearly these hospital admissions reveal that patients are not controlling their diabetes, which leads to long-term complications, the most prominent being end stage renal disease (ESRD) as evidenced by the 5 renal dialysis centers in business on such a small island. Thus, their diabetes indicators clearly show that additional interventions need to be implemented such as blood glucose monitoring, hemoglobin A1c testing, behavioral modification/healthy lifestyle practices, GI4and adherence to medication regimen to prevent long-term complications associated with diabetes. Other than diabetes, cardiovascular disease is the most prominent health problem on Guam. Diseases of the Heart accounts for a mortality rate of 196.7 per 100,000 population, making it the leading cause of death on Guam. Health markers associated with the development of cardiovascular disease include smoking, obesity, sedentary lifestyle, and high blood pressure. On Guam, 27% of adults are smokers, 21% smoke daily, 34% are overweight, 27% are obese, and 26% do not participate in any physical activity (2008 Behavioral Risk Factor Surveillance Survey). According to data from GMHA, in 2008, Guam's hospital admission rate for hypertension was 543 per 100,000 population (543 hospital admissions for hypertension per 100,000 population).

infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam. The DoD has kept the public informed as required by NEPA, which includes holding public scoping meetings and public hearings and allowing the public to comment on the DEIS. DoD has had ongoing discussions with Cooperating Agencies (those federal and local agencies with special expertise or regulatory oversight) throughout the preparation of the DEIS and will continue these discussions with agencies through the completion of the Final EIS. The DoD has also met with elected officials.

J-017-058

Thank you for your comment. Because smallpox was wiped out many years ago, a case of smallpox today would be the result of an intentional act. A single confirmed case of smallpox would be considered an emergency. Thanks to the success of vaccination, the last natural outbreak of smallpox in the U.S. occurred in 1949. By 1972, routine smallpox vaccinations for children in the U.S. were no longer needed. In 1980, smallpox was said to be wiped out worldwide, and no cases of naturally occurring smallpox have happened since. Today, the smallpox virus is kept in two approved labs in the U.S. and Russia. However, credible concern exists that the virus was made into a weapon by some countries and that terrorists may have obtained it. The Centers for Disease Control (CDC) calls it a "Category A" agent. Category A agents are believed to present the greatest potential threat for harming public health. A Smallpox Response Plan and Guidelines has been developed by the CDC to provide direction to state and local health officials for responding to a smallpox emergency. The plan identifies many of the federal, state, and local public health activities that need to be undertaken in a smallpox emergency. It also provides guidelines for

DEIS
REVIEW COMMENTS SHEET

Furthermore, the draft EIS (page 18-16) states: "According to the impact analysis in Chapter 16, significant adverse impacts would occur to public service agencies influenced by the population increases. These impacts would be mitigated by assisting Gov Guam in funding for health services personnel." This statement is quite broad and does not specifically identify whether or not the Guam Community Health Centers are included in the funding for health services personnel as well as the amount of funding that would be needed for the Guam Community Health Centers. Obviously, it is crucial that the Guam Community Health Centers be included as one of the Gov Guam agencies for such funding because when construction workers arrive as a result of the military build-up, they may not necessarily have an identified source of health insurance coverage for care, and those without coverage would further strain Guam's existing health care resources, particularly the Guam Community Health Centers and Guam Memorial Hospital. Additionally, Southern Region Community Health Center is currently undergoing a physical expansion. The lack of adequate physical space for a primary health clinic hinders the efficiency of clinic flow, which results in a lengthy patient waiting time and ultimately inaccessibility to primary health care services. For instance, Southern Region Community Health Center's current physical floor design is not conducive for a primary health care clinic operation so it needs to be expanded to meet the growing demand for primary care services. Expanding SRCHC by adding 19,638 sq. ft. of space to the existing facility (from 14,989 to 34,627 sq. ft) includes doubling the exam rooms from 6 to 12 (3 rooms per clinician). Additionally, redesigning the patient flow positively impacts service delivery and optimizes provider productivity resulting in thousands of additional medical visits. Moreover, investing in an electronic health record system can improve the efficiency of patient flow, which lessens the patient waiting time, thus allowing more patients to access primary health care services. With more patients accessing primary care services, there would be an increase in the number of medical visits. Thus, funding for additional medical capacity is needed so that the CHCs can hire more providers, nurses, nurse aides, and support staff who would be housed at the newly expanded and renovated SRCHC.

many of the general public health activities that would be undertaken during a smallpox emergency. This plan also includes the creation and use of special teams of health care and public health workers. If a smallpox case is found, these teams will take steps immediately to control the spread of the disease. Because small pox is believed to be eliminated worldwide, the EIS does not address a possible outbreak of the disease.

J-017-059

Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-060

Thank you for your comment.

J-017-061

Thank you for your comment.

J-017-062

Thank you for your comment. Volume 2, Section 18 indicates that with construction activities, there is a potential for standing water and water based vectors such as mosquitoes and related diseases. To limit the amount of standing water at construction sites, BMPs would be



GOVERNMENT OF GUAM
AGANA, GUAM 96932

January 29, 2010

MEMORANDUM

To: Director, Department of Public Health and Social Services
Via: Acting Chief Public Health Officer
From: Administrator, Bureau of Primary Care Services
Subject: Response/Comments on Draft EIS/OEIS

In response to the draft of the EIS, Chapter 18.2.6.5 (page 18-21), the EIS states the following: "No increases in demand for health services would occur as a result of additional military activities on Guam. However, the natural increase in population would result in a slight increase in demand for these services. **As a result of natural population increase on Guam, approximately 1 additional doctor and 3 additional nurses would be required to maintain current service ratios.** These additional health care professionals would be hired in order to maintain current service ratios".

The Guam Community Health Centers used the formula as recommended by facilitators of the U.S. Bureau of Primary Care grant writing workshop of having 1 medical physician per 1,100 patients and 1 mid-level provider (i.e., nurse practitioner, certified nurse midwife) per 750 unduplicated patients. Using this formula, and the U.S. Grantee Comparison Report from the U.S. Bureau of Primary Care Services, the latter revealing an average of 2.74 visits per patient, the Guam Community Health Center calculated its 5 year projection of medical visits and patients. In the year 2010-2011, the Guam CHCs anticipates 15,027 patients and 41,306 medical visits with an increase in staffing from 52 to 59.9. In Year 2 (2011-2012), the Guam CHCs anticipated 16,127 patients and 44,320 medical visits with 67.95 FTE staff and in Year 3 (2012-2013), there would be a 5% increase in both medical visits and patients resulting in 16,877 patients and 46,375 medical visits with 70.95 FTE staff. Moreover, during peak construction force of the military buildup in 2014, an 11% increase in both medical visits and patients is expected using the same formula previously mentioned, which garnishes 18,727 patients and 51,444 medical visits with a staffing of 78.95 FTE. However, after the peak, the CHCs anticipate an increase of 6% in both the percentage of patients and medical visits resulting in 19,827 patients and 54,458 medical visits with a staffing of 83.95 FTE. Please see table below.



implemented such as draining or filling stagnant water pools, puddles, and ditches; removal of containers that catch/trap water (e.g., buckets, old tires, cans); and if necessary, apply pesticide (e.g., *Bacillus thuringiensis*) to help control mosquitoes. Implementing these BMPs would reduce the opportunities for an outbreak of water-related diseases.

J-017-063

Thank you for your comment. Incidents of notifiable diseases (including TB) for Guam were collected from the Government of Guam, Department of Public Health and Human Services, Office of Epidemiology and Research. The number of AIDS cases is presented in Table 18.1.2. Volume 2, Section 16 specifies that the DoD would rely on construction contractors, who have significant expertise in the areas of workforce housing and logistics, to support temporary foreign workers. There would be health screening of all workers to reduce health risk to the Guam population. Contractors would also be required to provide health care either by supplementing local Guam staff and resources or building their own clinic.

The FEIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

**Guam Community Health Centers 5 Year Projection of
Medical Visits and Patients**

Year	1	2	3	4	5	
Year	UDS 2008	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
Staffing Current	52.00	59.9	67.95	70.95	78.95	83.95
Patients	13377	15027	16127	16877	18727	19827
Visits 36,705	36705	41306	44320	46375	51444	54458
Patient Percentage Change		12	7	5	11	6
Visits Percentage Change		13	7	5	11	6
Number of Additional Patients		1650	1100	750	1850	1100
Number of Additional Visits		4601	3014	2055	5069	3014
1 MD=1100 patients 1 mid level providers=750 pts 2.74 visits/patient						

J-017-064

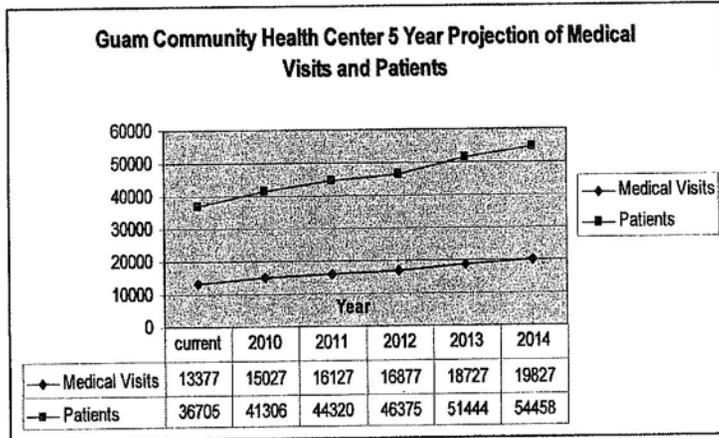
Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

DoD recognizes the importance of reducing adverse effects on the people of Guam, its natural resources, and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to ensure that the short-term impacts of construction are managed effectively and that the long-term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-017-065

Thank you for your comment. Statistically, an increase in the number of traffic incidents could result as a result of increased military personnel, increased workers coming to Guam, as well as natural population increases. As discussed in Volume 2, Section 18.2.2.7, there would potentially be more vehicles on the roadways resulting in more potential for accidents as a result of the buildup. The Navy uses focus group sessions with personnel to strategize potential measures to reduce the number traffic incidents. Several common factors contribute to traffic incidents including; young personnel, late night, impaired driving, and alcohol/drugs. Some of the measures that would be implemented to reduce traffic incidents include awareness training regarding the



Medical Staff	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
FP	3.0	4.0	4.0	5.0	6.0
Internist	2.0	2.0	2.0	2.0	2.0
Neurologist	0.2	0.2	0.2	0.2	0.2
OB/GYN	0.6	0.6	0.6	0.6	0.6
Pediatrics	2.95	2.95	2.95	2.95	2.95
CNM	1.0	1	1	2.0	2.0
NP	1.6	1.6	2.6	2.6	2.6
Total Providers	11.35	12.35	13.35	15.35	16.35
Nurses	8.8	9.8	10.8	11.8	12.8
Nurse Aides	5.0	6.0	7.0	9.0	10.0
Other Staff	34.75	39.8	39.8	42.8	44.8
Total FTE	59.9	67.95	70.95	78.95	83.95

J-017-072

The table above clearly indicates that there would be an increase of 2 family practitioners, 1 certified nurse midwife, and 1 nurse practitioner, 3 nurses, 4 nurse aides, and 8.05 other support staff in 2014, the peak of the military build-up construction as compared to 2010. However, according to the EIS draft, Chapter 18.2.6.5 (page 18-21), it states that approximately 1 additional doctor and 3 additional nurses would be required to maintain current service ratios. Thus, there is definitely a discrepancy of 1 physician and 2 mid-level providers, 4 nurse aides, and there is no

consequences of drugs and alcohol use; increase Shore Patrol activity; and provide free shuttle bus runs to/from town. Traffic accident data for the years 2001 through 2005 indicated that, despite the population increase over the 5-year period, the number of traffic accidents has decreased. In addition, the Guam Territorial Transportation Improvement Plan contains 14 island-wide traffic hazard elimination projects that include school zone signs, village road safety and warning signs, seashore protection, pavement markers, anti-skid surfacing, and guardrails. Volume 2, Section 16 discusses possible measures that the DoD could take to support increased staffing of required positions. These measures include seeking federal funding for necessary positions; increasing the number of private staffing and service contractors currently working for service agencies; and supporting a one-time hiring bonus of 20% of base pay for GovGuam agency positions, to increase interest in GovGuam agency employment. These measures could aid in increasing the number of public safety personnel on Guam. The EIS does not identify specific funding sources.

Overall traffic congestion and resulting travel times will increase as organic (non-military) population increases on Guam. The increase in population associated with the military build-up will also add traffic and increase congestion. The DEIS identifies a number of roadway improvement projects for the 2030 planning horizon, that if implemented, will offset the increased congestion attributable to the military at many locations.

The 2030 Guam Transportation Plan outlines recommendations for an improved mass transit system on Guam. These recommendations included forming the Guam Mass Transit Authority and implementing high-capacity bus service on the island. In late 2009/early 2010, the Guam Regional Transit Authority (GRTA) was formed and will now be responsible for all public transit functions. The GRTA approved the Guam Transit Business Plan in January 2010, which

mention of additional support staff (i.e., medical record clerks, lab technicians, pharmacists, and pharmacy technicians). Interesting enough, the Guam Community Health Centers has just recently completed the 2009 Uniform Data System Report (UDS) and data reveals an increase of 6% in the percentage of patients (from 13,377 in 2008 to 14,187 patients in 2009) and a 9% rise in medical visits (from 36,705 in 2008 to 40,083 in 2009).

J-017-073

Furthermore, the EIS draft Section 18.2.6.5 Health Care Services (page 18-21) states: "These additional health care professionals would be hired in order to maintain the current service ratios." The EIS draft on page 18-22 states: "Without corresponding increases in health care providers potential health and safety impacts could include: longer wait/response time for patients, fewer or no available providers on island for chronic or acute issues, complications or death from delayed treatment, and/or requirements for patients to travel off-island to receive adequate treatment. However, because corresponding increases in doctors and nurses is anticipated to occur to maintain existing service conditions, no impact on health services from the no-action alternative are anticipated."

There is nothing in the draft EIS that provides any suggestive strategies for the recruitment of health professionals and the hiring of health professionals is a very crucial problem not only on Guam, but the entire U.S. The draft EIS assumes that the increases in doctors and nurses are anticipated to occur, but there is no information on the draft EIS of how Guam would get more nurses and doctors. For the draft EIS to also state that there would be no impact to health care services is not at all supported with any documented data and information. Thus, as the CHC Executive Director, please allow me to justify my disagreement with the statement that there would be no impact to health care services.

Guam has been classified as a "Health Professional Shortage Area (HPSA)" with a HPSA score of 11 due to several factors: **a population to primary care physician ratio of 2,883:1 (2,883 people per every 1 primary care physician) that exceeds the U.S. typical standard of 1500:1; 51% of the population are below 200 percent of poverty level; 34% of the population having no form of health insurance coverage; and the high need for primary health care services.**

The shortage of health professionals is primarily attributed to the difficulty in recruiting providers due to Guam's remote island setting, small scale, and territorial status (i.e., not linked to any larger state entity), the physician salary not comparable to U.S. rate, and the high cost of malpractice insurance on Guam. According to the 2008 Health Professional Licensing Office data, Guam has 58 full-time equivalent primary care physicians (24 family practitioners, 13 pediatricians, 3 general practitioners, and 18 internists). With a population of 167,226, 58 FTE primary care physicians are simply not enough for the entire island. The island has only a limited number of specialists, which includes 1 cardiologist, 3 nephrologists, 2 orthopedic surgeons, 6 general surgeons, 6 OB/GYNs, 2 Ear Nose and Throat (ENT) specialists, 2 neurologists, 1 oncologist, 1 neurosurgeon, 2 infectious disease specialists, 0 pulmonologist, and 0 gastroenterologist.

includes purchasing new buses, constructing a bus maintenance facility, and modifying the bus schedule.

The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the U.S. Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The Department of Defense, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to seek solutions to island-wide traffic issues.

J-017-066

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam.

Additionally, there are 50 dentists practicing on Guam including 1 oral maxillofacial, 1 periodontist, 2 endodontists, 2 orthodontists, and 5 pediatric dentists. Most of the dental clinics are located at the central and northern part of the island (Seventh Day Adventist Clinic, Family Health Plan Dental Center, Gentle Care Dental Associates, Ordot Dental Clinic, Isla Dental, Hafa Adai Family Dental, Hightower Dental Clinic, Pediatric Dental Center, and dozens of sole private practicing dentists. Moreover, Mental Health Services are primarily available at the Department of Mental Health and Substance Abuse and the island has 3 psychiatrists.

Some of the aforementioned private health and dental clinics do accept Medicaid or MIP patients sporadically. This usually happens in the beginning of the fiscal year when the government insurance programs have funds appropriated, but they close their doors midway through the year when funds have dwindled, or are no longer available and there is no more reimbursement. Therefore, most of the private health clinics cannot be counted upon to serve MIP and Medicaid patients in a consistent manner. Additionally, they accept a few uninsured or underinsured patients who can afford to pay up front. Private providers also are quite ineffective in caring for the medically underserved patients because they are busy enough with insured patients. Most decline to accept new patients, particularly the uninsured and those with government insurance. Government insurance pays poorly—far below the private insurance rates, pay late, has cumbersome billing procedures, and so they have no incentive to do so. It should be noted that many of the specialists on Guam (i.e., orthopedics, neurologist adult cardiologist, ENT, nephrologist, ophthalmologist, surgeons) do continue to care for uninsured, MIP, and Medicaid patients in need of their specialty care, realizing that these patients have nowhere else to go. In fact, many of these providers offer reduced rates to the uninsured, self pay patients. With most private providers unwilling to accept MIP, Medicaid, and uninsured patients, particularly those who cannot make payment upfront, thousands of indigent patients literally have nowhere to turn to for their primary health care needs. Thus, Guam's medically underserved population urgently need better access to comprehensive primary medical care. The Northern Region Community Health Center, Southern Region Community Health Center, and the Guam Memorial Hospital are the "safety-net" providers for the medically underserved population. In fact, the CHCs are the sole source providers in the northern and southern areas of the island and GMHA ER has become an urgent care center for poor people as their options for medical care are limited.

Other than the shortage of providers, there are gaps in tertiary care services, inpatient care services, and off-island referral services. Although Health Services of the Pacific is the only JACHO accredited facility providing home health care and hospice care on Guam, there is no tertiary care facility on island as in the U.S. so this gap exists. In addition, gaps in the provision of comprehensive care for patients requiring hospitalization occur even though GMHA has 7 FTE hospitalists (3 full-time OB/GYNs of which 2 also work part-time at the CHCs, 1 FTE pediatrician, and 3 FTE internists). Although the hiring of these hospitalists has helped to bridge the gap to some extent, it is not enough, thus private physicians take rotating "house calls" to ensure appropriate coverage 24/7 for

J-017-067

Thank you for your comment. As noted in the SIAS, the public service impact methodology was intended to ensure that stated impacts are just those due to the proposed action, not pre-existing problems or deficits, or natural population increase. However, the existence of deficits for individual agencies is noted where applicable, and the impact analysis will also note the larger picture of deficits and challenges affecting GovGuam overall.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-068

Thank you for your comment. Our data will be reviewed and updated as necessary.

J-017-069

Thank you for your comment. Our data will be updated as necessary.

J-017-070

Thank you for your comment. Analysis of potential increase in chronic diseases is beyond the scope of issues analyzed in the EIS. A chronic disease is one lasting 3 months or more, by the definition of the U.S. National Center for Health Statistics. Four modifiable health risk behaviors 1) lack of physical activity, 2) poor nutrition, 3) tobacco use, and 4) excessive alcohol consumption are responsible for much of the illness, suffering, and early death related to chronic diseases. Chronic

admissions. The lack of specialists and the limited number of full-time hospitalists also means physicians on “house-call” sometimes spend long hours in the hospital, away from their clinics, caring for intensively ill patients until they are transferred to a regional tertiary care center on the U.S. mainland or the Philippines. Since Guam’s referral hospitals in Hawaii, California, and the Philippines are several hours away by commercial jet, transfers are not made quickly due to extensive coordination that is needed for medical evacuation and the uncertainty about the acceptance of the medically underserved patients by these institutions. Off-island hospitals may not necessarily accept MIP and Medicaid patients due to delays in payment by these government insurance plans, which is often the main source of funding for the off-island health care cost of these patients.

Other than the physician shortage, the island lacks dentists largely due to licensure “turf” battles and salary constraints. Guam’s licensure laws requires dentists already licensed in the U.S. to retake a comprehensive dental board exam, which costs \$2,500 and the dentist must pass this written exam along with a practicum exam in order to be licensed on Guam. The difficulty in recruiting dentists to work at the CHCs is also attributed to a very low salary offered by the Guam Department of Public Health and Social Services, Guam CHCs.

Additionally, the draft EIS Section 18.2.1.3 Issues Identified during Public Scoping Process (Page 18-12), which states: “As part of the analysis, concerns related to public health and safety that were mentioned by the public, including regulatory stakeholders, during the public scoping meetings were addressed. These include: potential increases in diseases including: AIDS, cholera, dengue, Hepatitis C, Malaria, Rubella, Tuberculosis, Typhoid fever, STDs other than AIDS, potential increases in mental illness, potential increases in traffic incidents, and potential contact with UXO.” There is no mention of the potential increase of any chronic diseases (i.e., diabetes, hypertension, cancer, etc) which are very prevalent not only in Guam, but throughout the U.S.

Chronic diseases including diabetes and cardiovascular diseases are increasingly common on Guam as lifestyles have become westernized and sedentary; and the overindulgence of food being an integral part of cultural practices further predisposes people to such diseases. Over the past decade, type II diabetes has become an increasingly serious problem on Guam and continuously prevails as one of the top 5 leading causes of death, accounting for a **mortality rate of 27.3 per 100,000 population**, although this rate is a significant underestimate of the actual data since many deaths are attributed to complications of diabetes such as heart disease, rather than diabetes itself. Hospital admission rate for long-term diabetes complication is also another health indicator, which reveals diabetes as an ongoing health problem. In 2008, Guam Memorial Hospital Authority (GMHA) reported Guam’s diabetes long-term complication hospital admission rate of **512 per 100,000 population** (512 hospital admissions for diabetes per 100,000 population). Clearly these hospital admissions reveal that patients are not controlling their diabetes, which leads to long-term complications, the most prominent being end stage renal disease (ESRD) as evidenced by the 5 renal dialysis centers in business on such a small island. Thus, these diabetes indicators clearly show that additional

diseases tend to become more common with age. The leading chronic diseases in developed countries include arthritis, cardiovascular disease such as heart attacks and stroke, cancer such as breast or colon cancer, diabetes, epilepsy and seizures, obesity, and oral health problems. Each of these conditions typically plague older adults in the United States and other developed nations.

J-017-071

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD’s ability to fund actions is limited by federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam.

J-017-072

Thank you for your comment. Our data was checked and updated as necessary.

J-017-073

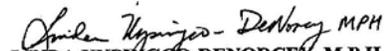
Thank you for your comment. As documented in this EIS, the DoD acknowledges the existing sub-standard conditions of health care services on Guam and the interest to have DoD fund improvements to these services. DoD’s ability to fund these services is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, the DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

Volume 2, Chapter 18 identifies less than significant impacts to public

interventions need to be implemented such as blood glucose monitoring, hemoglobin A1c testing, behavioral modification/healthy lifestyle practices, and adherence to medication regimen to prevent long-term complications associated with diabetes.

Other than diabetes, cardiovascular disease is the most prominent health problem on Guam. **Diseases of the Heart accounts for a mortality rate of 196.7 per 100,000 population, making it the leading cause of death on Guam.** Health markers associated with the development of cardiovascular disease include smoking, obesity, sedentary lifestyle, and high blood pressure. On Guam, 27% of adults are smokers, 21% smoke daily, 34% are overweight, 27% are obese, and 26% do not participate in any physical activity (2008 Behavioral Risk Factor Surveillance Survey). According to data from GMHA, in 2008, Guam's hospital admission rate for hypertension was **543 per 100,000 population** (543 hospital admissions for hypertension per 100,000 population).

Furthermore, the draft EIS (page 18-16) states: "According to the impact analysis in Chapter 16, significant adverse impacts would occur to public service agencies influenced by the population increases. These impacts would be mitigated by assisting Gov Guam in funding for health services personnel." This statement is quite broad and does not specifically identify whether or not the Guam Community Health Centers are included in the funding for health services personnel as well as the amount of funding that would be needed for the Guam Community Health Centers. Obviously, it is crucial that the Guam Community Health Centers be included as one of the Gov Guam agencies for such funding because when construction workers arrive as a result of the military build-up, they may not necessarily have an identified source of health insurance coverage for care, and those without coverage would further strain Guam's existing health care resources, particularly the Guam Community Health Centers and Guam Memorial Hospital. Additionally, Southern Region Community Health Center is currently undergoing a physical expansion. The lack of adequate physical space for a primary health clinic hinders the efficiency of clinic flow, which results in a lengthy patient waiting time and ultimately inaccessibility to primary health care services. For instance, Southern Region Community Health Center's current physical floor design is not conducive for a primary health care clinic operation so it needs to be expanded to meet the growing demand for primary care services. Expanding SRCHC by adding 19,638 sq. ft. of space to the existing facility (from 14,989 to 34,627 sq. ft) includes doubling the exam rooms from 6 to 12 (3 rooms per clinician). Additionally, redesigning the patient flow positively impacts service delivery and optimizes provider productivity resulting in thousands of additional medical visits. Moreover, investing in an electronic health record system can improve the efficiency of patient flow, which lessens the patient waiting time, thus allowing more patients to access primary health care services. With more patients accessing primary care services, there would be an increase in the number of medical visits. Thus, funding for additional medical capacity is needed so that the CHCs can hire more providers, nurses, nurse aides, and support staff who would be housed at the newly expanded and renovated SRCHC.


LINDA UNPINGCO-DENORCE, M.P.H.

health and safety as a result of potential shortfalls in public health care services. Volume 2, Chapter 16 discusses the impact of an increased patient to health care provider ratio as a result of population growth with implementation of the buildup. The impact analysis in Chapter 16 identifies significant adverse impacts to public service agencies influenced by population increases. These impacts would be mitigated by assisting GovGuam in funding for health services personnel. Possible measures discusses that the DoD could take to support increased staffing of required positions include seeking federal funding for necessary positions; increasing the number of private staffing and service contractors currently working for service agencies; and supporting a one-time hiring bonus of 20% of base pay for GovGuam agency positions, to increase interest in GovGuam agency employment. These measures could aid in increasing the number of health care professionals on Guam. The EIS does not identify specific health services or funding sources.



GOVERNMENT OF GUAM



DEPARTMENT OF PUBLIC HEALTH & SOCIAL SERVICES
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Felix P. Camacho
GOVERNOR

J. Peter Roberto, ACSW
DIRECTOR

Michael W. Cruz, M.D.
LIEUTENANT GOVERNOR

February 16, 2010

JGPO c/o NAVFAC Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Attention: GPMO

REF: Submission of Health & Social Services Sub-Committee (HSS) Comments on the Draft Economic Impact Statement

Hafa Adai! Submitted herewith are the Health & Social Services Sub-Committee comments on the Draft Economic Impact Statement.

Should you have any questions regarding the attached documents, please feel free to contact Ms. Bertha Tajeron, Program Coordinator III at 735-7125 or via email at bertha.tajeron@dphss.guam.gov

Respectfully,


J. Peter Roberto, ACSW
Director, DPHSS

Enclosures

xc: Paul. Shintaku, Director, GBO
Office of the Governor
Tel. No.: (671) 735-7102 Fax: (671) 734-5910

February 12, 2010

Via: Email

Mr. J. Peter Roberto
Chairman
**SUBCOMMITTEE OF HEALTH AND
HUMAN SERVICES**
Office of the Governor
Adelup, Guam

**Subject: DMHSA's response to the Draft Environmental Impact
Statement (DEIS)**



department of
**MENTAL HEALTH
SUBSTANCE ABUSE**
Department of Public Health & Social Services
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FELIX PEREZ CAMACHO
Governor

MICHAEL W. CRUZ, M.D.
Lieutenant Governor

ELISABETH T. CRUZ
Acting Director

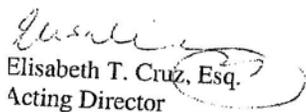
JASON S. TEDTAOTAO, MPA
Deputy Director

Hafa Adai Mr. Roberto,

Transmitted herewith is the Department of Mental Health and Substance Abuse (DMHSA) comments on the Draft Environmental Impact Statement (DEIS).

If you have any comments or questions to the attached response, please call Mr. Frank Reyes 647-5309 or Dr. Andrea Leitheiser 647-5348 at the Department of Mental Health and Substance Abuse.

Respectfully,


Elisabeth T. Cruz, Esq.
Acting Director

Department of Mental Health and Substance Abuse

<http://mail.google.com/a/dphss.guam.gov/?ui=2&ik=40ca147ecd&view=att&th=126c17a328983054&att...> 2/16/2010

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pg	Line, Tab, Fig	Commenter (last name)	Comment	Agency/Org
J-017-074	1	9	4	53 line 2-e	DMHSA	Military have drug and alcohol and child issues. Department has been providing military with care. They don't bill TRICARE because they don't have the capacity. They are in the process of forming an MOU with the military to share staff and training. When active duty are deployed - difficult to keep treatment consistent.	
					DMHSA	Solution/Recommendation: (see rewrite by Dr. Leitheiser) H2B - see a lot of substance abuse in this population - it is very stressful, intensive work - a lot of H2 companies would rather send a migrant worker home then pay for their mental health care. Thus, this means the worker will hide any problems from their employer. These people come to the attention of DMHSA through courts, because they are arrested.	
						Solution/Recommendation	
1	9	4	53 line 2-f				
1	9	4	4-126				
J-017-075	2	9	2.2.3	2.1.1.4		Based on multiple interviews with construction contractors familiar with Guam projects, it is expected that a large population of H-2B workers will originate from the Philippines. Furthermore, since two-thirds of Guam's foreign-born population is from the Philippines, it is expected that most "stay-behind" workers and related future population growth would originate from there.	
						Solution/Recommendation: The impact of the "stay-behind" workers will bring additional dependents to Guam. Future dependents needing services	

J-017-074

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-075

Thank you for your comment. Public comments on the DEIS are an important part of the decision-making process. This information becomes part of the FEIS and is evaluated when DoD prepares the FEIS and issues a Record of Decision at the end of the NEPA process.

Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

DEIS
REVIEW COMMENTS SHEET

No.	Vol	Chpt	Pg	Line, Tab, Fig	Agency	Comment	Agency/Org
J-017-076 1	9	4	124-127		DMHSA	Increase in use/abuse of substances (drugs & alcohol) during the construction and operational phases will occur. <u>Recommendations:</u> The military will need to provide services in assessments and treatment for military & DoD contract personnel and their dependents.	
	2	9	2/4 2-1/4-61		DMHSA	Increased impact in psychiatric care during the construction and operational phases will occur. <u>Recommendations:</u> The military will need to provide psychiatric care services (adults and children) in the area of mental health for military & DoD contract personnel and their dependents. This means that they would have to recruit the necessary professionals to accommodate for this needed service. The need to maintain one's psychiatric care through psychotropic medications will be the responsibility of the treating physician and/or treatment facility. Support services and staffing (nurses and psychiatric technicians) to be provided as required.	
	3	9	4 4-127		DMHSA	Increase in the utilization of children and adult residential programs and foster care programs during the construction and operational phases will occur. <u>Recommendations:</u> The military will need to provide accommodations for placement into residential programs (adults and children) on-base or provide funding to access any existing community resources.	
	4	9	4 125-127		DMHSA	Increase in population with Criminal Sexual Conduct (CSC) increases the likelihood of services provided through Healing Hearts during the construction and operational phases will occur. <u>Recommendations:</u> The military will need to create services for victims of sexual assault perpetrated by military servicemembers, DoD contract/civilian employees and their dependents.	
	5	App D of 9 App F 53-54			DMHSA	Summary/Topics recorded in DEIS has been updated by the DMHSA DEIS working group. <u>Recommendation:</u> See current summary/topics provided at attachment.	
	6	App D of 9 App F 61-64			DMHSA	The Guam ADRC (Aging & Disability Resource Center Program) and its GuamGetCare system have transferred from the DISID to the DMHSA in July 2009. The meeting summary/topics discussed and written in the DEIS were those gathered during the DISID interview conducted by TEC, Inc. on February 10, 2009. <u>Recommendation:</u> Transfer and add the interview Summary/Topics of the Guam ADRC and the Guam Get Care system to the DMHSA Summary/Topics on pages 53 & 54, Appendix D of Appendix F, Volume 9. Current description is at attachment.	

J-017-076

Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

The DoD plans to have several medical clinics in Guam and a new replacement Naval hospital would provide health services to the military personnel, their dependents, and military beneficiaries. Additionally, it is anticipated H2B workers as well as on-island workers will have health plans and private clinics will provide medical services.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

ATTACHMENT TO ITEM 6 OF DEIS COMMENT SHEET

DEIS/SIAS Guam Interviews

Appendix D of Appendix F, Socioeconomics Impact Assessment Study

DEIS recorded the interview at DISID: February 10, 2009, 10:00 AM

Updated and changed to DMHSA: DMHSA awarded a grant in September 2009 for expansion and enhancement of the Guam ADRC.

DMHSA Working Group (January, February 2010)

Meeting Summary/Topics

6. Guam Aging and Disability Resource Center Program and the GuamGetCare System

- i. Web-based system – comprehensive directory of services
- ii. Aging and Disability Resource Center program (initial federal funding for ADRC 2005 ended September 2009). Received a Person-Centered Planning (PCP) Implementation grant in 2007, which is sustaining the ADRC through 2010. DMHSA applied for and was awarded the ADRC 2009 grant, for grant period: September 30, 2009 through September 29, 2012.
- iii. Hits on the GuamGetCare system are recorded – current average count on hits is 30,000 per month.
- iv. People from off-island are currently accessing the system to find out if there are services on Guam. Program staff continue to populate the resource directory with all the services available on island – intent is to use the system to its full potential to become a 211 system (like 411 system). With a 211 system, people can call to find out what services are available – handy especially during times of disaster.
- v. GuamGetCare also allows for agencies to share forms, e.g., referrals, applications, etc.
- vi. DISID was created by Guam P.L. 24-16 to be a single point of entry to streamline access to services for people with disabilities. GuamGetCare fulfills this concept.
- vii. GuamGetCare also has Care Tools for use by professionals – case managers can share notes between staff, etc. (with user ID and password protection).
- viii. Users continue to enter data – agencies can now generate reliable data.
- ix. Go to guamgetcare.org and see all the links:
 - Assess Your Needs
 - Help for Caregivers
 - Learn About Care Options
 - Search for Services

- Key Resources
- Application Forms
- Calendar
- Report a Problem
- I Need Help
- Start a Health Profile

Soon to have: PATH (Planning Alternative Tomorrows with Hope) Online

- x. Have MOU with GovGuam agencies such as the Division of Senior Citizens (DSC) – their consumers are also in the system – staff are using the system to track referrals, case management, plus home delivered meals and transportation services. Subgrantees of DSC such as Catholic Social Service and GGARP/SPIMA also utilize the system.
- xi. Other agencies use the system but do not contribute to maintenance/funding. DMHSA in collaboration with DISID does the work – apply for grants for sustainability.
- xii. Consultant is contracted through approval from the AG Office.
- xiii. Guam will create consumer ID cards that streamline access/service delivery (the existing ADRC information system supports wireless barcode scanning). This will allow real-time data collection when staff do not have access to a computer (e.g., during a transportation route). Having this real-time data will give case managers and family caregivers the opportunity to identify service gaps and arrange interventions in a more timely manner.
- xiv. Improving Discharge Planning: ADRC staff will work with discharge planners at the Guam Memorial Hospital Authority (GMHA) to help make consumers aware of community-based long-term care options.
- xv. How GuamGetCare addresses the Amended Permanent Injunction:
 - Inventory of existing community services and space available;
 - Cross-agency case management to make receiving care in the community a possibility;
 - Ideally, expanded discharge-planning tools that will empower consumers to be aware of all the services available in the community as well as institutional options; and
 - Person-centered planning model, which allows consumers to articulate their desires and personal goals for their future.

J-017-077

Thank you for your comment.

ATTACHMENT TO ITEM 5 OF DEIS COMMENT SHEET**Department of Mental Health and Substance Abuse**

Interview (February 6, 2009, 2:00 pm)

Attendees:

Attendee Name	Title/Organization
Amber Guillory	Environmental Planner, TEC Inc
Dr. David Shimizu	Director, DMHSA
Dr. Andrea M.S. Leitheiser	Clinical Admin./Psychologist/DMHSA
Mr. Simeon Palomo	Planner III/DMHSA

DMHSA Working Group (January, February, 2010)

Attendees:

Attendee Name	Title/Organization
Elisabeth T. Cruz, Esq.	Acting Director, DMHSA
Francisco Reyes	ADRC Project Manager, DMHSA
Dr. Andrea M.S. Leitheiser	Clinical Admin./Psychologist/DMHSA
Reina Sanchez	Community Supp. Serv. Sup., DMHSA
Leah Rassier	Program Coord. II, DMHSA
Evelyn Manibusan	Social Worker III, DMHSA

Meeting Summaries/Working Group Priorities

Purpose: To provide documentation on the impact the military buildup will bring on the services provided through the Department of Mental Health and Substance Abuse (DMHSA).

Goals:

1. To identify 10 concerns relative to the buildup in relation to the DEIS,
2. Report military pertinent concerns, and
3. Provide information on DMHSA Service Delivery System.

Overall Objectives

Objective 1: Increase in population will impact the vital resources provided through DMHSA

Objective 2: Accessibility to resources in the community will be limited with the appearance of a competitive edge to those connected to the military buildup.

J-017-077

Goal 1 Report: Ten Concerns Relative to Buildup in Relation to DEIS

Task 1: Impact on Clinical (Behavioral) Services and the Federal Amended Permanent Injunction (API)

- Interface in relation to potential receiver and expectations of receiver in relation to military build up and API to include JCAHO accreditation
- Increase in these services will see the need to increase the professionals who are the front line in the provision of service delivery
- Increase in these services will bring about an overall need to identify an increase in programs and services
- Utilization of clinical services will need to be re-evaluated in proposing how additional work will be managed with current staffing
- Utilization of clinical services will need to provide funding for the hiring of professionals to work with individuals
- Data collection, analysis, and dissemination issues in relation to utilization and outcome rates

J-017-078

Task 2: Impact on Psychiatric and Behavioral Psychological Care

- Increase in the utilization of Psychiatrist and Clinical Psychologists to deal with overall mental health wellbeing of the community, along with the increase in military personnel
- Increase in the hours needed by local and government Psychiatrists and Clinical Psychologists to deal with the issues related to the overall mental health wellbeing of the community, along with the increase in military personnel
- Increase in the expectations by local and government psychiatrists and clinical psychologists to treat individuals with symptomatic psychiatric illness in ruling out the disorder
- Increase in the jurisdiction of symptomatic psychiatric illness placed on the local and government psychiatrists and clinical psychologists in continued treatment of military personnel in these settings

Task 3: Impact on Medication Clinic

- Increase in population seeking services through medication clinic in providing for available psychotropic medications through DMHSA
- Increase in the utilization of clinic hours for additional consumers
- Increase in population will directly affect the need to increase the number of psychiatrist available in meeting the demands of the additional consumers
- Increase in the funding needed to provide for available psychotropic medications through DMHSA

Task 4: Impact on Children's Services

- Increase in the need to provide additional services in specialized areas in childhood illnesses
- Increase in the need to provide community activities for specialized childhood illnesses

J-017-078

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-079

- Increase in the need of professionals (psychiatrists, psychologists and physicians) to address the treatment of childhood illnesses
- Increase in the need for DMHSA to develop programs directly related to the areas of services needed for children and adolescents

Task 5: Impact on Residential Services for Children

- Increase in population may warrant the need to currently identify various levels of care to proposed levels of care for future services delivery
- Increase in population identifies the need to provide adequate treatment for those individuals needing residential services
- Increase in population of troubled youth may warrant the need to identify additional correctional facilities and residential homes
- Increase in the utilization of Children's Inpatient Unit prior to a step-down to residential services for children

Task 6: Impact on Residential Services for Adults

- Increase in population may warrant the need to identify various levels of care currently to proposed levels of care for future services delivery
- Increase in population of adults with mental illnesses and or mental retardation seeking residential services for their family member
- Increase in the population of mental illness disorders identifies the need to provide additional inpatient facilities
- Increase in the utilization on Adult Inpatient Unit prior to a step-down to residential services for adults

Task 7: Impact on Nursing Services

- Increase in the population will need to see an increase in professionals in the nursing field in all areas of treatment
- Increase in utilization of nursing services will increase the need to provide additional funding to assist in the hiring of both Registered Nurses (RN) and Licensed Practical Nurse (LPN)
- Increase in utilization of the Inpatient Units of DMHSA will increase the need for not only nurses for the units but that of psychiatric technicians to assist in the daily operations of a unit
- Increase in the utilization of inpatient services will increase the current cost per person receiving services through the inpatient units

Task 8: Impact on Healing Hearts (Rape Crisis Center)

- Increase in population with Criminal Sexual Conduct (CSC) increases the likelihood of services provided through Healing Hearts

J-017-079

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-080

- Increase in the utilization of Healing Hearts services increase the need to provide professionals specializing in the treatment of individuals who have been raped
- Increase in the utilization of Healing Hearts services increases the need to hire professionals to address the sensitive issue in relation to the occurrence as being time-sensitive

Task 9: Impact on Substance Abuse

- Increase in the use of substances (drugs and/or alcohol) with military personnel who are out on liberty, along with identified individuals providing services through the construction phase with no access to military services. The non-military individuals who do not have military coverage
- Increase in the need to provide substance (drugs and/or alcohol) assessments and treatment for military personnel
- Increase in the need to provide substance (drugs and/or alcohol) group meetings in the community to maintain military personnel and their sobriety

Task 10: Impact on Individual Staff

- Increase in the additional workload places a strain on limited resources currently available
- Increase in the need for specialized services for children and adolescents
- Increase in the need for specialized services for adults with Mental Illness and/or Mental Retardation
- Complexity and increased work demands will impact quality of service delivery.

Goal 2 Report: Pertinent Military Concerns

J-017-081

Availability of Data and Utilization Rates

DMHSA is requesting the current utilization rates of the proposed military population. Military health care capacity and utilization rates have never been released and this is necessary to make operational projections for future fiscal years. The current service population at DMHSA as noted by the Records Department is 14,000 cases with 1,400 cases being seen on a monthly basis in an active capacity. As reported in earlier civilian military task force meetings the DMHSA branches and divisions estimate that approximately two of every ten consumers (20%) who receive services are military related to include: active duty members, active reservists, inactive reservists, veterans, retirees, spouse, dependent, or divorced dependents with military healthcare benefits. It is reported that Guam has the highest rate of enlistment per capita for both active duty and reserves (joint recruiting services, Guam, 2009. Military related consumers may also receive services with those professionals contracted in the private sector. However, several professionals have reported they are currently at capacity or unable to service complex mental health cases due to competing time constraints or liability issues.

J-017-080

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-081

Thank you for your comment. Expanded mitigation discussion is available in the FEIS.

DMHSA provides the only inpatient hospitalization facility for psychiatric illness in the West Pacific and has been utilized free of charge by the military for the past thirty years. In addition DMHSA provides supportive crisis services to after hours emergency cases forwarded by the military. These cases are subsequently referred back to their primary providers upon stabilization or review. DMHSA does not bill TRICARE or the VA for these services as a fee schedule is still being developed. DMHSA does not track military related services formally as we do not have an electronic system to track data and have to use our limited resources to track by hand, information currently required for service delivery funding (i.e. Compact Impact and Block Grant relevant data). An electronic health information system which tracks consumer information is currently in progress of development for implementation at DMHSA.

J-017-082

Service Population Issues

DMHSA services the entire local population and does not deny access to services to anyone. Currently, there is a waitlist for outpatient, residential, and children services. People with insurance typically go to private practice. However, DMHSA does see many insured individuals due to the lack of available services in the community and the prohibitive co-pay costs for many consumers.

Given that DMHSA is the only inpatient facility for psychiatric care in the West Pacific the Navy relies on our acute care services. If an active duty military member has needs that are more long term however, the individual is usually sent off island. This is not the case for other populations who are not active duty as they remain on island and depend on local providers to include DMHSA for ongoing treatment.

The Veteran Administration on Guam struggles with an aging veteran population who has increasing needs for both mental health and residential care. DMHSA provides support to the VA for these patient considerations. In addition to this population is service member dependents who also require services in the local community.

Military populations to include H2B workers have substance abuse issues. Given the high rates of substance abuse in those populations who currently come to Guam and have acculturation and adjustment issues, it is believed that incoming H2B workers and military personnel will also experience stressors which encourage the usage of substances. Abuse of substances often times lead to work and social related difficulties that DMHSA has traditionally responded to. H2 companies would rather send a migrant worker home than pay for their mental health care. Thus, this means the worker will hide any problems from their employer. These individuals come to the attention of DMHSA via the court system after being arrested.

Funding Direct Costs

In an effort to augment local and federal funding for patient services delivery, DMHSA is creating a fee schedule with the support of our Legislative Oversight and the Governor's Office. DMHSA will require additional funding and personnel to meet both

J-017-082

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-083

Thank you for your comments.

the increasing needs of the local community, amended permanent injunction, and military build up.

Infrastructure, operational, and medication costs also continue to rise. First generation: recent and third later trials-sometimes newer drugs can impact patients poorly. First generation is usually very expensive because of the research and development costs. DMHSA maintains its own internal dispensary and also has a purchase order with private pharmacies that dispense. In an effort to decrease costs and decrease the likelihood of metabolic syndrome, DMHSA has encouraged the prescribing of third generation medications which are less expensive and have less incidents of metabolic syndrome. This has proven difficult. Currently, medication costs are approximately three million dollars annually.

Special Considerations

Mental health services have traditionally been underutilized in the military because of the concern such care may pose on rank promotions and selection for special assignments. Similar to the civilian community, military continues to struggle with the stigma related to mental health services. Civilian dependents also have voiced preferences at times to seek care from civilian providers who they believe will be less likely to sympathize with the active duty spouse. These are issues that must also be considered.

J-017-083

Military members have different confidentiality rights and reporting requirements are also different for active duty and reserve personnel. This must also be considered when executing MOUs and other agreements between DMHSA and military facilities. It will be helpful to develop cross-cultural training for military in conjunction with their commands. This may reduce the number of conflicts that may occur and subsequent escalation of such conflicts.

Staffing Concerns

Military populations benefit from professionals familiar and trained to address their mental health needs. Staff would benefit from additional training in this area. Recruiting and maintaining professional staff continues to be a challenge on Guam and many areas of the mainland United States. Currently, headhunters, networking with professional groups, and print advertisements are utilized to recruit professionals. It is hoped that with the military increase that other professional personnel will also accompany them and be willing to work in the local community to assist in the servicing of our populations.

Goal 3 Report: DMHSA Service Delivery System

About DMHSA

Emotional crises occur in the lives of most people everyday. Individuals and families may face serious, chronic mental disorders that require long-term care. Support and treatment services are available at the Department of Mental Health and Substance Abuse. DMHSA promotes physical, mental and spiritual well-being by providing comprehensive mental health and substance abuse prevention and treatment programs

that are culturally sensitive and consumer driver. All services are confidential and are administered via four primary divisions: Nursing Services Division with Professional Support Unit, Clinical Services Division, and Children and Adolescent Services Division.

Nursing Services Division and Professional Support Unit: Skilled nurses and psychiatric technicians provide inpatient care to adults and children with acute mental health symptoms and also to those with more chronic behavioral issues. Additionally, nursing services are provided to those living in the community through the Medication Clinic and an outreach team. Psychiatrists fall under the Professional Support Unit. These licensed professionals provide diagnostic, evaluation, treatment and consultation to consumers participating in the various services offered in the department. Weekly to monthly psychiatric visits as well as medication evaluation, prescriptions, and monitoring are included as part of the service. In addition to this, the licensed professionals provide consultation and training to the DMHSA staff to ensure the best course of care and treatment for our consumers.

Healing Hearts Crisis Center. This center specializes in the treatment of sexual assault victims and their families. Sexual assault is a traumatic experience for an adult or child and calls for a very supportive and empathic response in order to begin healing. Our Healing Hearts Program begins with an Intake assessment that often leads to a medical-legal examination in a safe, caring environment. The program staff coordinates all cooperation with other agencies, counseling and follow-up health care, so the victim can begin healing with being overwhelmed.

Clinical Services Division: The core mission of the Clinical Services Division is to provide behavioral health services to the people of Guam. In addition, the federal amended permanent injunction focuses primarily on the tremendous need for the provision of such services. It is the primary goal of the Clinical Services Division to increase the number of consumers served, implement new programming, and train those employed to render said services and to be in compliance with the amended permanent injunction.

The Clinical Services Division is comprised of six (6) services which include: Adult Counseling Services Branch, Medical Records Services Branch, Drug and Alcohol Services Branch (New Beginnings), Community Support Services Branch, and the Prevention and Training Branch (Prevention and Early Intervention Advisory Committee Empowerment PEACE). The missions of the branches are as follows:

Adult Counseling Services Branch, Crisis Hotline Services. Licensed Doctoral and Master Level clinicians comprise this branch to include Licensed Clinical Psychologists allocated to meet the needs of the Amended Permanent Injunction. Adult Counseling Services provides therapeutic, continuing and new patient evaluation services at DMHSA. Adult Counseling Services Branch serves as the first diagnostic point of entry for mental health consumers. Crisis support services for those individuals contemplating ending their life and other serious crisis also make contact via the crisis

hotline services. Psychological screening tests and tools are utilized for diagnostic and treatment planning purposes.

Medical Records Services Branch. As the Health Information Management Center's Record Custodian, Health Insurance Portability and Accountability Act (HIPAA) Compliance Officer, Forms Committee Chairperson, Policy and Procedure Committee Member and Quality Assurance Accreditation Committee co-Chairperson to the strictest confidentiality laws of this nation, we are tasked to engage in providing support to all clinicians, consumers, operational and administrative professionals for the department. In addition, collaborate with local and federal governmental entities such as the criminal justice system, healthcare providers, U.S. Personnel, Social Security Administration and others. The health record is the legal business record for our organization. As such, it must be maintained in a manner that follows applicable regulations, accreditation standards, professional practice standards and ethical legal standards of all 16,000 + consumers registered with DMHSA.

Drug and Alcohol Services Branch (New Beginnings). To provide, develop, and/or support (via contract) Alcohol and Drug Treatment Services in a therapeutic and community-based settings for individuals and families, and most especially women and adolescents, affected by substance misuse, abuse or dependence. Services may include but are not limited to education, brief/early intervention, outpatient, intensive-outpatient, aftercare or continued care, day treatment, social detoxification, and residential.

Community Support Services Branch. The Community Support Branch provides case management services for the DMHSA consumer population. In addition to case management services they also participate in community outreach treatment teams which target those consumers at risk for medication non-compliance and for whom community support is necessary to ensure their living in the least restrictive means possible. These services prove invaluable as recidivism is greatly reduced to the acute inpatient units to DMHSA and the frequency of consumer mental status deterioration is diminished.

Prevention and Training Branch (Prevention and Early Intervention Advisory Committee Empowerment PEACE). The Prevention & Training Branch staff provides technical assistance, training and resources to policy makers, program managers, community coalitions (faith and school-based), and public and private sector leaders in an effort to empower community-based program leaders to effectively reduce the incidence and prevalence of alcohol, tobacco and other drug-related problems, and to promote overall health and wellness. This Branch adopted the public health model of prevention that recognizes that prevention is a lifelong process and attempts to reduce both the supply of and the demand for alcohol, tobacco and other drugs. Prevention programs and services involve the use of six strategies: 1) Information Dissemination, 2) Education, 3) Alternatives, 4) Problem Identification and Referral, 5) Community-Based Process, and 6) Environmental and Social Policies.

Adult Residential Support Services: Adult Residential Services offer a spectrum of residential care in community-based settings for adults with serious mental illnesses. An initial assessment is done by licensed professionals to determine the best level of care that will benefit the consumer prior to placement in the residential setting. Once in the residential setting the consumer is provided with an array of services that include activities of daily living and enhancing coping skills and promoting independence and self-sufficiency.

Day Treatment Services. The department promotes and enhances the psychosocial, economic and physical well-being of each adult consumer with serious mental illnesses enrolled with the program and who require monitoring and supervision in the a therapeutic setting. Therapeutic and skill building group sessions, community outings, job fairs and presentations are some of the activities and events.

Child & Adolescent Services Division: Child, Adolescent and Family Services also known as I Famagu'on-ta (Our Children) are provided by a group of dedicated and caring professionals and support staff working together as a TEAM with the child, youth and family. The services are provided through the Systems of Care philosophy and are child centered, family driven, strength-solution based, least restrictive, community based and culturally competent. The Wraparound process involving the consumer, family, natural supports and other service providers (agencies public and private) is how services are determined, implemented and delivered. Some of the services available are: Intake assessment, Individual and Family Counseling, Psychiatric Services and Medication Management, Intensive Care Coordination also known as Wraparound, Day treatment Professional known as Rays of Hope (ROH), Therapeutic Group Home (TGH), Transition to Independence Program (TIP), Parent Training, Information and Support (PTIS).



Victim Advocates Reaching Out

P.O. Box 2045 Hagatna, Guam 96932
Hotline: 671-477-5552 Fax: 477-8276
Email: varopres@yahoo.com

Providing volunteer support services for victims of violent crime and traumatic events since 1982.

2/16/2010

SUBJECT: DEIS – COMMENTS
Status: Nonprofit – Crisis Intervention/Advocacy – Human Services

VARO (Victims Advocates Reaching Out) was not given the opportunity for the interview process. As first responders we have noticed an increase in cases in the past month over prior months. There is fear that the cases will continue to rise with the population increase.

VARO is a nonprofit volunteer base organization that began in 1982. VARO provides **24/7** intervention/advocacy services to victims of violent crimes and traumatic events. We are first responders' status in the community. VARO services civilian and military and **ALL** victims of violent crimes and traumatic events. All VARO services are **FREE & CONFIDENTIAL**. Our Victim services include Intervention/Advocacy, emergency shelter, food, clothing, transportation, court accompaniment, Pro Se, legal assistance, counseling, and many other services. When an individual is victimized a domino effect goes into play with VARO and throughout the community.

J-017-084

Although there were many important issues that have been addressed by the community, our largest concern is the forthcoming increase in victim services. As with most nonprofit organizations, funding is always a challenge. Using examples of several "recent" cases we responded to:

- 1) Military family – Domestic Violence with children. The family lived in civilian soil thus; the military insisted that the case was in our jurisdiction.

In cases like these, VARO responds immediately, the victim and/or children become a priority for VARO and the community. Safety, Shelter, clothing and all victim services, social services, legal etc. will be executed in order to keep the victim/s safe and sound. To assist the victims appropriately it will require a number of services and resources, funding, workers, GPD, legal services, Office of the Attorney General, Shelters. VARO provided services for this victim.

Solution:

- DOD should avail funding or assistance for military families

J-017-084

Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

Although mental health and substance abuse assistance is available within the DoD health system it is probable that some military personnel and their dependents perceive more anonymity when they seek help with these social disorders outside the DoD health system.

While military personnel and some of their dependents will contribute to Guam's revenues (through taxes, user fees, licenses, etc.), this added revenue may not be provided on a timely basis, or may be insufficient to offset all of the needed social services created by the proposed action. DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-017-085

- Collaborations should be mandated between Military and Service providers and/Government of Guam.
 - Training should be required for both Service providers and Military to ensure quality of services to victims of crime.
- 2) Victim is civilian, several perpetrators with (high-profile) military status – Case of sexual assault; the crime was committed in civilian soil. In this case, there were communication barriers between Government of Guam and Military Law Enforcement and other respective agencies and service providers. The end result led to nowhere, the victim suffered re-victimization numerous times. The case remains unresolved. A Good Samaritan purchased a ticket for the victim providing a return home to family. Still, no arrests have been made. VARO provided services for this victim.

Solution: Government of Guam, Civilian service providers should work collaboratively with Military in every aspect of victim services to ensure perpetrators are held accountable for their crimes.

J-017-086

- 3) Based on local statistics and VARO caseloads, there have also been random crimes occurring in civilian grounds. Nightclubs and bars are the breeding grounds for violence; alcohol only intensifies even the tiniest conflicts. Random fights and several homicides have transpired at the bar scenes this past year.

J-017-087

Prejudice and territorialism is the error of mankind in any part of the world demographically, to change that mindset it take education, awareness and in some cases, training for both civilian and military communities.

The military should increase military police and security in areas of high risks/prone to attract violent crimes and not wait to ban military after a tragedy or incident occurs as done in the past. We must prevent these crimes from happening

By:
Vangie Cabacar
Executive Director

J-017-085

Thank you for your comment. Your mitigation recommendations have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-017-086

Thank you for your comment. Issues of public safety have been highlighted during the public comment period. Additional information, as available, has been provided in the FEIS. Expanded mitigation discussion is also provided.

J-017-087

Thank you for your comment. There are many reasons why the Marines (about half) are being moved from Okinawa. This discussion is provided in section 3.5.2 of the Socioeconomic Impact Assessment Study (SIAS) that is in Appendix F, Volume 9 of the Draft EIS. Serious crimes by military personnel in Okinawa are committed at a lower rate than the overall civilian population in Okinawa, despite reports to the contrary. Many serious crimes are based on singular incidents that are reported multiple times so that it appears to be multiple incidents.

The impacts of crimes on Guam are discussed in Volume 2 of the FEIS. As noted in the SIAS: "A critical distinction when analyzing crime impacts is between the total numbers of crimes ("volume of crime") and the actual crime rate (numbers divided by population). Population increases always bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely to commit crimes."

The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by a proportionate increase in crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in

Catholic Charities of the Archdiocese of Agana dba Catholic Social Service (CSS) is a faith-based 501 (c) 3 non-profit organization serving persons with disabilities, the homeless, victims of family violence, and persons needing emergency food and clothing. The following are services provided:

Elderly

- Case Management Services.
- A day care for the frail elderly and another day care for those specifically suffering from dementia.
- An emergency receiving home for abused elderly and adults with disabilities.
- In-home Services for homebound frail elderly.
- Elderly Housing (10 units).

Persons with Disabilities

- Respite Care Services for caregivers.
- Group Homes.
- Community Habilitation and Day Center.
- Permanent Supportive Housing for Persons with Disabilities (8 units).
- Group home for those with severe mental disabilities.

Homeless

- Emergency Homeless Shelter.
- Transitional Housing (30 units).

Homeless Prevention

- That provides funding for needy family with rent and utility payment arrears.

Service for Victims of Family Violence

- Emergency Shelter.
- Five (5) Transitional Housing.
- Shelter for abused children.

Food Bank and Thrift Shop

Catastrophic Illness Assistance Program

- A donation driven program that provides minimal assistance to individuals leaving or referred for off-island medical treatment.

Migration and Trafficking Program

- Program that is funded on a per diem reimbursement basis from USCCB and CCUSA to assist refugees relocate with in Guam.
- Program to assist trafficking victims with shelter and supportive services.

Housing Counseling Program

The additional needed to address the social services impact of the military build up are as follows:

- Open up another homeless shelter.
- Open up also another shelter for women victims of family violence.
- Purchase or build apartments to serve as transitional housing for homeless individuals and families.
- Build the capacity of the present food pantry.
- Transportation to assist families' access services.

Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct and enforce laws to protect the citizens of Guam and our military personnel.

- Fund the Housing Counseling program that would help families learn budgeting skills that would help them pay for their rent and other needs.
- Homeless prevention program.
- Family Counseling services.
- Child care assistance.
- Micro enterprise program.
- Another Adult Day Care program will have to be developed doubling the current capacity.
- Assistance to help the needy procure their medications.
- Truck to pick up donation.
- Storage to store the increase in food supply for the food pantry.
- Human Trafficking Victims Services.



Felix P. Camacho
Governor

Michael W. Cruz, M.D.
Lt. Governor

**Department of Agriculture
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Joseph D. Torres
Director

Joaquin N. Naputi
Deputy Director

February 17, 2010

Joint Guam Program Office JGPO
c/o NAVFAC Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Attention: GPMO

Subject: Draft Environmental Impact Statement/Overseas Environmental Impact Statement for Guam and CNMI Military Relocation: Relocating Marines from Okinawa, Visiting Aircraft Berthing and Army Air and Missile Defense Task Force

The Draft Environmental Impact Statement/Overseas Environmental Impact Statement for Guam and CNMI Military Relocation: Relocating Marines from Okinawa, Visiting Aircraft Berthing and Army Air and Missile Defense Task Force (DEIS) was written in accordance with the requirements set-forth by National Environment Policy Act (NEPA), Council on Environmental Quality regulations, and 32 CFR Part 989 (as amended). The DEIS evaluated the impacts for relocating U.S. Marine Corps forces to Guam, constructing visiting Aircraft Carrier berthing facilities at Naval Base Guam, and establishing a U.S. Army Air and Missile Defense Task Force on Guam. The DEIS also identified possible actions to mitigate or lessen the impacts.

The three main components of the proposed actions are briefly stated as follows:

1. *Marine Corps.* (a) Develop and construct facilities and infrastructure to support approximately 8,600 Marines and their 9,000 relocated from Okinawa to Guam. (b) Develop and construct facilities and infrastructure to support training and operations on Guam and Tinian for relocated Marines.
2. *Navy.* Construct a new deep-draft wharf with shore-side infrastructure improvements creating the capability in Apra Harbor, Guam to support a transient nuclear powered aircraft carrier.

3. *Army.* (a) Develop facilities and infrastructure on Guam to support relocating approximately 600 military personnel and their 900 dependents to establish and operate an Army AMDTF.

Guam residents and the Guam Department of Agriculture (GDoA) were given a deadline of February 17, 2010 to comment. GDoA's response to the DEIS includes broad overarching comments in letter format, as well as an attached matrix of detailed comments that indicate specifically where the DEIS document fails to meet adequate levels of analysis to determine the full impacts of the action(s). The GDoA submits the following comments in response to the DEIS.

J-018-001

NEPA process and proposed implementation too fast for Guam to properly prepare

GDoA has major concerns with the DEIS NEPA process and the schedule of implementation. The proposed actions within the DEIS are scheduled to commence in 2011. Overall the DEIS is an extremely large document that is extremely difficult to digest. To provide input on all the components of the proposed actions within the DEIS is even more challenging. The time allotted to provide comment, in spite of the extension (45-days), is not sufficient; the 30-day for review of the FEIS is also problematic. 40 CFR Section 1501.8 Time Limits (b) states that the agency may consider the following factors in determining time limits such as size of the proposed action, number of persons and agencies affected, degree to which relevant information is known and if not known the time required for obtaining it, and degree to which the action is controversial. These factors appear to have not been taken into account when considering the time limit for the entire NEPA process for the Guam and CNMI Military Relocation. Furthermore, 40 CFR Section 1506.10 Timing of agency action (d) states that the lead agency may extend prescribed periods. GDoA is requesting that the a 90 day review period be given for the FEIS instead of the usual 30 day review period.

J-018-002

Supplemental DEIS necessary to address inadequate analysis and missing information

The DEIS does not objectively evaluate the full range of direct, indirect, and cumulative effects of the preferred alternative, and of the reasonable alternatives; or, include effects of climate change and rising sea levels within analysis. Studies appear to be selectively chosen to justify decisions already made. Full and fair discussion of the significant impacts was not provided. The DEIS does not provide adequate discussion on the reasons for eliminating alternatives. GDoA's attached matrix of specific comments provides multiple examples. Of particular note is that the DEIS continually fails to identify impacts to Mariana fruit bats within the analysis of impacts from actions; fruit bat recovery is of paramount importance to the people and culture of Guam.

The DEIS did not provide adequate information for GDoA to compare and contrast the environmental effects of the alternatives. There was significant information that was not included in the DEIS. Examples of such information include, but are not limited to, the Micronesia Biosecurity Plan, Noise Abatement Plan, *Partulid* Translocation Plan, Ungulate Management Plan, an adequate *in situ* benthic assessment to include coral size frequencies, information on coral communities below 60 ft. depth, lack of information and misinformation regarding environmental consequences, discussion on the possible

J-018-001

Thank you for your comment. The DoD carefully considered all requests to extend the length of the comment period beyond the 45-day minimum required by NEPA. In evaluating multiple options, DoD leadership determined that a 90-day comment period best balanced the need for sufficient time to review a complex document with the requirement to reach a timely decision regarding the proposed military buildup on Guam.

J-018-002

Thank you for your comment. The information that is mentioned is included in this EIS. The EIS addresses the proposed action of the military relocation, alternatives, impacts and mitigation measures to reduce any adverse effects.

conflicts between the proposed action and the objectives of local policies, and a sea turtle assessment. The missing information is relevant to environmental concerns and impacts, thus, DoD must provide a supplemental to the DEIS that includes the additional information, studies and analysis not completed prior to the development of the DEIS.

J-018-003

Adjust actions to reduce impacts

Due to the reasons stated above and the enormous impact the proposed actions will have on Guam's natural resources, and the ability to recover native species, GDoA is staunch in its position that the "No Action Alternative" is the preferred action(s) for all components of the proposed action. However, GDoA is cognizant that Department of Defense (DoD) is focused on meeting the needs of the mission. Thus, the FEIS and/or supplemental to the DEIS must identify and consider new alternatives to meet mission requirements that would significantly reduce the impacts to Guam's natural resources. These new alternatives may include the upgrade of current assets, creating multi-level living quarters, and/or moving actions to developed areas. The document reflects that the placement of activities and structures are focused on convenience and comfort when a small detour could reduce impacts to the native forest and the ability to recover native species. For example, the Army AMDTF Weapons Emplacement Preferred Alternative includes the NWF Area 50, and the northern part of "old housing". These sites and those of the other alternatives impact native habitat.

J-018-004

Cumulative impacts not analyzed adequately

According to NEPA, the cumulative effects of the action(s) must be analyzed within the DEIS. The cumulative effects of DoD actions on Guam for terrestrial and marine combined have not been adequately analyzed in the DEIS. The DEIS does take into account actions recently approved or in review (as listed Volume 7, p. 4-5 thru 4-12). However, the DEIS does not include analysis of impacts due to all previous activities, as well as those in the foreseeable future. DoD has been the stewards of 28% of Guam's land and natural resources for over 50 years, yet the document only refers to the most recent DoD projects. For example, the direct loss of habitat through clearing and, the disturbance buffers surrounding areas of military activity, have greatly fragmented the limestone forest in northern Guam. The recovery of Guam's native and endangered avifauna depends on the availability of limestone forest for species recovery. The FEIS must include analysis of how much limestone forest is necessary for the recovery of species and whether the proposed actions will nullify over 30 years of efforts to preserve and protect efforts to restore Guam's native avifauna since the military's introduction of the brown treesnake (*Boiga irregularis*) following WWII. The direct actions of the military's actions on DoD property, in addition to the development outside base property due to the military buildup, will most likely impact too much of northern Guam to allow for the recovery of Guam's native species. GDoA is unsure that any amount of mitigation will provide replacement value or restore ecological function.

J-018-005

Furthermore, the cumulative impacts from the loss of coral reef habitat through dredging and construction activities and military training are not adequately analyzed. The original Adotgan Point Ammunition Wharf dredging (Kilo Wharf) as well as other projects that occurred before 2005 needs to be included within the cumulative impact

J-018-003

Thank you for your comment. The EIS addresses the proposed actions, alternatives, impacts and mitigation measures to reduce any adverse impacts.

J-018-004

Thank you for your comment. The EIS evaluates cumulative impacts only in the recent past per federal requirements. Impacts to Federally listed species and the necessary habitat for their recovery are currently being evaluated by the U.S. Fish and Wildlife Service. Our analysis of recovery habitat for the kingfisher is as follows:

The Final Revised Recovery Plan for the Guam Micronesian Kingfisher (2008) requires at least 2 subpopulations (with at least one each in northern and southern Guam) of at least 1,000 adults each to remove the species from the Federal list of endangered and threatened species (page 43). The Recovery Plan identifies the average territory size as 10 hectares (page 10). The Recovery Plan addresses the potential for stochastic events such as storms and disease outbreaks and states "at least two subpopulations should be established on Guam to prevent extinction and support recovery (page 58)." This results in an island-wide total of 10,000 hectares of kingfisher recovery habitat needed to support the kingfisher.

U.S. Fish and Wildlife Service has estimated that Guam has a total of 11,491 ha of kingfisher recovery habitat remaining; the military build-up will directly impact 629 ha of recovery habitat.

Once the direct impacts from the build-up are subtracted, the remaining recovery habitat on Guam would total 10,862 ha, which is still within the recovery habitat threshold.

We have provided our cumulative effects analysis which is based on the information presented in Volume 7, Chapter 4 of the Draft EIS and

J-018-006 analysis. The cumulative impact analysis should include the impacts of all projects as a whole and not individually as within the DEIS. The supplemental DEIS or FEIS needs to include tables depicting 1) the cumulative number of potential acres to be impacted for terrestrial and marine for the preferred alternatives, and of the reasonable alternatives for the Guam and CNMI Military Relocation; and, 2) the cumulative number of acres to be impacted or has been impacted for terrestrial and marine for all past, present, and future projects.

J-018-007 ***Micronesia Biosecurity Plan is incomplete and unfunded***
The Micronesia Biosecurity Plan (MBP) is referred to consistently in the DEIS as a means of reducing the risk of invasive species spreading to and from Guam, as well as throughout the region. The MBP must be fully developed and 100 percent funded in order to minimize and reduce the risk of brown treesnakes and other invasive species spreading throughout the region. The MBP must include measures to eradicate invasive species already in Guam and Tinian. Invasive species already present in Guam and Tinian will continue to threaten the region.

The FEIS and ROD must adequately address the funding of MBP as most of the jurisdictions within Micronesia do not have the assets to improve biosecurity procedures. As mentioned in 40 CFR Section 1505.3, agencies may provide for monitoring to assure their decisions are carried out and should do so in important cases. The MBP is an important case. Without a fully funded MBP and 100% brown treesnake interdiction program in place, the risk to the region from the proposed actions is too immense.

J-018-008 ***Unescorted access for GDAWR to recover native species and save DoD resources***
The DoA's Division of Aquatic and Wildlife Resources (GDAWR) must be given unaccompanied access to the compensatory mitigation sites to implement recovery actions. The supplemental DEIS or FEIS should include language that dictates unescorted access for GDAWR staff to DoD property to complete their mission of monitoring and restoring Guam's natural resources. This statement in the FEIS is necessary to insure that the local DoD Commands recognize GDAWR as a partner in the recovery of Guam's species. Current access policies limit GDAWR staff's ability to assist DoD in the effort to preserve and protect Guam's natural resources while pursuing the mission of national defense. Recent BRAC activities have increasingly reduced the ability of GDAWR to complete monitoring activities that have been in existence for over 30 years. The DoD Environmental personnel need to focus their efforts on completing compensatory mitigative measures and previous commitments with permits approved by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and Biological Opinions developed with the U.S. Fish and Wildlife Service, rather than replacing or replicating GDAWR's survey efforts on DoD lands. This is a waste of DoD funds that could be used to complete necessary mitigative measures when there are other agencies funded to complete monitoring activities.

Section 1704 (a) of the Organic Act of Guam states that "Except as otherwise provided by law, the government of the Virgin Islands, Guam, and America Samoa, shall have concurrent civil and criminal jurisdiction with the United States with regard to property

represents future State, tribal, local or private actions that are reasonably certain to occur in the action area.

J-018-005

Thank you for your comments. The document has been reviewed and modified as appropriate based upon your comments. Volume 7 in the EIS includes a cumulative impact analysis appropriate for the anticipated growth and additive effects on the nearshore environment.

J-018-006

Thank you for your comment. Due to the complexity of the project, there are two parts of the cumulative impact analysis: the summary of impacts for all components of the proposed action (Volume 7 Chapter 3) and an assessment of the additive impacts of the proposed action in combination with other past, present and reasonably foreseeable projects (Volume 7, Chapter 4). A systematic methodology was applied in both analyses.

Volume 7, Chapter 3 summarizes the combined potential impacts of all of the preferred alternatives on Guam and Tinian. The impacts of Volumes 2 through 6 are discussed by resource. At the end of Volume 7, Chapter 3.3 there is a table summarizing the combined impacts of all long-term (operational) components of the preferred alternatives. Significant impacts are identified. Trends in the resource health on Guam and Tinian since World War II are described. This section includes limited quantitative data for proposed action impacts. For example, special-status species habitat loss due to the proposed action and current amount of habitat available island wide is presented in Volume 7, Section 3.3. There is no quantitative island-wide data readily available for most of the resource areas assessed and the impact analysis is often qualitative.

Volume 7, Chapter 4, Cumulative Impacts, assesses the potential

owned, reserved, or controlled by the United States in the Virgin Islands, Guam, and America Samoa respectively." DoD should abide by the above section to ensure mitigation is in fact assisting the natural resources to recover and work in partnership with local resource agencies rather than excluding them from access to DoD property.

J-018-009

Impacts to Overlay Refuge habitat for the recovery of Guam's native species

Over 1,286 acres of habitat in the Refuge Overlay will be cleared by the proposed actions in the DEIS (see Volume 7, p. 3-29). The impact of these actions is most likely to jeopardize the recovery of Guam's federal and locally listed endangered species. The impact of clearing native limestone forests, and other habitats appropriate for the release of endangered species including the Mariana crow (*Corvus kubaryi*), Guam Micronesian Kingfisher (*Halcyon c. cinnamomina*), and Guam rail (*Gallirallus owstoni*) federally and locally listed) is extremely large. The FEIS should discuss how the loss of these habitats will be minimized by adjusting alternative actions to avoid forested areas, as well as mitigated by preserving other areas for recovery, funding recovery actions and ensuring GDoA is involved in the monitoring and recovery of endangered species. To the largest extent possible, the removal of large native forest tree species should be avoided. The proposed actions will have significant impact that may, is likely to adversely affect federally listed species.

J-018-010

Add special emphasis on repatriation of endangered species on Guam military lands

Current DoD/Navy policy dictates that the repatriation of endangered species (ES) on military lands demands the signature of a high level of command (possibly the Assistant Secretary). Thus, the local Navy Environmental staff is adverse to any projects that involve repatriation of ES and do not facilitate local or Federal agency ES recovery efforts on DoD property. This effectively prevents any repatriation efforts on DOD lands and nullifies any commitment by DoD to mitigate for the proposed actions, and previous commitments. The impact of not allowing reintroduction of ES on DoD property is enormous when you consider the size of Guam, the percentage of land held in trust by DoD, as well as the quality and quantity of habitat reserved for ES recovery on military land. Without local intent and support of repatriation of ES on DoD land, DoD is in violation of the Endangered Species Act of 1973 without first considering the impacts on the species. The FEIS must include measures that will dictate the release on ES on DoD land and language must be included to allow GDAWR full participation in ES recovery programs on DoD lands.

J-018-011

Proposed actions impact commitment to conservation actions and recovery of species

The FEIS must address how DoD on Guam will allow recovery actions to continue in Naval Magazine Storage and Munitions Storage Area (Andersen AFB) in light of the expected increase in security with the proposed addition of ECMs.

Increase effort to control ungulate damage to native forest

DoD must continue or commence ungulate control via depredation-permitted programs in all its bases. DoD must incorporate methods such as snaring and trapping, rather than shotgun, for control of Philippine deer (*Cervus marianus*) and feral pigs (*Sus scrofa*) in ES habitat. Installation of fencing would complement removal efforts by controlling

additive impact of the EIS proposed actions when combined with potential impacts of other past, present and reasonably foreseeable future actions. The period of consideration for the cumulative impact analysis is 2004 to 2019. The project list is based on best available information from DoD and the Guam Land Use Commission database. There is no National Environmental Policy Act (or similar) document disclosing project impacts for most of the cumulative projects listed; therefore, there is insufficient data on most cumulative projects listed to conduct a quantitative impact analysis. In Chapter 4 a table summarizes the potential cumulative impacts on Guam and another table summarizes the potential cumulative impacts on Tinian. Potential additive cumulative impacts are identified for a number of resources. Mitigation measures are proposed earlier in the EIS. The cumulative impacts analysis has been expanded in the FEIS, including the addition of climate change analysis and analysis of cumulative impacts to coral.

J-018-007

Thank you for your comment. The DoN is developing a Micronesia Biosecurity Plan (MBP) to address potential non-native invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). The plan is intended to be a comprehensive evaluation of risks in the region, including all Marine Corps and Navy actions on Guam and Tinian. The Navy will develop biosecurity measures to address non-native invasive species issues that will supplement existing practices. For additional information on the MBP and existing and interim measures for non-native invasive species

ungulate movements and creating areas for eradication, as well as facilitating installation of multi-species barriers. Where appropriate hunting programs should make these resources available to resident hunters. These efforts must be in collaboration with, and in cooperation with GDoA's GDAWR.

J-018-012

GDoA prefers the No Action Alternative to dredging of Apra Harbor

Based on the reasons stated previously, such as the inadequate evaluation all reasonable and dismissed alternatives and insufficient analysis of the full range of direct, indirect, and cumulative effects resulting in an un-meaningful analysis to compare and contrast the environmental effects of the various alternatives, GDoA has no option but to choose the no action alternative to dredging of Apra Harbor for the Aircraft Carrier Berthing (Volume 4). According to the DEIS, twenty-five acres of coral habitat will be directly impacted (dredged) by the preferred action, while over 46 acres will be indirectly impacted totaling in over 71 acres impacted by the action. However, the acreage may be higher because an adequate resource assessment was not conducted to include biological communities below the 60 ft. depth and possible the biological community at the entrance of the Inner Apra Harbor Channel.

The DEIS provides incorrect information in regard to the dredging project, such as there are no shallow shoal patch reefs where dredging would occur (direct impact area) (Volume 4 Page 11-11) and hammerheads spawn outside Inner Apra Harbor Channel (Volume 4 Page 11-35). Shallow shoal reefs are located in the direct impact area and hammerheads do not spawn; they display an act called "pupping". Sea turtle surveys were not properly conducted resulting in an inadequate analysis of impacts to sea turtles. Incidental surveys were conducted by individuals with no sea turtle expertise while conducting benthic surveys resulting in an unsupported statement that sea turtles have not been observed foraging or resting within the proposed project area.

The DEIS states incorrect and conflicting information concerning the proposed waterfront functions action. Examples include statements about hammerhead spawning in Apra Harbor. Hammerheads do not spawn; they display an act called pupping. The DEIS further states that finfishes are only represented by three families in the Inner Harbor. However, the Marine Biological Survey of Inner Apra Harbor (Smith et al. 2008) conducted by the University of Guam reported approximately 19 families of finfish. The end result is that the affected environment of Inner Apra Harbor is inadequately analyzed (Vol. 2 Chapter 11).

J-018-013

DEIS proposed actions conflict with local policies

Discussion on the possible conflicts between the proposed action and the objectives of local policies are not included within the DEIS. Title 5 Guam Code Annotated Section states that it shall be unlawful to remove live coral from that area surrounding the Island of Guam extending from the shore of the island outward to the ten fathom contour. A permit is needed from GDoA. However, there is no discussion about this issue. Neither of the two alternatives provided (Polaris or the Former SRF Site) are acceptable with the large amount of direct and indirect negative impacts to the Shoals that the action will cause. The no-action alternative would not jeopardize the conditions of these areas,

control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-018-008

Thank you for your comment. DoD will continue to work cooperatively on the referenced efforts.

J-018-009

Thank you for your comment. Impacts to Federally listed species and the necessary habitat for their recovery are currently being evaluated by the U.S. Fish and Wildlife Service. Their findings are being included in the FEIS. Refinement and additions to mitigation measures for these species that were proposed in the DEIS have also been updated in the FEIS. Large trees would not be removed unnecessarily. However, in many areas the development is intensive and all vegetation must be removed. The FEIS has been updated to note that a salvage and re-use plan for plants would be developed or required of contractors before clearing began.

J-018-010

Thank you for your comment. The Department of the Navy (DoN) is proposing conservation measures to support re-introduction of native endangered or threatened species on DoD lands on Guam consistent with species recovery plans. In further support of such recovery efforts, the DoN intends to actively participate in recovery committees for endangered or threatened species on Guam. When DoN and USFWS mutually agree the constraints to reintroduction of native threatened or endangered species on DoD lands on Guam have been minimized to a point that a feasible and successful re-introduction of the affected

contrary to the DEIS' position that the no-action would lead to a degradation of these habitat as a result of coral bleaching and other environmental perturbations (Vol. 7, p. 3-36).

J-018-014

The DoD should recognize the Sasa Bay Marine Preserve and the Pati Point Conservation Area, which Public Law 24-21 created as local marine preserves. Discussion on the possible conflicts between the proposed actions of the CVN dredging and waterfront functions and the objectives of marine preserves are not included within the DEIS. The DoD should formally set these areas as conservation areas.

Proposed mitigation/compensatory actions

J-018-015

1. GDoA supports the use *In Lieu Fee* as the preferred mitigation and watershed restoration management as the alternative mitigation. GDoA does not support artificial reefs as an option for mitigation because it does not replace the lost ecosystem function.
2. The mitigation of any lost coral resources should include off-site mitigation similar to the Cetti Bay Mitigation for the Kilo Wharf dredging project. The Cetti Bay Mitigation provides recovery of coral reef function, by restoring upland forest habitat in adjacent areas. The establishment of artificial reefs and coral transplantation projects should not be considered as mitigative actions for coral destruction as they are not proven methods to restore coral ecology. Compensatory mitigation needs to include compensation for the aquatic resource functions that will be lost as a result of the permitted activity and not just the loss of corals only as stated in 40 CFR Section 230.93 General Compensatory Mitigation Requirements.
3. With the proposed actions and resulting population increase, Guam's Marine Preserve Areas will be under greater pressure and, as such, will need increased enforcement by conservation officers. DoD must mitigate for the increase of 80,000 people during the construction phase by providing funds to increase Guam's enforcement of aquatic and terrestrial resource laws and regulations. A contingent of 20 additional conservation officers will be needed to enforce local conservation aquatic and wildlife laws and regulations.

J-018-016

4. Forest habitat, whether primary, secondary or scrub, is critical to the recovery of Guam's native wildlife. Impacts to these habitats must be mitigated wherever possible, and any and all losses compensated. Tree species such, *Intsia bijuga*, *Artocarpus marianensis*, *Ficus prolixa*, *Pisonia grandis*, are not easily replaced and, function of the forest is not easily recovered. Timetables for construction and compensatory mitigation must be aligned to prevent proposed actions moving forward without compensation.

species is more probable than not, the DoN will work with the U.S. Fish and Wildlife Service to develop a re-introduction plan and supporting programmatic biological opinion that ensures such re-introduction efforts are consistent with the species recovery plans and the military mission on Guam. Constraints to successful re-introduction would include things such as controlling the brown tree snake and feral cat populations on Guam.

J-018-011

Thank you for your comment. The addition of ECMs at NMS and Andersen AFB is not expected to require a significantly higher level of security than currently exists. An ungulate management plan is currently under development by the Navy on Guam and is part of planned mitigation discussed in the DEIS. Additional information has been added to the FEIS on the Ungulate Management Plan and implementation.

J-018-012

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments. The DoD is committed to performing its mission in an environmentally responsible manner. Best management practices (BMPs) and potential mitigation measures will minimize the potential impacts of the proposed action. These BMPs and potential mitigation measures are described primarily in Volumes 2, 4, and 7.

Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and

Please see attached document for specific comments on the DEIS document, citing volume and page, relating to the above general concepts. Thank you for the opportunity to comment on the DEIS. GDoA looks forward to the opportunity to review supplemental documents, as well as the FEIS, that will address concerns regarding the DEIS. I may be contacted at 671-735-3962.

Sincerely,

JOSEPH D. TORRES
Director

Attachments:

cc: USFWS Ecological Services, Honolulu
Guam Bureau of Statistics and Plans (BSP)
Guam Environmental Protection Agency (GEPA)
Guam Department of Recreation (DPR)

the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

The EIS correctly states that no direct dredging would take place at the shoal areas. Further, based on sediment transport modeling, indirect impacts from sedimentation would avoid the shallow shoal areas. The NOAA (2005) citation that referred to hammerhead spawning has been removed and replaced with BSP (2010) stating the "pupping event".

J-018-013

Thank you for your comment. The Navy will follow all appropriate laws and regulations while completing the proposed action on Navy-submerged lands within Apra Harbor. The Navy will continue to work with the USACE during the CWA permitting process. As stated in Volume 4, Chapter 11 of the EIS, no direct or indirect impacts are anticipated to occur within the Shoals area. Text has been revised as appropriate.

Comment Response Matrix Draft EIS/OEIS Guam and CNMI Military Relocation							
#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
0							
J-018-017	1	ES-25	5	Airspace	GDAWR	Special Use Airspace (SUA) would consist of a proposed restricted area (R-7205) to accommodate hazards associated with Terminal High Altitude Area Defense (THAAD) radar operations, located along and off the northwest coast of Guam.	GDAWR conducts aerial surveys for sea turtles off the coast of Guam. In addition, the cliff line on the northwest of Guam is habitat of the protected Mariana fruit bat. The FEIS must identify impacts to monitoring programs and fruit bats, as well as indicate DoD's commitment to consult with USFWS and GDAWR regarding this action.
J-018-018	1	ES-1	4	Introduction	GDAWR	(b) Develop and construct facilities and infrastructure on Guam to support training and operations on Guam and Tinian (CNMI) for the relocated Marines.	The FEIS would need to define the location and total amount of land impacted by the buildup in a spreadsheet and map.
	1	ES-10		Overview	GDAWR	Alternative 2 - Preferred includes NCTS, Finegayan, South Finegayan, and land in FAA	This action includes 2580 ac. Or 1,044 ha, a large area of forest in the NCTS area, that will need to be included in the compensation for loss of ES habitat.
	1	ES-10	3	Alternative 2	GDAWR	Of the total Overlay Refuge (2,095 ac [848 ha]) in the Finegayan area, this alternative would develop approx. 53% (1,106 ac [448 ha]).	Action should not clear the Overlay Refuge habitat reserved for T&E species. GDAWR recommends main cantonment site be moved to avoid Overlay Refuge parcels and impacts to ES recovery. All habitat loss must be quantified and compensated.
	1	ES-15		Overview	GDAWR	Marine Corps Relocation - Reference to Vol - Tinian - Rifle Ranges are proposed in the FAA Mitigation Site	The FEIS, or a supplemental EIS, must identify how much land is being proposed for the Firearms ranges in the FAA mitigation site - what is proposed for mitigation, and what impact would this have on the site? Why is Alternative 3 not considered, as it is not in the mitigation site.

J-018-014

Thank you for your comment. These Marine Protected Areas are addressed in Chapter 11 of Volumes 2 and 4.

J-018-015

Thank you for your comment. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

J-018-016

Thank you for your comment. Proposed conservation actions in the DEIS to avoid and minimize for all impacts, including all vegetation removal, have been refined and additional measures added in the FEIS. Inclusion of timetables is not possible at this time but many are likely to be specified in the U.S. Fish and Wildlife Service Biological Opinion.

J-018-017

Thank you for your comment. The FEIS was updated to include a discussion of the requirement for coordination of the proposed SUA with the GDAWR in regards to the existing monitoring requirements off the coast of Guam. There would be continued commitment to consult with

GDAWR Comments to DEIS/OEIS Guam and CNMI Military Relocation							
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#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment	
	Volume	Page	Paragraph				
J-018-019	6	1	ES-15	1	GDAWR	There was an extensive screening analysis for firing ranges and non-firing training ranges that examined various geographic alternatives on Guam.	The FEIS should clarify why additional firing ranges are needed. There is not full consideration of alternatives for ranges. Actions should include the expansion of existing ranges and not include Pagat area due to the recreational value, historic resources and private property issues.
J-018-020	7						
	1	ES-15	1	Training range complex alternatives	GDAWR	Surface Danger Zones (SDZ) for firing ranges, located east of Guam, would extend over the ocean.	The east coast and forested areas are used for recreation (hikers, hunters, fishermen). Location of the firing ranges must be chosen where there will be less impact to local recreation.
	8	ES-19	3	Alternative 1 (Polaris Point) (preferred)	GDAWR	A new Port Operations support building and various utility buildings would be constructed on a staging area at the wharf. There would be an area established for Morale, Welfare, and Recreation (MWR) activities and vehicle parking.	The DEIS does not indicate the amount of area to be developed for Morale, Welfare, and Recreation (MWR) activities and vehicle parking. The FEIS must quantify all habitat loss and compensate.
	9	ES-22		Overview	GDAWR	AMDTF - Alternative 1 the preferred alternative indicated support facilities in NCTS	The FEIS must indicate where munitions will be stored to support the AMDTF and the impacts on adjacent or nearby mitigation sites - i.e. HMU. The FEIS needs to identify specifically how the access of researchers to the mitigation site will be facilitated. Current access is not adequate to complete recovery activities as committed to in Biological Opinion.

the USFWS and GDAWR for support of the monitoring program for the Mariana fruit bat.

J-018-018

Thank you for your comment. The items requested are provided in subsequent volumes of the EIS. Regarding the DoD preference for Alternative 1 over Alternative 3 on Tinian, Alt 3 is close to the airport and will cause some air space issues and the terrain requires huge amounts of earth movement. The Platoon Battle course cannot be used when the KD range and AFF range are being used. Alternative 3 makes access to the northern part of the island more difficult because it cuts the only paved access along 86th St.

J-018-019

Thank you for your comment. Training ranges are essential to support Marine Corps training requirements. DoD was required to determine whether military relocation requirements (including the establishment of training ranges) could be met by excess, underutilized or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action.

J-018-020

Thank you for your comment. Firing ranges have been sighted based on numerous constraints and all feasible alternatives have been evaluated. All areas of habitat loss have been included in the DEIS. Munitions locations for the AMDTF are shown in Volume 5 of the EIS. DoD is committed to providing access to researchers provided it does not

GDAWR Comments to DEIS/OEIS Guam and CNMI Military Relocation								
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#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment		
	Volume	Page	Paragraph				Section	
J-018-021	10	1	ES-25	1	Munitions storage alternative 1 (preferred alternative)	GDAWR	Munitions Storage Alternative (preferred) would be in three noncontiguous areas near the HMU at Munitions Storage Area (MSA) 1 at AAFB. The proposed magazines would be constructed at these two sites (requiring demolition) and at a third site located east of the HMU across an unnamed roadway. The area of ground disturbance including a buffer (and excluding the existing munitions storage facilities) is estimated 6.6 ac (2.7 ha).	The FEIS must clarify how locating munitions storage near HMU impact access to IMU. Will road access be closed when work occurs at the magazine storage sites such as moving of munitions. GDAWR prefers that existing storage sites (between 4 th -8 th street B-D avenues) be used to avoid access issues to HMU mitigation site.
						GDAWR	Alternative 2 site is located north of B Avenue at MSA 1; ground disturbance including a buffer is estimated 2.7 ac (1.1 ha). Alternative 3 site is located northeast of HMU and an unnamed road at MSA 1; ground disturbance including a buffer is estimated 2.7 ac (1.1 ha).	Alternative 2 will be the more appropriate alternative for this action. Access to HMU will not be disrupted. If Alternative 1 remains the preferred alternative, mitigation to provide daily, unescorted access will need to be developed and implemented.
J-018-022	12	1	ES-29	3	Potable Water	GDAWR	Basic Alternative 1 (preferred) would consist of installing up to 22 new potable water supply wells at AAFB, rehabilitating existing wells, and interconnecting with the GWA water system, and associated water line transmission and distribution systems.	The FEIS must indicate the impacts of the increased number of wells to Guam's water supply. Sea level rising must be included in the analysis.
J-018-023	13	1	ES-29		Overview	GDAWR	There is a reference to the Power Generators at Pons to support Facilities in the NCTS area.	The FEIS must analyze the impacts a power plant near the HMU would have on the HMU, the surrounding forest and urban population in regards to noise and the discharge of emissions. Mitigation measures should be identified.
J-018-024	14	1	ES-29		Overview	GDAWR	Alternative 3 -Long-term	The FEIS must identify the impacts activity will have on the endangered moorhen that inhabit Fern Lake and identify avoidance and mitigation measures.

impact the military mission; DoD will work with the agencies on these access issues.

J-018-021

Thank you for your comment. It is anticipated that the gate to the HMU could be located such that it is not near the munitions storage area so that there would be no conflict with potential movement of munitions. In any case access should only be a scheduling issue. It is noted that in general access to DoD lands on Guam for monitoring or patrolling by GDAWR is a DoD Joint Region policy matter and not EIS-related. Alternative 1 is preferred considering mission requirements and potential impacts for all resource areas.

J-018-022

Thank you for your comment. Interim Sustainable Yield Assessment: DoD agrees that protection of the sole source NGLA is imperative. The FEIS discussed the two available estimates of the NGLA that have been published, one by the Northern Guam Lens Study (NGLS) (CDM 1982) and one by Barrett Consulting with John Mink (Barrett 1992). The CDM 1982 study estimated the sustainable yield of the NGLA as 57.5 MDd, and the Barrett 1992 study estimated the sustainable yield as 80.5 MGd. University of Guam (UoG) Water and Environmental Research Institute (WERI) provided an expert technical review for DoD of the two sustainable yield estimates for the NGLA in 2009. The study concluded that the approach and methodology used in Barrett 1992 to estimate the sustainable yield are still valid and are appropriate for initial planning; and the Barrett 1992 sustainable-yield estimates should be used instead of the earlier 1982 sustainable-yield estimates because the later values are based on an additional decade of field data. Additionally, this expert communicated that the additional data that had been gathered from the NGLA since the 1992 study would not likely change the sustainable yield estimate for purposes of the FEIS because the data collected was from sub-basins of the aquifer that are not located where DoD proposes to

GDAWR Comments 2-16-2010						
#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph			
J-018-025 15	1	ES-30		Overview	GDAWR	For Guam Roadway Network - 5 bridge replacements and 58 projects GRN. The FEIS must identify the impacts to marine resources and area impacted by the GRN. Although no new area will be cleared, the additional pollutants dispersed along these roadways with increased traffic flow must be addressed. There are MFBA and endangered species concerns, a policy should be outlined in the ROD requiring adherence to AGLs.
J-018-026	1	ES-9		Overview	GDAWR	Total area needed would be 2500 acres (1,012 ha) Correction: 1,100 hectares is needed for Main Cantonment
J-018-027 17	1	1-14	4	1.2.5.2	GDAWR	Training Operations Covered by the Guam and CNMI Military Relocation EIS/OEIS: Since the MTRC EIS/OEIS is covering DoD-wide training on existing DoD land and training areas in the region, there will be overlap between the two EIS/OEISs in the area of land usage. As these two documents are being developed on similar schedules, they are being closely coordinated to ensure consistency. The Draft EIS/OEIS will need to be aligned with ISR STRIKE EIS, as well as other EISs to ensure consistency and ensure that cumulative impacts are adequately addressed. The proposed actions within the MTRC and Relocation EIS/OEIS is in addition to the impacts/stresses to natural resources on Guam from the past 50 years of DoD land management.
J-018-028 18	1	1-45		Table 1.11-1	GDAWR	Table 1.11-1. Documents to Be Incorporated by Reference. Table 1.11-1 should include Refuge Overlay MOU, ISR STRIKE EIS, Kilo Wharf EIS, and other current projects in DOD lands, to align Military Relocation EIS.
J-018-029 19	1	2-11		2.2.3.1	GDAWR	Embarkation operations: ...a cargo staging and vehicle wash down area would be provided in proximity to but not adjacent to the wharf. The distance between Victor Wharf and cargo staging and vehicle wash down area must be minimized to avoid the spread of unwanted species during transit. Biosecurity measures must be fully funded and implemented.
	1	2-13	1	2.2.3.2	GDAWR	...laydown area must also be remote from other operations because of the noise and spray associated with the LCAC's. This area is within a mammade fill area, requires no demolition, and is undeveloped (vacant) with no land use constraints. The impact (noise and spray) associated with the LCAC's is a concern to GDAWR. The proposed area for the laydown and adjacent areas within Polaris Point must be surveyed for wildlife and invasives. Impacts from the LCAC laydown should be minimized.

withdrawal water. Therefore, the FEIS uses the Barrett 1992 sustainable yield estimate of approximately 80 million gallons per day. However, it is important to note that the estimated total average daily demand from the aquifer for all sources (DoD and non-DoD) during the peak construction year of 2015 is 50.33 MGd, which is below both sustainable yield estimates. Volume 6, Chapter 2, Section 2.2.4.1 and Chapter 3, Section 3.2.3.1 discuss this in detail. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-management of the aquifer and development of a 3-D model, and will help guide decision-making during well installation. It is also important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information

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J-018-030	21	1	2-13	2	2.2.3.2	GDAWR	A new access road would be provided from Marine Corps Drive.	The DEIS does not illustrate access road from Marine Drive for the laydown area. Does the access road from Marine Corps Drive require clearing? What is the length of the access road? Is there an alternative route to avoid clearing? All clearing of habitat must be compensated.
	22	1	2-14/15		2.2.4.1	GDAWR	The proposed alternatives for the location of the live firing range complex are on the east coast of Guam....	The proposed location for the firing range is not a preferred alternative due to the regular recreational use of the area. It would likely be impossible to give enough access/time to recreational users to mitigate for restricted use. The FEIS must address impacts of projectiles (bullets, metal fragments) on habitat.
	23	1	2-15		2.2.4.2	GDAWR	The access road alternatives are located outside NMS property and would require acquisition of a right of way extending 300 ft (91 m) from the road centerline. Alt. A: improve hiking trail, require 50 ft (15 m) wide of vegetation clearing; Alt. B: no improvements on existing hiking trail and would be used by foot traffic.	The FEIS should provide justification for the preferred alternative. All clearing of habitat needs to be quantified and compensated for.
J-018-031	24	1	2-16		2.2.4.3	GDAWR	• Biological: the amount of habitat disturbed should be minimized... to avoid sensitive essential habitat for threatened and endangered species.	GDAWR agrees that disturbance should be minimized; all disturbance and clearing of habitat should be accounted for and compensated.
J-018-032	25	1	2-16		2.2.4.4	GDAWR	DEIS mentions planned FCLP on the north ramp of Andersen Air Force Base	The FEIS must indicate that FCLP's will be required to adhere to the 1000R. Above Ground Level lift off from the FCLP. Also, Hets should be conducted in areas outside of T&E sensitive areas.

held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

Long-term Comprehensive Aquifer Study: DoD has already committed funds to conduct the NGLA 3-D model. During meetings with GWA in November 2009, GWA, GEPA and DoD jointly met with UoG-WERI to discuss the proposed USGS study and it was agreed that a working group of stakeholders would be established to guide the efforts to successfully manage the NGLA. This working group which includes, EPA, GEPA, GWA, DoD, UoG-WERI, and USGS is meeting in Guam in early March 2010 to allow the stakeholders to collaboratively shape the USGS study that DoD is funding. This meeting will allow stakeholders to provide their input into the development of a 3-dimensional model that will be created as a management tool to guide and shape the long term development, protection and continued operation of the aquifer as a critical resource. It is expected that the stakeholders will agree on parallel efforts to leverage available information to address military buildup related impacts to the NGLA for the FEIS while defining the parameters that will shape the creation of the 3-dimensional model that will establish baseline conditions of the aquifer to support long term decisions related to groundwater quantity and quality management. GWA has placed significant weight on the timely development of the 3-D model and through its involvement in the upcoming stakeholder meeting and the near monthly meetings with DoD has the ability to influence the development of the model to address its specific concerns and interests raised in its comments in the DEIS. Data gathered during the DoD well siting study will be used to continue to guide and steer the co-

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J-018-033								
26	1	2-24		Overview 2.5.2	GDAWR	Eight new Earth Covered Magazines (ECMs) and Modular Storage Magazines (MSMs)	The FEIS must define the impacts of the new storage areas on the overall Explosive Safety Quantity Distance (ESQD). FEIS must also outline how GDAWR and other cooperators will have access in these areas. An agreement between DoD and GDAWR needs to be established that allows for unaccompanied access, in order for GDAWR to conduct ES recovery work. DoD needs to continue to allow for the release of endangered species.	
J-018-034								
27	1	2-28		2.7.1.1	GDAWR	Construction Requirements - "DOD plans to allow interested islanders to harvest plants in areas to be cleared.	GDAWR is in favor of the intent to allow islanders access to harvest, however procedures must be in place to control the spread of invasive plants and animals, (i.e., Coconut Rhinoceros Beetle, etc.) The use of <i>Leucaena</i> for firewood should be ok. If it should be allowed for woodcarving and other pertinent uses.	
J-018-035								
28	1	2-29		2.7.1.3	GDAWR	Tables 2.7-2; 2.7-3; 2.7-4; 2.7-5; and 2.7-6; Primary locations of Marine Corps Construction; Navy Construction; Army Construction; Utilities Construction; and Roadway Widening Project Construction	The locations given in the table are very broad. A map should accompany the table to identify locations identified in each table.	
J-018-036								
29	1	2-33		2.7.1.4	GDAWR	Table 2.7.7. Up to 15,816 workers will be needed for DOD related projects.	The FEIS must identify how DoD will mitigate for the impact of the foreign workers on the natural resources of the island, i.e., marine preserves, and other non-regulated coral reefs. For example, the installation of signs in a multiple languages, funding for increased enforcement of MPAs.	

management of the aquifer and development of a 3-D model.

Aquifer Management Plan: In October 2009, fully comprehending the importance of protecting the sole source NGLA, DoD initiated an effort with GWA/CCU to co-manage the NGLA. In fact, co-management of the aquifer, and pursuit of a comprehensive 3-D model of the aquifer was a DoD recommendation, not one made by EPA, GWA or GEPA. This effort proposed that GWA and DoD, the two entities that rely on the NGLA as a major source of water would need to work as one to protect this critical resource. The proposal was to cooperatively assess the impacts of proposed developments, use the upcoming USGS study to guide efforts to manage the NGLA, and leverage DoD and GWA resources to cooperatively address potential impacts and propose alternatives to mitigate adverse impacts to the NGLA. Although this initiative to work together cooperatively has been advanced at subsequent meetings that created consensus on the way ahead, both GWA and EPA raised concerns with the DEIS knowing that many of the issues they raised are already being addressed. Additionally, EPA was invited to these meeting, but declined to attend unless DoD funded their participation. It is important to note that although GWA's comments stressed the need to involve UoG-WERI in the USGS study of the NGLA due to the body of information held at WERI; GWA, EPA and GEPA all questioned UoG-WERI's confirmation that the 1991 report "Groundwater in Northern Guam, Sustainable Yield and Groundwater Development" supports the adequacy of the NGLA to meet the water demand related to the military buildup. It is expected that the stakeholders will steer the USGS study to provide sufficient information to address the concerns about sustainable yield of the NGLA (at the sub-basin level) and provide that information to address the concerns raised in the review of the DEIS for inclusion in the FEIS.

Sea Level Rise: Volume 7 of the FEIS includes a general discussion of

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J-018-037	30	1	2-8	2.2.1	GDAWR	The majority of the proposed ACE Beddown Project Area site is an inactive, previously disturbed area north of the existing Andersen AFB Airfield.	All habitat types are important for species recovery, particularly in northern Guam. The FEIS must quantify all loss of habitat, including disturbed areas for compensation. Most (native and migratory) protected species on Guam rely on various habitat types, including 'disturbed' habitats.
J-018-038	31	1	2-8	2.2.1	GDAWR	Air traffic would include helicopter, vertical lift aircraft, fixed wing, and unmanned aircraft arrivals and departures. Air traffic rates are contingent on surge and operational requirements.	EIS will need to align with the MIRC EIS in regards to air traffic routes and rates. The FEIS must clarify how airfield operations will mitigate for fruit bat disturbance. It is imperative that the only remaining fruit bat colony not be further disturbed by increase in activity.
J-018-039	32	1	2-8	2.2.1	GDAWR	There are bio-security searches of cargo and baggage.	All cargo, baggage, machinery and equipment will need to be inspected prior to departure and arrival. FEIS will need to commit to 100% inspections to control the spread of invasives, including but not limited to BTS.
J-018-040	33	1	2-8	2.2.1	GDAWR	This site would serve as the passenger terminal for Andersen AFB and temporary cargo storage.	Consultation with USFWS, USDA-WS, and RJSC would need to be conducted for the construction and operations of the cargo storage facility in order to meet bio-security standards.

impacts from global warming, including sea level rise and the effects on the aquifer.

J-018-023

Thank you for your comment. I believe you are referring to one of the potential long-term alternatives to locate a new power plant at Potts Junction near the HMU. That alternative is only presented at the programmatic level. If it would be pursued, a new NEPA analysis and review would be required. That would take a much more detailed project specific analysis that would look at the items raised in your comment. That is outside the scope of this EIS.

J-018-024

Thank you for your comment. Long-term alternatives are not evaluated in the EIS. If implemented, additional NEPA will be conducted for these actions.

J-018-025

Thank you for your comment. Volume 6 Chapter 13 includes a list of projects and project types that may indirectly impact marine resource areas, as well as specific marine conservation areas (e.g. Sasa Bay Marine Preserve). Volume 6 Chapters 6 (Water Resources) and 12 (Terrestrial Biological Resources) discusses potential direct and indirect impacts to aquatic environments associated with GRN projects. These chapters discuss the potential for non-point source pollution inputs into target environments, and include mitigations and BMPs relevant to each chapter's resource areas.

J-018-026

Thank you for your comment.

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J-018-041	GDAWR Comments 2-16-2010							
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34	1	2-9	1	2.2.1	GDAWR	Andersen AFB access improvements and the North Gate and Access Road proposed projects, would improve the traffic flow and physical security of vehicles entering and exiting the air base... until it terminates at 5 th Avenue.	Clearing of habitat may be avoided (as well as increased disturbance and habitat fragmentation) by developing a transportation plan for AAFB to improve traffic flow with the existing gates. A strategic schedule for movers, construction trucks, delivery trucks, etc., should be implemented to reduce traffic and security issues. The FEIS must quantify all clearing of all habitat types and identify compensation.	
J-018-042	35	1	1-17		3.5.1	GDAWR	The preferred alternative for the AMDTF Headquarters is the NCTS, with the MSA as the preferred storage of munitions in three non-contiguous areas near the HMU.	GDAWR does not agree with increasing munitions storage near the HMU as a preferred alternative. The increase in activity and security associated with locating near the HMU will hamper recovery efforts. The FEIS must indicate unescorted access to the HMU for GDAWR and other cooperators to complete species recovery activities within the HMU, as mandated under the Biological Opinion for ISR Strike.
	36	1	3-6		3.2.2	GDAWR	Of the total Overlay Refuge (2,695 ac [848 ha]) in the Finegayan area, this alternative would develop approximately 53% (1,106 ac [448 ha]).	In Alternatives 1&8, 29% of the development will occur on Overlay Refuge. In section 2.2.4.3 (page 2-16) the amount of habitat disturbed should be minimized.... Alternatives and actions should minimize disturbance and avoid overlay refuge.
	37	1	3-8		3.2.5	GDAWR	The preferred munitions storage area is the NMS for Earth Covered Munitions (ECMs)	GDAWR prefers this alternative because it would not alter the ESQD of the area and would avoid Andersen's MSA which would impact T&E species habitat.

J-018-027

Thank you for your comment. The cumulative impacts discussion has been updated between the Draft and Final EIS. The updated section is included in Volume 7 of the FEIS.

J-018-028

Thank you for your comments. As discussed in Section 1.11 of Volume 1, Table 1.11-1 identifies environmental documents that are being prepared while this EIS was being developed. The documents recommended for incorporation by reference are cited specifically in this EIS when applicable sections are incorporated.

J-018-029

Thank you for your comment. These issues have been addressed within the Final EIS. Information about these issues is primarily included in Volume 2 with an overall summary of impacts, best management practices and mitigation measures in Volume 7.

J-018-030

Thank you for your comment. All vegetation removal for construction of the ranges and access road is included in the EIS. It is the intent of DoD to maintain public access to the cultural and historic sites at Pagat and Marbo consistent with safety and operational requirements. Restricting access to certain DoD areas at certain times is required to maintain public safety. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

With respect to the access road for the NMS, DoD has re-evaluated the

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J-018-043					GDAWR	NCTS and South Fingayan. "Construction activities would displace wildlife from habitat in the proposed project area."	The habitat to be cleared is estimated at 174 acres. The FEIS must analyze where the animals within these acres will go and their impacts to the surrounding area (particularly ungulates). Mitigation for impacts must be identified or increase compensation for additional acres of habitat degradation.
38	2	10-100	2	10.2.2.1			
J-018-044					GDAWR	Operation. Indirect impacts would occur from feral or unleashed animals. Housing is proposed for up to 3,520 families.	The estimate should be 7,040 peis because military policy allows for up to two peis per family. The FEIS should address the full potential impact, how it will be mitigated and how such actions will be funded.
39	2	10-103	2	10.2.2.1			
J-018-045					GDAWR	<i>Heritiera longipetiolata</i> - Cluster of 22 mature trees that were identified in 2000 ...located immediately to the south of the Alternative B KD range boundary.	The known cluster of these listed trees should not be cleared. The FEIS should address how these mature trees will be avoided in siting the KD Range. The probability of success with transplanting is low.
40	2	10-117		10.2.2.1			
					GDAWR	Guam Mariana Fruit Bat and Little Mariana Fruit Bat Recovery Plan (USFWS 1990a)	The change in status of the Marianas fruit bat from federally endangered to threatened does not reduce the protection level of the bat (and its habitat) or the importance of the fruit bat for Guam. Fruit bat surveys in the Marianas must be updated. The FEIS should have current surveys of fruit bats in light of recent poaching incidents on Rota. Protection of Guam's remaining bat should be a priority for DoD.
41	2	10-12		Recovery Plans			
J-018-046					GDAWR	Apra Harbor, Mariana moorhen. LCAC and AAV ramp construction is within approximately one-half mile of the Atanmo River designated a secondary habitat for the Mariana common moorhen.	The impact to Marianas moorhen, migratory shorebirds, and other associated wetland birds would be significant (from noise, oil spills, etc.). The FEIS must clarify how the less significant evaluation of "secondary habitat" was derived.
42	2	10-123		10.2.2.3			

need for this road and determined that it is not required to meet operational requirements.

J-018-031

Thank you for your comment. All impacts have been evaluated and conservation measures proposed.

J-018-032

Thank you for your comment.

The FCLPs will be conducted at North Ramp and will involve standard takeoff and landing operations by jet aircraft. Since the training operations are designed to simulate takeoff and landings on an aircraft carrier, proposed operations cannot be restricted to above 1,000 ft AGL. The FCLP operations would be similar to typical takeoff and landing operations at Andersen AFB in general and would include all standard operating procedures.

J-018-033

Thank you for your comment. Impacts associated with the construction of the magazines are discussed in the EIS. It is the intent of the Navy to continue allowing access to these areas for ES work.

The Navy is also proposing conservation measures to support re-introduction of native endangered or threatened species on DoD lands on Guam consistent with species recovery plans. In further support of such recovery efforts, the DoN intends to actively participate in recovery committees for endangered or threatened species on Guam. When DoN and USFWS mutually agree the constraints to reintroduction of native threatened or endangered species on DoD lands on Guam have been minimized to a point that a feasible and successful re-introduction of the affected species is more probable than not, the DoN will work with the

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J-018-047 43	2	10-134	4	10.2.2.6	GDAWR	Specific conservation measures in place include aircraft training restrictions and Post-typhoon training schedule restrictions to protect fruit bats and crows.	In addition to the restrictions with overflights (agf) in specific areas as described in this section, hovering of aircraft should be prohibited over forested areas.
44	2	10-134/5	5	10.2.2.6	GDAWR	Existing conservation measures on Navy lands would be continued under the proposed action... swiftlet, moorhen; and BTS interdiction and control measures....	In addition conservation measures should be developed and implemented for the native species found in Navy lands such as tree snail, skink and gecko, butterfly, and fruit bat.
45	2	10-135	8	10.2.2.6	GDAWR	One week prior to clearing... survey for species	Surveys for wildlife must occur immediately before clearing as fruit bats may move into area and roost the night before clearing.
46	2	10-135	1	10.2.2.6	GDAWR	No maneuver and navigation training occurs in areas with known Mariana common moorhen nesting activity.	The FEIS must clarify moorhen nesting monitoring on Navy lands prior to and/or during training. USFWS and GDAWR should be notified of results.
47	2	10-135	2	10.2.2.6	GDAWR	The Navy is considering some or all of the potential protection measures described below to minimize potential impacts to special-status species.	The Navy should not be 'considering', but rather should be "developing and implementing all" protection measures to minimize impacts to special-status species.
48	2	10-135	3 rd bullet point, last sentence	10.2.2.6	GDAWR	Or if fruit bats are present within 492 ft (150 m) of the project site, the work must be halted and not started again until the bat has left the area.	The text, 'on its own volition', should be inserted at the end of the statement.
49	2	10-136	2 nd / ₃ rd bullet point	10.2.2.6	GDAWR	A qualified biologist would conduct weekly monitoring of Mariana fruit bats at all roost sites in the project area....	DoD must coordinate with GDAWR for monitoring fruit bats and crows. GDAWR has been monitoring for 30 years on AAFB. No actions within the proposed actions should curtail the ability of GDAWR to continue to carry out their mission.

U.S. Fish and Wildlife Service to develop a re-introduction plan and supporting programmatic biological opinion that ensures such re-introduction efforts are consistent with the species recovery plans and the military mission on Guam. Constraints to successful re-introduction would include things such as controlling the brown tree snake and feral cat populations on Guam.

J-018-034

Thank you for your comment. A salvage and re-use plan for plants would be developed or required of contractors before clearing began. The Navy would review contractor plans. This requirement has been added to the FEIS.

J-018-035

Thank you for your comment. This referenced figure is included in the Draft and Final EIS as ES-2 in the Executive Summary and repeated again as 3.2.1 in Volume 1.

J-018-036

Thank you for your comment. Additional information on these issues have been incorporated into the Final EIS in Volume 2.

J-018-037

Thank you for your comment. All habitat types have been evaluated for impact.

J-018-038

Thank you for your comment. The FEIS includes a discussion of the requirement for coordination of the proposed SUA with the MIRC EIS in regards to the existing air routes and airspace management. Proposed flights would comply with the existing flight restrictions that requires avoidance of overflight of threatened and endangered species sites.

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J-018-048	2	10-137	4 th bulletpoint	10.2.2.6	GDAWR	The Navy, in compliance with the DoD Defense Transportation Regulations, Ch. 505 protocols, is committed to implementing 100 percent inspection of all outgoing vessels and aircraft with dog detection teams.	100 percent inspection of incoming vessels and aircraft should be implemented to avoid the spread of invasive species to Guam.
J-018-049	2	10-138	2	10.2.2.6	GDAWR	Potential Conservation Measures and Best Management Practices: Ungulate Management Plan. This plan is currently being developed by the Navy to control and monitor ungulates including deer, pigs, and carabao on all military lands in Guam....	DoD should coordinate with GDAWR for the development and implementation of the Ungulate Management Plan. GDAWR is the local authority for game management and issues permits for take of game.
J-018-050	2	10-140	1	10.2.2.6	GDAWR	Potential Mitigation Measures: Ecological Reserve and Conservation Areas: The Navy would expand the existing Orote ERA and would consider the creation of new ERAs or conservation areas.	Text should read: 'Navy would expand existing Orote ERA and would create new ERAs or conservation areas'. ERAs and conservation areas should not be restricted to military lands but in public lands as well. Expanding Haputo ERA should be an option for mitigation.
J-018-051	2	10-140		10.2.2.6	GDAWR	ESA-Protected Sea Turtle Natural History	In addition to the leparoscopy program, mitigation for nesting sites within military lands and adjacent areas should be addressed and implemented.
J-018-052	2	10-160		Table 10.2.8	GDAWR	Summary of Potential Mitigation Measures: Vegetation-None, for all alternatives.	After avoidance, mitigation measures for vegetation removal should include seed collection for nursery and translocation of seedlings.
	2	10-19		Figure 10.1-7	GDAWR	Fauna listed in the Legend	Figure is incomplete with the listed Fauna. Occurrence of native reptiles and invertebrates should be identified in the Figure.

J-018-039

Thank you for your comment. The DoN is developing a Micronesia Biosecurity Plan (MBP) to address potential non-native invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). The plan is intended to be a comprehensive evaluation of risks in the region, including all Marine Corps and Navy actions on Guam and Tinian. The Navy will develop biosecurity measures to address non-native invasive species issues that will supplement existing practices. For additional information on the MBP and existing and interim measures for non-native invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-018-040

Thank you for your comment. Consultation with the agencies will be conducted on the cargo storage facility at Andersen AFB. The DoD is already cooperating with various USDA APHIS entities (e.g. Pest Control & Quarantine, Wildlife Services, Veterinary Service) for the completion of a Micronesia Biosecurity Plan (MBP). The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks, including air cargo pathways at Andersen AFB. For additional information on the MBP and existing and interim measures for invasive species control, please refer to

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J-018-053 56	2	10-21		10.1.2.1	GDAWR	<i>Invertebrates</i> : Native land hermit and coconut crabs are present in coastal areas at Andersen AFB.	In addition to coastal areas, coconut crabs may be found in mature limestone forest and in karst areas. Pati Point, NWF, Upper Tarague cliff areas are known areas for coconut crabs to occur. Note: all of Guam is considered coastal.
57	2	10-22	2	10.1.2.1 Andersen AFB	GDAWR	<i>Wildlife - Non-Native Species; Mammals</i> : However, due to chronic low-level poaching of the Mariana fruit bat, the USFWS 5-year review of the Mariana fruit bat recommended that this recreational hunting program be replaced with a sustained control program (USFWS 2007a).	Recreational hunting programs, as well as an integrated pest management approach, should be considered to reduce ungulate damage to ES habitat. In ES sensitive areas, techniques such as trapping, archery, and snares should be used to avoid noise disturbance to the species by shotguns.
58	2	10-22	6	10.1.2.1 Andersen AFB	GDAWR	<i>Wildlife - Non-Native Species; Invertebrates</i> : The Asian cychad scale is an unintended pest introduction to Guam, and has effectively eliminated the cychad <i>Cycas circinalis</i> , a dominant mid-level canopy species of limestone forests.	The DEIS statement that the scale insect infestation "effectively eliminated the <i>Cycad circinalis</i> is totally false. Efforts are underway to recover cychads through the introduction of biocontrol agents for the cychad <i>aulacaspis</i> scale. Mature plants are currently protected from scale damage by a lady beetle. Major impediments to the recovery effort are habitat destruction and seedling predation by uncontrolled ungulate populations on lands occupied by DoD. All cychads must be protected to prevent any further elimination of the tree. Note: the proper name is <i>Cycas micronesica</i> .
59	2	10-22	7	10.1.2.1 Andersen AFB	GDAWR	<i>ESA-listed Species and Critical Habitat</i> : Essential habitat for the Mariana fruit bat, Mariana crow, and Guam Micronesian kingfisher, based on the 2002 proposed critical habitat ruling and Mariana crow Recovery Zones, include much of the installation outside of the cantonment and housing areas.	Essential habitat for the Guam rail should be included.

Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-018-041

Thank you for your comment. The impact on habitat of the proposed actions has been estimated and is located primarily in the terrestrial biology sections of the Final EIS. A complete list of best management practices and mitigation measures is included in Volume 7.

J-018-042

Thank you for your comment. Munitions storage facilities were sited in an area of Andersen AFB compatible with this military land use. Appropriate safety buffers are included in the proposed action. Adjustments were made to ensure consistency with the HMU.

J-018-043

Thank you for your comment. Wildlife that is displaced will move into adjacent areas. Displaced ungulates and mitigation are addressed in subsequent pages of Chapter 10. Conservation measures are addressed in subsequent pages of Chapter 10.

J-018-044

Thank you for your comment. The Marine Corps recognizes the various issues associated with household pets and has adopted a new order "Domestic Animal Control" (MCO 1000.22 Chapter 6, August 11, 2009) that will be applicable to the forces relocating to Guam. A few of the key points relevant to pet population control are: 1) Bachelors will not be allowed to have pets, 2) families are limited to 2 dogs, 2 cats or 1 dog and 1 cat, 3) all pets are to be registered with local veterinary treatment

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J-018-054							
60	2	10-22		Mammals	GDAWR	"Reintroduction efforts in Area 50 and MSA at Andersen AFB determined that cat predation was a major limiting factor to native species recovery efforts..."	Guam rails (<i>Gallinulus owstoni</i>) and Mariana crows (<i>Corvus kubaryi</i>) were released in these areas. The FEIS must indicate that repatriation of Guam's ES to DoD lands is imperative to the DoD's responsibility to mitigate and compensate for previous and proposed actions.
61	2	10-23		Table 10.1-4	GDAWR	Under Occurrence at Andersen AFB, for the Micronesian starling, '1 small population, not more than several hundred'.	The FEIS should analyze impacts to the starlings by proposed activities in Andersen.
62	2	10-23		Table 10.1-4	GDAWR	For the native tree snails: Historically present in Tarague Basin, but none observed in 1989 survey.	More recent survey information should be available. GDAWR contracted a snail survey in northern Guam. The FEIS should indicate results of the newest survey and, if Tarague was not surveyed, a supplemental survey should be completed.
63	2	10-24		Figure 10.1-9	GDAWR	Legend: Mariana Crow, Mariana Fruit bat, and Guam Micronesian Kingfisher	Figure 10.1-9 does not indicate habitat for the endangered Guam rail and Mariana swiftlet. Both species historically are known to occur in AAFB.
64	2	10-25	4	10.1.2.1	GDAWR	Mariana Fruit Bat: Andersen AFB recently established a management plan for Mariana fruit bat that identifies important roosting and foraging habitat on base, and describes management activities to benefit the species.	The FEIS should include Andersen's AFB management plan for the Mariana fruit bat in the appendices for the readers to align the established management plan for the fruit bat with the proposed activities.
65	2	10-26		Mariana Crow	GDAWR	Discussion on the Mariana crow and priority areas of this species	The section on the Mariana crow should include information on the status of the species on Rota. The FEIS should contain all information in order to reflect the status of this species, as well as the possibilities to recover crows through translocation from Rota.

center, 4) vaccination and microchips are required and 5) spay and neutering is strongly encouraged but not required. The microchip requirement would deter abandonment, because the owners know in advance that they could be identified as being responsible for pet abandonment. This new order is added to Volume 8 of the Final EIS and Volume 7 summary table of Best Management Practices. The numbers of pets arriving is described in Volume 2, Section 10.2. 3,520 Marine Corps families are proposed for the Marine Corps action. An assumption is made that approximately half of these families would have pets. This is more reasonable that assuming all of the families would have 2 pets each. The military typically allows 2 pets per family. As many as 3,520 pets could relocate with the Marine Corps.

J-018-045

Thank you for your comment. *Heritiera longipetiolata* trees not in range footprints would not be cleared. Efforts will be made to avoid individuals of this species and as a last resort transplanting or propagation would be attempted. Fruit bat surveys on DoD lands are ongoing and available data has been incorporated into the FEIS. Fruit bat protections and mitigation for habitat loss that is being developed in the USFWS Section 7 consultation is being incorporated into the FEIS.

J-018-046

Thank you for your comment. The "secondary habitat" designation is in the USFWS moorhen recovery plan cited at the end of the statement.

J-018-047

Thank you for your comment.

Overflight restrictions would include hovering aircraft.

Protection, monitoring, and/or conservation measures are being

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J-018-055					GDAWR	In 2005, 11 occurrences of crawls, body pits, nesting, or hatchlings were documented at Tarague Beach. Most recently, the 2006 season recorded five occurrences of green turtles at Tarague Beach (Andersen AFB 2008b).	The information regarding sea turtle nesting needs to be updated and included in the FEIS/OEIS. GDoAG has the following information regarding sea turtle nesting at Tarague Beach: In the years; 2005- total nests =11 (July to October)= EOD 2006- total nests = 5 (Feb to June)=Tarague basin (Scout beach) 2007- total nests = 0 2008- total nests = 6 (July-6 nests 2 false)=EOD 2009- total nests = 11(April to June)= Tarague basin (May to August)=EOD	
66	2	10-27	3	Green sea turtle				
J-018-056	2	10-31	1	10.1.2.2	GDAWR	<i>Wildlife, Native Species:</i> Shorebirds observed in 1996 included the wandering tattler and common sandpiper. The common sandpiper is actually 'uncommon.' But a regular winter visitor to Guam and the Marianas.	This is an example of the DEIS failing to include more recent and inclusive data in the assessment. The FEIS needs to include the most up-to-date information available for all resources.	
67								
68	2	10-32		Table 10.1-6	GDAWR	Under the column: <i>Occurrences at NCTS Finegayan</i> ; for the Mariana fruit bat, 'None currently occur, but essential habitat present'.	Bats are known to occur within the area, the habitat present serves as a foraging ground for the bats.	
69	2	10-33		Figure 10.1-11	GDAWR	Occurrences of Special-Status Species and Essential Habitat and Recovery Zones for ESA-listed Species on or in the Vicinity of NCTS Finegayan	The Guam rail should be included in the figure.	

proposed for all species that are potentially impacted by the proposed action. Additional descriptions of these have been added to the FEIS.

Monitoring for fruit bats immediately before clearing would occur to prevent disturbance to the species.

The only proposed training in known moorhen areas would be in southern NMS. Language on training restrictions for nesting moorhens will be added to the FEIS.

Specific protection measures have been described in the FEIS.

The text "of its own volition" is not believed to be necessary since anything otherwise would be harassment and a violation of the ESA.

DoD would coordinate with GDAWR on fruit bat and crow monitoring and allow access to its lands to the extent possible given mission requirements.

J-018-048

Thank you for your comment. Various types of inspections are already required for military shipments per the Department of Defense (DoD) Transportation Regulations, Instructions, Guidance and per an MOU between the Department of Defense (DOD) and USDA-APHIS titled Military Agricultural Preclearance/Inspection Program. This type of information has been added to the FEIS. For additional information on the MBP and existing and interim measures for invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

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J-018-057	2	10-34	1	10.1.2.2	GDAWR	<i>Mariana Fruit Bat</i> : Currently, Mariana fruit bats are occasionally observed at NCTS Finegayan. During morning observations on 10 nonconsecutive days in 2008, there were two sightings.... There are no known roost areas for Mariana fruit bat at NCTS Finegayan....	A comprehensive survey for Mariana fruit bat should be conducted in the NCTS area. In early 2009, reports of at least 15 bats were observed within the Haguito area. NCTS has essential foraging and roosting habitat for fruit bats.
J-018-058	2	10-34	5	Green sea turtle	GDAWR	Intensive surveys have only been conducted for nesting attempts in 2007 and 2008; two suspected nest attempts and two false crawls were documented in April 2008 (presumably of green sea turtles, although this is not confirmed) (Grimm and Farley 2008).	This information was provided to the GDoAG by Haggan Watch Volunteer Mark Defely. All Haggan Watch volunteers are trained in identifying sea turtle crawl patterns to identify specie of turtle based on the residual tracks left behind. This is correct.
72	2	10-37	2	10.1.2.3	GDAWR	<i>Wildlife - Native Species</i> : The Pacific plover and yellow bittner were the only native bird species observed at the former FAA parcel during recent surveys... It is assumed that the Harmon Annex parcel would have similar wildlife based on the vegetation mapped by USFWS....	The Mariana fruit bat should be identified under this section. The habitat present in Former FAA, and GLUP 77 supports the species.
73	2	10-38		Table 10.1-9	GDAWR	Known or Potential Occurrence of ESA-listed, Candidate, and Guan-listed Species at the Former FAA and Harmon Annex Parcels	Fruit bats are known to use the Former FAA parcel for foraging. The area should be protected.
74	2	10-39		Figure 10.1-13	GDAWR	Essential habitat and Recovery Zones for ESA-listed Species on or in the Vicinity of the Former FAA Parcel, South Finegayan, GLUP 77, and Harmon Annex.	Figure needs to include the Guam rail and plant species listed in the ESA-list.

J-018-049

Thank you for your comment. Additional study of watersheds for potential management as compensation of coral impacts as a result of the proposed actions has been undertaken between the Draft and Final EIS. This additional information is included in Volumes 4 and 9 (Appendix) of the Final EIS.

J-018-050

Thank you for your comment. The FEIS has been updated to include expansion of Orote ERA and the creation of an ERA on the Naval Munitions Site. These are considered the sites that will result in the most benefit to natural resources. Creation of ERAs on non-DoD land is not considered feasible.

J-018-051

Thank you for your comment.

J-018-052

Thank you for your comment. The FEIS has been updated to describe that conservation measures for vegetation would include ungulate control and other measures to improve habitat. These measures will improve the condition of existing vegetation. In addition, foraging plots are included in the ungulate control enclosures for outplanting native tree species. Green sea turtle nesting areas are identified on Figure 10.1-7. No other special-status reptile species and no special-status invertebrates have been identified on Andersen AFB.

J-018-053

Thank you for your comment.

The FEIS has been updated to indicate coconut crabs are found in mature limestone forest.

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J-018-059	2					
75		10-40	1	10.1.2.3	GDAWR There is habitat present for the Pacific slender-toed gecko.... The species was not detected during recent surveys at the former FAA parcel. The Harmon Annex parcel would also be unlikely to harbor this species based on the similarity of vegetation and survey results from the nearby former FAA parcel and GLUP 77 parcels.	The Pacific slender-toed gecko should not be ruled out in the Harmon Annex parcel and nearby former FAA and GLUP 77 parcels. Survey methodology will need to be adjusted accordingly, such as time of day, weather, season, etc....
76	2	10-40		Table 10.1-10	GDAWR Table of Vegetation Communities within north region BRSA for proposed GRN Projects.	The table indicates the amount of habitat types to be impacted by the GRN. Total acreages need to be added to the total amount of habitat for compensation. FEIS should analyze how the increase in traffic flow road will impact habitat (run off, etc.). DoD and non-DoD lands should be ground-truthed for accuracy.
77	2	10-42		Figure 10.1-15	GDAWR Reference to GRN124. Is a new route through Harmon Annex.	The new route will encroach into 150 acres of forest. FEIS should analyze the impact to habitat, fruit bats, etc.
78	2	10-45-10-47		10.1.2.4	GDAWR In regards to ESA- listed species: the Mariana fruit bat, Mariana crow, Guam Micronesia kingfisher, Guam rail and tree snails; and Guam-listed species, Pacific slender-toed gecko and moth skink.	The FEIS needs to summarize the cumulative impacts of the loss of all habitat types for all of the proposed actions for calculation of compensation. The analysis should include a comparison of number of acres of habitat lost compared to the amount of habitat that is available within DoD property. The effects of fragmentation must also be a part of the analysis to determine full impact.
79	2	10-49	1	10.1.3.1	GDAWR <u>Wildlife -Native Species:</u> The yellow bittern has been reported as occurring in the area by GDAWR (2000a). Also, the blue-tailed skink and moorwing gecko were observed in forested areas during recent surveys in support of this EIS/OEIS.	Solitary bats also occur in Anderson South. The vegetation analysis for this area supports the presence for foraging bats in the area.

As mentioned, poaching is a problem, therefore hunting is a less desirable control method. Integrated pest management methods are being evaluated.

The statement about cycad scale has been revised in the FEIS. The authority for plant names used in the EIS is Dr. Lynn Raulerson's 2006 plant listed posted on the UoG herbarium website. The Guam species is listed there as *C. circinalis*.

Some updates to habitat definition have been made in the USFWS Section 7 consultation and this has been incorporated into the FEIS.

J-018-054

Thank you for your comment.

The Navy is proposing to implement various conservation measures on Guam to avoid and minimize for proposed project impacts and to improve habitat for threatened and endangered species. These measures are intended to support the re-introduction of native endangered & threatened species on Guam, consistent with the species recovery plans. When the constraints to successful reintroduction of native threatened or endangered species have been minimized to a point that the Navy and USFWS mutually agree will provide the opportunity for feasible and successful re-introduction, the Navy will work with USFWS to develop a programmatic biological opinion to ensure that such re-introductions are consistent with the species recovery plans and will not conflict with the military mission on Guam.

Impacts to the Micronesian starling is evaluated on page 10-89 of the EIS. No significant impact is anticipated for the proposed action.

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J-018-060	2				GDAWR	ESA-listed Species and Critical Habitat: No critical habitat, essential habitat, or recovery zones for ESA-listed species has been designated at Andersen South, and no ESA-listed species have been reported or observed at Andersen South during recent surveys in support of this EIS/OEIS.	Essential habitat and recovery zones for the Guam rail, other native avifauna, and the Mariana fruit bat include all of Guam. USFWS Recovery Plans for these species indicate northern and southern Guam for recovery. The FEIS should identify Andy South and forested areas along Route 15 as recovery zones for Guam and ESA-listed species.
80		10-49	3	10.1.3.1			
81	2				GDAWR	Guam-listed species: Andersen South was not covered in the Air Force current and draft INRMPS prepared for the base.	Andersen South should be included in future INRMPS. Historically, the Guam rail, Micronesian kingfisher, Mariana crow, Mariana fruit bat, tree snails and native reptiles were found there.
82	2				GDAWR	Wildlife--Native Species: The yellow bittern has been reported as occurring in the area by GDAWR (2000a). Also, the blue-tailed skink and mourning gecko were observed in forested areas during recent surveys in support of this EIS/OEIS.	Solitary bats also occur in non-DoD lands (Route 15, Pagat Point area). The vegetation analysis for this area supports the presence of foraging bats. In addition, Figure 10.1-19 (p. 10-51) identified the Mariana Eight-spot butterfly and <i>Heritiera</i> location, which is not mentioned in the text under Wildlife--Native Species.
83	2				GDAWR	For the Mariana fruit bat, present historically but not observed within the last several years; essential habitat present.	Fruit bats are known to occasionally occur within the Route 15 parcel. Without regular surveys the FEIS cannot assume bats are not present.
84	2				GDAWR	Wildlife--Native Species: Because of the presence of non-native species, the disturbed limestone forested areas within the BRSA do not currently support resident native bird species.	Disturbed limestone forested areas along Route 15 have high potential for native species recovery and should be managed accordingly. The FEIS should compensate for all habitat loss.

The Navy is not aware of tree snails at Andersen AFB. No actions are proposed in Tarague basin, therefore no additional surveys are planned.

No specific habitat areas have been designated for the Guam rail or Mariana gray swiftlet on Andersen AFB.

The EIS cannot include all plans that have information on species management as it would become far too voluminous. The Andersen AFB fruit bat management plan can be obtained through Andersen AFB.

Information has been added to the FEIS on the fruit bat population on Rota.

J-018-055

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

J-018-056

Thank you for your comment.

All recent bird survey information available to the Navy for NCTS Finegayan has been included.

The FEIS has been updated to note the occasional use of NCTS Finegayan by fruit bats for foraging.

There are no occurrences of Guam rail at NCTS Finegayan therefore the species was not included. The species is discussed in the text.

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J-018-061

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85	2	10-62	2	Reptiles	GDAWR	During recent surveys conducted in support of this EIS/OEIS, three native reptile species were found within the forested areas of the Orote Peninsula, in the vicinity of Dadi and Tipalao beaches, and at Polaris Point: Pacific blue-tailed skink, mourning gecko, and mutilating gecko (NR Survey Report in preparation).	Green sea turtles <i>Chelonia mydas</i> are known to forage at the Polaris vicinity. This needs to be included in this section in the FEIS/OEIS. Also the adjacent area known as Spanish Steps Adotgan Donkulu and Dikiki should be mentioned. Navy has this data.
86	2	10-64		Figure 10.1-24	GDAWR	Occurrence of Special-Status Species- Naval Base Guam	Figure should include nesting area for brown noddies, and common migratory bird species.
87	2	10-65	2	10.1.4.1	GDAWR	Mariana Eight-Spot Butterfly: One population of the Mariana eight-spot butterfly has been reported on Orote; the specific location was not given.	The FEIS should clarify status of the Mariana eight-spot butterfly. The population reported on Orote should be documented.
88	2	10-67		Table 10.1-22	GDAWR	Known or Potential Occurrence of ESA-listed, Candidate, and Guam-listed Species within the Apra Harbor Region BRSA for the Proposed GRN Projects.	Migratory birds should be included in the table due to presence of wetlands. Migratory birds are protected under the MBTA.
89	2	10-69	6	10.1.5.1	GDAWR	Wildlife - Native Species: Birds Migratory birds observed in project-specific studies include the yellow bitern.....	The sub-section "birds" is missing the Guam swiftlet, which occurs at NMS.

J-018-057

Thank you for your comment. The surveys conducted at NCTS Finegayan that were summarized and your reports seem to indicate a low level of usage and this is believed adequate to describe the general level of usage and for evaluation of impacts to the fruit bat in the EIS. The Navy is currently in Section 7 consultation with the USFWS so if you have information that you believe is important that USFWS does not have, it should be provided. The comments you provided do not indicate that there are known roost areas (only habitat for roosting), therefore the statement of no known roost areas is believed correct. The Mariana fruit bat is included under the discussion for FAA and in Table 10.1-9. Your comment has been used as the basis to state that fruit bats are known to use FAA occasionally. Guam rail recovery habitat has been added to the figure. The Navy is not aware of any listed plant species being present in project areas shown in the figure.

J-018-058

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comment.

J-018-059

Thank you for your comment.

Surveys for geckos and skinks were conducted at FAA and no listed species were found. It is believed reasonable to extrapolate this to Harmon Annex and South Finegayan.

The table cited for roadways lists vegetation in the vicinity of the areas being considered and does not indicate areas that would be impacted. Impacts are evaluated in Section 10.2.

Roadway GRN124 impacts are evaluated in Volume 6.

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J-018-062 90	2				GDAWR	Wildlife - Non-native species: <i>Mammals</i> ; The population of feral carabao on the NMS was estimated at approximately 300 animals as of 2001.... Between 1999 and 2003 the Navy, in cooperation with USFWS and GDAWR, administered an immunosuppression drug (PZP) to female carabao...	The FEIS must include the current estimated population of carabao at NMS. The description of carabao control is lacking; there is no mention of the illegal 'culling' of the carabao population that occurred after immuno-contraception project. The FEIS must outline how DoD will respect local regulations and the agencies managing Guam's natural resources. The combined effects of BRAC and the proposed activities should be analyzed. Current levels of cooperation are deteriorating with the BRAC. ES are impacted by the lack of cooperation of DoD with local and federal resource agencies; that is, the recent removal of a USFWS biologist for the overlay refuge and the reduction of access for the local resource agencies.
		10-70/71	4 (p.70) 1 (p.71)	10.1.5.1			
						GDAWR	Known or Potential Occurrence of ESA-listed, Guam-listed, and Candidate Species at NMS.
J-018-063 92	2	10-71		Table 10.1-25	GDAWR	Occurrences of Special-Status Species and Essential Habitat and Recovery Zones of ESA-listed Species on or in the Vicinity of Naval Munitions Site.	Locations for the Mariana eight-spot butterfly and plants listed in Table 10.1-25 should be included in the Figure.
	2	10-73		Figure 10.1-27	GDAWR	Wildlife: Based on comparison with other similar habitat on Guam, these habitats are not likely to support native wildlife vertebrate species other than common species such as the yellow bittern.	The Mariana common moorhen should be included in this sentence. The habitat present within this region supports the presence of moorhen.
J-018-064 94	2	10-78	3	10.2.1.2	GDAWR	If significant impacts are determined, then mitigation may be proposed to offset the impacts. For this EIS/OEIS, a major consideration for BMPs is biosecurity.	Biosecurity must be 100% implemented to offset impacts. Biosecurity protocols are a direct cost of operations in the Pacific.

Collective impacts for all projects are analyzed in Volume 7.

Your comment has been used as the basis to state that fruit bats occasionally use Andersen South.

J-018-060

Thank you for your comment.

Specific recovery habitat areas have been identified by the USFWS for the Mariana fruit bat, Mariana crow, and Micronesian kingfisher and these are shown on maps in the EIS. Some updates to habitat definition have been made in the USFWS Section 7 consultation and this has been incorporated into the FEIS. No specific habitat areas for species have been designated by GDAWR.

Andersen South will be included in future INRMPs.

Occasional fruit bats are mentioned in the Rt 15 area on page 10-52 of the DEIS. The wildlife section does not include special-status species - these species are discussed in a subsequent section.

Additional fruit bat surveys of the Rt 15 area have been conducted and results are reported in the FEIS.

Mitigation for all forested habitat removal has been included in the EIS.

J-018-061

Thank you for your comment.

Sea turtles are discussed in subsequent pages under ESA-listed species. Only nesting areas are discussed - foraging areas are covered under Marine Biological Resources.

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J-018-065	95	2	10-8	Table 10.1-1	GDAWR	Table Known or Potential Occurrence of ESA-listed, Candidate, and Guam-listed Species on Guam	The Micronesian Honeycreeper, <i>Myciophila cardinalis</i> , and Rufous Fantail, <i>Rufifrons urbane</i> should be included. These species occurred on Andersen AFB and NCTS. FEIS should include these species as they exist in the CNMI and may be repatriated to Guam.	
	96	2	10-86	5	10.2.2.1	GDAWR	<i>Special- Status Species:</i> The proposed actions would have a minimal affect on the population or the subspecies with up to several thousand individuals present throughout the Mariana Archipelago.	Impacts on fruit bats should focus on the Guam population and not the Mariana Archipelago. The proposed actions, along with illegal take in Rota, would have a major affect on the Guam population. Fruit bats are culturally important and the loss of fruit bats from DoD land would jeopardize the recovery of fruit bats on Guam.
	97	2	10-88	1	10.2.2.1	GDAWR	Mariana Fruit Bat: Fruit bats are rarely observed during the day in the proposed construction areas. Construction would occur during daylight hours, avoiding the nighttime activity of individual Mariana fruit bats. Therefore, direct impacts from noise and activity associated with construction would result in less than significant impacts to fruit bats.	DAWR disagrees that direct impacts from noise and human activity with construction would result in less than significant impacts to fruit bats. Bats that forage in the proposed construction areas may remain at the site or adjacent sites during the day. The FEIS must include the direct impact of vegetation loss and noise to the fruit bats.
	98	2	10-88	5	10.2.2.1	GDAWR	Guam Rail: However, because the Guam rail is currently extirpated in the wild and most of Guam has habitat that is potentially suitable for the recovery of the species, removal of these areas due to construction would result in a less than significant impact.	The habitat present on Andersen AFB, should be the focus for the recovery of the Guam rail, see goals and objectives, AAFB's INRMP, recovery efforts for Guam rail. "Most of Guam has habitat..." should be removed from the text as most is being developed in preparation for the military buildup. The FEIS should address the loss of habitat to ES recovery "outside the fence" associated with the military buildup. The cumulative impacts of loss of habitat in and outside the fence may make it impossible to ever recover Guam's native species.

The figure referenced is intended to shown only special-status species. Other species are discussed in the text. This is consistent throughout the EIS.

Proposed project areas on Orote include only developed areas, therefore there is no need in this EIS for precise location information for the butterfly.

The table referenced is intended to show listed or candidate species, not other wildlife. This is consistent throughout the EIS.

Swiftlets are discussed in subsequent pages under ESA-listed species.

J-018-062

Thank you for your comment. Presence of carabao on NMS is not a major issue for the actions being proposed in this EIS and will be addressed in the Navy Ungulate Management Plan that is in development. In general, access to DoD lands on Guam for monitoring or patrolling by GDAWR is a DoD Joint Region policy matter and not EIS-related.

J-018-063

Thank you for your comment.

Table 10.1-25 has been updated to include ravine forest.

The location for the eight-spot butterfly and *Heritiera longipetiolata* have been added to Figure 10.1-27. These locations are somewhat general. Maps mentioned in the 1998 study could not be located. No maps were found and text descriptions for the *Cyathea lunulata* locations were not specific enough to allow a mapped location.

Moorhens are discussed under ESA-listed species.

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J-018-066	99	2	10-88	4	10.2.2.1	GDAWR	Mariana Crow – The crow population is referenced as containing 170 breeding pairs (USFWS 2005b).	The estimate is based on a USFWS 2004 survey. The FEIS should indicate an updated survey to be completed. The loss of any forest on Guam should be avoided.
	100	2	10-89		Table 10.2-2	GDAWR	Under Direct Temporary Impacts from Construction- Noise, Lighting, Human Activity, for the MSA- New Magazines, impact does not apply for essential habitat for bat and kingfisher.	Mariana fruit bat should be included in the table for the Direct Temporary Impacts from Construction- Noise, Lighting, Human Activity and the MSA- new magazines. Foraging bats will be forced to avoid site and forage elsewhere.
	101	2	10-97	1	10.2.2.1	GDAWR	The Navy would implement habitat restoration as a mitigation measure and control of BTS as a BMP.	Monitoring of impacts of aircraft noise on listed species is important, the FEIS (or ROD) should identify the source of funding for monitoring and that state agency will participate in these assessments. The FEIS must also indicate that the repatriation of endangered species will be allowed in DoD.
J-018-067	102	2	10-97	4	10.2.2.1	GDAWR	All Special-Status Species. 100% inspection effort for all cargo, vehicles, munitions, household goods, and other items leaving Guam. A Micronesian Biosecurity Plan would be developed...	Funding for the full implementation of biosecurity should be identified in the FEIS or ROD, as well as the gaps in biosecurity measures within the individual jurisdictions. The FEIS must acknowledge that the increase in traffic and risk of invasive species throughout the region is due to the military buildup. DoD must ensure that biosecurity is 100% funded and initiated prior to the commencement of the proposed actions.

J-018-064

Thank you for your comment. The FEIS has additional description of the Micronesia Biosecurity Plan and specific descriptions of many biosecurity measures.

J-018-065

Thank you for your comment. The honeyeater was not considered in the EIS because it is not an ESA-listed species and it is not currently present on Guam, therefore individuals cannot be harmed by the proposed action. The fantail was not considered because the Guam-listed subspecies is extinct.

The impact analysis and overall conclusion for the fruit bat on Guam has been revised in the final EIS. The impact focus is on the Guam population.

Before construction an area would be surveyed to determine presence of fruit bats. If present construction would not begin until the bats have left the area.

Since the DEIS the USFWS has identified specific recovery habitat for the rail. These have been used to reanalyze impacts in the final EIS.

J-018-066

Thank you for your comment.

The best estimate of the current number of breeding pairs on Rota (60) from studies conducted in 2007-2008 will be added.

Impacts to the fruit bat from temporary construction impacts has been added to the FEIS.

Potential impacts of noise on listed species is recognized and monitoring

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J-018-068	102	2	11-19	2	11.1.4.2	GDAWR ...and the scalloped hammerhead shark, a PHCRT MUS, is found during seasonal spawning at one location (NOAA 2005a).	This is incorrect. Anecdotal evidence suggests that pupping and not spawning occurs around Sasa Bay and Inner Harbor. The FEIS/OEIS needs to correct this and a study should be conducted to verify this information and included within the FEIS/OEIS.
	104	2	11-20	1	11.1.4.2	GDAWR The scalloped hammerhead is reported to spawn in January through March outside the Inner Apra Harbor Entrance Channel (NOAA 2005a), although their occurrence is reported as extremely rare (personal communication with Steve Smith, [Navy 2009c]).	This is incorrect. Anecdotal evidence suggests that pupping and not spawning occurs around Sasa Bay and Inner Harbor. The FEIS/OEIS needs to correct this and a study should be conducted to verify this information and included within the FEIS/OEIS.

is proposed as mitigation. The Navy is proposing to implement various conservation measures on Guam to mitigate for proposed project impacts and to improve habitat for threatened and endangered species. These measures are intended to support the re-introduction of native endangered & threatened species on Guam, consistent with the species recovery plans. When the constraints to successful reintroduction of native threatened or endangered species have been minimized to a point that the Navy and USFWS mutually agree will provide the opportunity for feasible and successful re-introduction, the Navy will work with USFWS to develop a programmatic biological opinion to ensure that such re-introductions are consistent with the species recovery plans and will not conflict with the military mission on Guam.

J-018-067

Thank you for your comment. The DoN is developing a Micronesia Biosecurity Plan (MBP) to address potential non-native invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). The plan is intended to be a comprehensive evaluation of risks in the region, including all Marine Corps and Navy actions on Guam and Tinian. The Navy will develop biosecurity measures to address non-native invasive species issues that will supplement existing practices. For additional information on the MBP and existing and interim measures for non-native invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include

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J-018-069 105	2	11-26	4	11.1.4.3	GDAWR	The Navy, in cooperation with USFWS and GDAWR, monitors for sea turtle nesting on Navy land throughout the sea turtle nesting season (April – July for the green sea turtle and January – March for the hawksbill sea turtle) (Navy 2005, COMNAV Marianas 2008).	A cooperative effort between the Navy and resource agencies is currently almost non-existent for monitoring sea turtle nesting activity. It is difficult for GDoA staff to access sea turtle nesting areas within Navy. No Navy funding is provided to GDoA for sea turtle work, and information is not provided to the GDoA on sea turtle nesting within Navy. The FEIS needs to clarify the statement and state that the Navy needs to make an effort to cooperatively work with the resource agencies for monitoring sea turtle nesting activity.
106	2	11-26	5	11.1.4.3	GDAWR	The spinner dolphin and common bottlenose dolphin are the only two marine mammals anticipated in the nearshore (<164-ft [50-m] isobaths) ROI for the study areas (Navy 2005). Table	This is not correct. Whales are also located in the study area based on GDoA aerial surveys. The FEIS needs to correct the statement.
107	2	11-27	3	11.1.4.3	GDAWR	The hawksbill sea turtle is far less abundant than the green sea turtle, and as a result, debate exists on its occurrence (rare versus regular) within the ROI.	The FEIS needs to clarify the debate it is referring to and with whom. Furthermore, an adequate sea turtle assessment needs to be conducted and included in the FEIS.

information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-018-068

Thank you for your comments. The document has been revised.

J-018-069

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

1. The author used information provided by joint efforts in the EIS.
2. Other species of whales have been identified and evaluated as appropriate based on their occurrence within the ROI.
3. Text has been revised to clarify.

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J-018-070

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
108	2	11-27	6	11.1.4.3	GDAWR	Common Bottlenose Dolphin There are no occurrence records for this species in the Marianas, but this is within the known distribution range for the species. Bottlenose dolphins are expected to occur from the coastline to the 6,550-ft (2,000-m) isobaths (Navy 2005).	These are conflicting statements. The first sentence states there is no occurrence of the common bottlenose dolphin in the Marianas then the next sentence states that it is expected to occur from the coastline on out. Page 11-26 Paragraph 5 also states that the common bottlenose dolphin is anticipated in the ROI. These areas are in the Marianas. The DEIS needs to correct this discrepancy that there are no occurrence record for the common bottlenose dolphin in the Marianas.

J-018-070

Thank you for your comment. The text will be reviewed and modified as appropriate. The author agrees that some references on this topic are conflicting, specifically Navy 2005 and NOAA 2005. For this reason, and considering their typical range near the coast, the DoD has conservatively included this species in the impact analysis.

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J-018-071

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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109	2	11-29	6	11.1.4.4	GDAWR	If it is necessary for a surface ship to load ballast water in an area that is either potentially polluted or within 3 nm from the shore, it is Navy policy for the ship to pump the ballast water out when outside an area 12 nm from shore and twice rinse the ballast tank(s) with clean sea water prior to the next entry within 12 nm of shore. Surface ships perform a ballast exchange twice in clean water, even if the ballast water was pumped out before exiting the polluted waters or 3 nm limit, as residual water remaining in a tank after emptying it may still contain unwanted organisms that could be transferred during the next ballasting evolution (Navy 2003).	This paragraph needs to be rewritten and included in the FEIS to clarify exactly how far out a ship has to be before pumping ballast water ballast. A copy of the Navy policy on ballast water release needs to be included in the FEIS/OEIS.
110	2	11-29	7	11.1.4.4	GDAWR	This policy is based on the U.S. Coast Guard's (USCG) —Ballast Water Management for Control for Nonindigenous Species in Waters of the U.S. § (33 Code of Federal Regulations [CFR] §151 Subpart D), which is applicable to all foreign and U.S. vessels, equipped with ballast tanks that enter a U.S. port.	The U.S. Coast Guard's CFR refers to an area 200 nm out. Why isn't the Navy releasing ballast water 200 nm out?

J-018-071

Thank you for your comment. The Navy complies with all relevant US and international ocean protection laws. Chapter 11 of Volume 2 in the Final EIS addresses issues such as ballast water used in ships.

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J-018-072					GDAWR	Specifically, roadway projects in the Central Region include pavement strengthening, road widening, intersection improvements, and bridge replacements (on Route 1), as well as the rerouting of Route 15. The proposed new location of Route 15 would redirect the road onto Department of Defense (DoD) property (Andersen South) so that the public road would not be within any firing range danger zones. These projects include: (1) pavement strengthening between Asan River and Route 11 along Route 1; (2) pavement strengthening between Asan River and Route 6 along Route 1; (3) pavement strengthening between Route 6 and Route 4 along Route 1; (4) pavement strengthening between Route 6 and Route 4 along Route 1; and (5) the replacement of bridges over the Atantano, Laguas, Agana, Sasa, and Fonte rivers.	The FEIS/OEIS needs to include a rewrite of this paragraph so the rerouting of Route 15 stands out and is stressed in the paragraph. For example, "Specifically, roadway projects in the Central Region include rerouting of Route 15, pavement strengthening, road widening, intersection improvements, and bridge replacements (on Route 1)".	
J-018-073	111	2	11-38	12	11.1.6.4			
	112	2	11-41	6	11.1.7.1	GDAWR	Although the southern portion of Sasa Bay is within the Navy's submerged lands, the Navy does not recognize its preserve status (COMNAV Marianas 2007a) (see Figure 11.1-11).	Sasa Bay contains a unique habitat and is a special aquatic site. The Navy should do the right thing and acknowledge Sasa Bay as a marine preserve.

J-018-072

Thank you for your comment.

J-018-073

Thank you for your comment.

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J-018-074

#	Location			Section	Commenter	EIS/OEIS Statement	GDAWR's Comment
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113	2	11-41	7	11.1.7.1	GDAWR	When mangroves are not functioning properly, sediments and nutrients flow into and can damage fragile coral reef ecosystems (Scott 1993). This may account for the limited coral habitat (4.5 ac [2 ha]) in Sasa Bay.	This appears to be an attempt to minimize the importance of the mangrove areas in Sasa Bay. The statement "This may account for the limited coral habitat (4.5 ac [2 ha]) in Sasa Bay" needs to be removed from the FEIS/OEIS unless there is a scientific study conducted in Sasa Bay to confirm this.
114	2	11-42		Figure 11.1-11	GDAWR	Sensitive Marine Biological Marine Resources	The figure 11.1-11 in the FEIS/OEIS needs to include the mangroves areas located in the north/northeastern portions of Sasa Bay marine preserve.
115	2	11-44	3	11.1.7.1	GDAWR	The hammerhead spawning is reported to be extremely rare (personal communications with Steve Smith, [Navy 2009c]).	This is incorrect. Anecdotal evidence suggests that pupping and not spawning occurs around Sasa Bay and Inner Harbor. The FEIS/OEIS needs to correct this and a study should be conducted to verify this information and included within the FEIS/OEIS. All other references to hammerhead spawning needs to be corrected in the FEIS/OEIS.

J-018-074

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

		Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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J-018-075	116	2	11-44	7	11.1.7.1 Harbor	GDAWR	During Smith (2007) survey dives in the eastern Apra Harbor area, no hawksbill turtles were observed.	Although no Hawksbills were observed on that date and time of the survey, DAWR has species incident reports of strandings of hawksbill turtles from the area to include fishing gear entanglements. This needs to be addressed and included in the FEIS/OEIS.
	117	2	11-44	7	11.1.7.1 Harbor	GDAWR	Although algal surveys were not conducted, Smith (2007) suggests that more potential sea turtle resting habitat and preferred algal forage species were present on Big Blue Reef and the Fairway areas, where most turtle sightings occurred.	This statement needs to be removed from the FEIS/OEIS because there is no scientific evidence to support it. No algal surveys or an adequate sea turtle assessment/study were conducted, however, a conclusion is being inferred.
	118	2	11-47	7	11.1.7.1 Harbor	GDAWR	Finfishes, although present, are not abundant and are represented by only three families: Pomacentridae (damselfishes), Chaetodontidae (butterflyfishes), and Carangidae (jacks).	This is an incorrect statement. The Marine Biological Survey of Inner Apra Harbor (Smith et al. 2008) conducted by the University of Guam reported approximately 19 families of finfish. The FEIS/OEIS needs to correct this major error. Statements like this do not provide for a fair and meaningful analysis of the affected environment.

J-018-075

Thank you for your comment.

1. The Hawksbill turtle has been observed as present around Guam. Additionally, general fishing gear entanglement and recreational boating have been included as potential existing threats, among others to sea turtles around Guam.
2. The observations made by Smith are applicable. No text revision.
3. Text has been reviewed and revised. These are the three major finfish families present, the other families identified in the study were poorly represented.

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J-018-076							
119	2	11-47	8	11.1.7.1 Harbor	GDAWR	On the reef at Abo Cove, cardinalfishes were observed with corals or rock, gobies with sand, mullet with rubble or sand, and a snapper was observed in the sand community.	This statement conflicts with Page 11-47 Paragraph 7 about only three families of fish present in the Inner Harbor. This is not an adequate analysis of the affected environment.
120	2	11-49	1	11.1.7.1 Harbor	GDAWR	The Inner Apra Harbor area does not represent a preferred habitat for sea turtles in comparison to the entire Outer Apra Harbor reef complex, and does not contain an abundance of algal or seagrass species that represent a major food source for sea turtles that cannot be found elsewhere in Outer Apra Harbor.	This statement needs to be removed from the FEIS/OEIS because there is no scientific evidence to support it. Sponges are also present as indicated in the Marine Biological Survey of Inner Apra Harbor (Smith et al. 2008) that may also serve as a food source for sea turtles.
121	2	11-50	1	11.1.7.1 Harbor	GDAWR	Due to the distances of Adotgan Point, Kilo Wharf and the historic Seaplane Ramp nesting areas from the proposed action under Alternative 1, it is unlikely that any nesting-related activities would be affected by the action alternatives, including night work and the associated lights and noise.	Seaplane Ramp is not a historic nesting site. This site was discovered by the GDoA staff only a few years ago. The FEIS/OEIS needs to correct this statement and state that Seaplane Ramp is not a historic sea turtle nesting site. The FEIS/OEIS needs to include information on the type and power of lights being used as this may affect nesting activities. By simple stating that sea turtles nesting activities are unlikely to be affected due to the distances is not adequate.

J-018-076

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

1. See previous comment(s). These were the three major finfish families, text has been corrected.
2. Based on site specific, qualitative, and quantitative assessments of Inner Apra Harbor community this has been reported. No text revisions.
3. Based on readily available references, including the one cited in the EIS, this site was reported as historic. The Navy believes the impact evaluation is appropriate based on distance away from the proposed action. The Navy is in Section 7 consultation with NOAA/NMFS and USFWS regarding potential impacts to sea turtles.

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J-018-077

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122	2	11-56	8	11.2.1.2 Determination of Significance	GDAWR	These communities are not considered to be coral reef (per USACE definition of what constitutes a coral reef), and therefore are not subject to compensatory mitigation.	No USACE definition could be found in any federal statute or regulation for coral reef. The FEIS/OEIS needs to include a copy of the USACE definition. Under 40 CFR Section 230.44, coral reefs are defined as skeletal deposit, usually of calcareous or siliceous materials, produced by the vital activities of anthozoan polyps or other invertebrate organisms present in growing portions of the reef. These communities need to be included as part of compensatory mitigation especially if no definition from USACE is provided.
123	2	11-60	3	Special status- species	GDAWR	Sea turtle nesting areas may be affected by one or more jeopardizing actions as described under Sections 7 and 9 of the ESA. Implementation and enforcement of appropriate mitigation measures would reduce impacts, possibly from significant to less than significant with the possibility of a beneficial effects outcome compared with existing conditions. These potential impacts to nesting sea turtles are addressed further under Volume 2, Chapter 10, Terrestrial Biological Resources.	The mitigation mentioned is inconclusive and is not an actual mitigation. More needs to be done to suffice mitigation requirements and included in the FEIS/OEIS.

J-018-077

Thank you for your comment. The USACE definition will be used or the 40 CFR definition provided will be used. The 40 CFR definition still supports the conclusion in the EIS; the area impacted in Inner Apra Harbor is not considered a coral reef ecosystem by definition. The DoD will not be performing compensatory mitigation for coral on Wharf structures.

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J-018-078	124	2	11-61	6	Special Status-species	GDAWR	<i>Special-Status Species.</i> A less than significant indirect impact to this resource is expected from construction-related recreational activities for similar reasons as described above in EFH. Additionally, special-status species are not as common on this coast compared to others around Guam and there are no sea turtle nesting areas (see operation description below for elaboration).	Adjacent to the Andy South is the Pagat area where as the GDoA identified a total of 83 sea turtles in the water (ocean and fore reef slope) foraging. Dolphins were seen on the aerial surveys with 260 estimated individuals. The data from the aerial surveys starting the calendar year 2000 thru 2009 needs to be included in the FEIS/OEIS.
	125	2	11-61	13	11.2.2.2 Central	GDAWR	<i>Essential Fish Habitat.</i> There would be short-term and localized, negligible indirect impacts to fish and EFH due to the increase of construction personnel and their dependents using the adjacent coastal waters for recreational activities.	The FEIS/OEIS needs to clarify if this statement means that only construction personnel and their dependents will be using the adjacent coastal waters for recreational activities while the local people will not have the opportunity. Local people should be able to use this public resource.
J-018-079	126	2	11-62	2	11.2.2.2 Central	GDAWR	Increased boating-related activities associated with construction personnel have the potential for transport of non-native species to and from other locations within the Mariana Islands chain; however, the access to this rough water coast is difficult. Therefore no major direct or indirect conduit exists for introduction of non-native species into the marine environment.	This statement is not entirely accurate. During the summer months, waters on the east side on the island are fairly calm resulting in an increase in boating activity. The statement needs to be rewritten to include an analysis of the introduction of non-native species during increased boating activities during the summer months and the analysis included in the FEIS/OEIS.

J-018-078

Thank you for your comment.

1. The impact analysis would not change as dolphins and sea turtles were anticipated off this coast and analyzed as if common in regards to projectile strikes.
2. This statement has been clarified in the EIS. Access to this area is not anticipated to change during the construction period.

J-018-079

Thank you for your comment. The DoD is developing a Micronesia Biosecurity Plan (MBP) to address potential invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. Recreational boating is a recognized pathway for introducing potentially invasive species to Guam and other islands. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. For additional information on the MBP and existing and interim measures for invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2 Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

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J-018-080	127	2	11-62	9	11.2.2.2 Central	GDAWR	Avoidance and minimization measures (see Section 11.2.1.1), including the use of—green bullets and periodic benthic cleanup, would be employed to decrease potential impacts.	It needs to be made clear in the FEIS/OEIS if all the bullets that will be used are green bullets or a combination of green bullets and lead bullets.
	128	2	11-64	3	11.2.2.2 Central	GDAWR	Special-status species, although potentially present within the ROI and offshore, are not common (NOAA 2005a). NOAA (2005a) does not list either of these special-status species (dolphins or sea turtles) as notably present within these coastal waters.	The GDoA identified a total of 83 sea turtles foraging in the water (ocean and fore reef slope) adjacent to the Pagat point area. Dolphins were seen on the aerial surveys with 260 individuals observed. The data from the aerial surveys starting the calendar year 2000 thru 2009 needs to be included in the FEIS/OEIS. The term notably is incorrect and should be replaced with the referenced data.
J-018-081	129	2	11-66	11	11.2.2.2 Central	GDAWR	The MEU embarkation ships currently come into port four times per year. This frequency would increase under Alternative 1.	The FEIS/OEIS needs to indicate the increased frequency that the MEU embarkation ships will come into port.
	130	2	11-67	3	11.2.2.2 Central	GDAWR	Vessel operations within Apra Harbor would be expected to increase proportionally to support increased embarkation training activities under the proposed action.	The FEIS/OEIS needs to state the increased frequency of vessel operations within Apra Harbor

J-018-080

Thank you for your comments. The document has been reviewed and modified as appropriate based upon your comments.

1. This text has been revised. Based on the small probability that small arms ricocheted projectiles would make it to the marine environment, these mitigation measures were deemed unnecessary.
2. See previous response to comment. text revised and citation added.

J-018-081

Thank you for your comment. The marine transportation sections of the Final EIS include a discussion of anticipated marine vessel traffic.

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J-018-082				Table 11.2-5. EFH Areas Associated with Outer Apra Harbor and Potential Effects	GDAWR	Rows 4 to 6 in Table 11.2-5 in reference to vessels in Sasa Bay	The table indicates that there will be an increase in vessel activity in Sasa Bay, which is a marine preserve. Vessels should not be entering Sasa Bay marine preserve. Discussion on the possible conflicts between the proposed action and the objectives of local policies need to be included in the DEIS.
	131	2	11-67				
					GDAWR	The vessels would adhere to the channel centerline, use the existing Outer Apra Harbor navigational channel to the ocean dredged disposal site, and return to Inner Apra Harbor.	This is contradictory to what is stated in Volume 4 Chapter 2 Section 2.3.5 about the disposal options for dredge material. This statement needs to be revised in the FEIS/OEIS to state that beneficial reuse and upland disposal will be considered first before ocean disposal.
	132	2	11-68	2	11.2.2.2		
J-018-083					GDAWR	The seasonal spawning of scalloped hammerhead sharks, although reported to be extremely rare (personal communication with Steve Smith, [Navy 2009c]),.....	This is incorrect. Anecdotal evidence suggests that pupping and not spawning occurs around Sasa Bay and Inner Harbor. The FEIS/OEIS needs to correct this and a study should be conducted to verify this information and included within the FEIS/OEIS.
	133	2	11-68	2	11.2.2.2		

J-018-082

Thank you for your comments. With respect to the first comment, DoD would ensure that any activity in Sasa Bay is done so in accordance with applicable regulations and policies.

With respect to the second comment, the DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

J-018-083

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comment. The reference used (NOAA 2005) that identified this event as "spawning" has been replaced with BSP (2010) and the text has been changed to a "pupping event."

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J-018-084

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134	2	11-69	Table 11.2-6. Sensitive Months for Certain Species within Apra Harbor	GDAWR	Green Sea Turtle ESA-listed, Threatened see Figure 11.2-3 Nesting: Jan – Mar	Current available information indicates that green sea turtles nest year round. Table needs to be revised to include this information.
135	2	11-70	11 11.2.2.2 Central	GDAWR	There have been no vessel strikes on sea turtles since the Navy has been operating within Apra Harbor (Navy 2009d).	Incorrect. On Nov. 19, 2002, GDoAG was called by LT. Commander Tom Schuermann with Mr. Robert Wescorn present to report a dead green sea turtle at Gab Gab beach. Upon further investigation the green sea turtle had multiple slices to the carapace and head areas. The gash resembled that of a propeller. Please refer to DAWR species incident report 8-20-2002 / 11-19-2002 & 5-13-2008. Three other incidents have been confirmed by the GDoAG.

J-018-084

Thank you for your comment.

1. Please provide "current available information" (i.e. reference and citation) identifying this extended nesting periods. Pending information, no text change.
2. Text will be revised and cited as stated.

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J-018-085	136	2	11-72	9	11.2.2.2 Central	GDAWR	There would be a less than significant impact on this resource. Increased vessel movements associated with MEU embarkation operations have the potential for increased sea turtle strikes enroute to and from Sasa Bay (a high turtle concentration area).	GDoAG does not agree with this statement. The Outer Apra Harbor is not being taken into account. GDoAG has information from aerial surveys on the number of turtles within Apra Harbor, which is also not taken into account. An adequate analysis needs to be conducted to include the Outer Apra Harbor and number and speeds of vessels in Apra Harbor.
J-018-086	137	2	11-73	2	11.2.2.2 Central	GDAWR	If upland dredged material disposal is required for any volume of material that does not meet Marine Protection, Research, and Sanctuaries Act Section 103 rules for ocean disposal, the dredged material would be placed at existing permitted sites.	This is contradictory to what is stated in Volume 4 Chapter 2 Section 2.3.5 about the disposal options for dredge material. This statement needs to be revised in the FEIS/OEIS to state that beneficial reuse and upland disposal will be considered first before ocean disposal.

J-018-085

Thank you for your comment. The proposed action, an additional 3-4 trips per year into the harbor, is considered negligible over the no-action alternative considering the Navy's existing standard operation procedures, including reduced speeds and biological lookouts, mitigation measures and BMPs that consider federally protected species and their well-being during vessel transit. The Navy will also implement mitigation measures and BMPs during in-water and land-based construction activities (i.e. dredging and wharf construction). See Volume 7 for a detailed list of these measures. The Navy is in Section 7 consultation with NOAA/NMFS and USFWS addressing potential impacts to sea turtles.

Text has been added to further evaluate the indirect recreational boating impacts, especially high speed water crafts and their potential increases in Outer Apra Harbor and elsewhere around Guam. It is anticipated that with the preparation of a Recreational Carrying Capacity Analysis Management Plan, which would provide data facilitating an estimation of potential marine environment impacts due to marine recreational activities on Guam (refer to Volume 2, Chapter 9 and Volume 7 for further information), the increased potential impacts would be mitigated to less than significant.

J-018-086

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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138	2	11-73	3	11.2.2.2 Central	GDAWR	Impacts associated with the fouling communities within Inner Apra Harbor (repair of waterfront facilities) were not included in the HEA Volume 9. These communities are not considered to be coral reef (per USACE definition of what constitutes a coral reef), and therefore are not subject to compensatory mitigation.	No USACE definition could be found in any federal statute or regulation for coral reef. The FEIS/OEIS needs to include a copy of the USACE definition. Under 40 CFR Section 230.44, coral reefs are defined as skeletal deposit, usually of calcareous or siliceous materials, produced by the vital activities of anthozoan polyps or other invertebrate organisms present in growing portions of the reef. These communities need to be included as part of compensatory mitigation especially if a no definition from USACE is provided.
139	2	11-74-75	Last on 74 first in 75	Essential fish Habitat	GDAWR	Fish and invertebrates species with FMPs are poorly represented within the Inner Harbor as described above in the marine flora, invertebrates and associated EFH discussion. Based upon the available data and information provided in Section 11.1.7, there is no reason to suspect that Inner Apra Harbor is serving as a significant spawning or nursery area for either invertebrates or fishes and/or any other FMP species.	Mangroves are known hatchery areas as well as juvenile areas for fish species and serve as resting areas for sea turtles. The FEIS/OEIS needs to include this information.

done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

J-018-087

Thank you for your comment.

1. See previous response.
2. This is stated in the EIS in several locations.

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140	2	11-75 - 11-76	6 on Page 11-75 and 1 on Page 11-76	11.2.2.2 Central	GDAWR	The Inner Apra Harbor area does not represent a preferred habitat for sea turtles in comparison to the entire Outer Apra Harbor reef complex, and does not contain an abundance of algal or seagrass species that represent a major food source for sea turtles that cannot be found elsewhere in Outer Apra Harbor.	This statement needs to be removed from the FEIS/OEIS because a sea turtle assessment was not conducted to support the claim. Sponges are also present as indicated in the Marine Biological Survey of Inner Apra Harbor (Smith et al. 2008) that may also serve as a food source for sea turtles.
141	2	11-76	1	Special status-species	GDAWR	Aside from a recent observation during a survey in Inner Apra Harbor (Smith B.D. et al. 2008) no other observations have been reported. No density information is available for Inner Apra Harbor.	Stranding reports from this location is available to reference the amount of species occurrence for strandings. This is measurable over time and needs to be addressed in this section to include aerial surveys for the area.

J-018-088

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comment.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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142	2	11-76	2	Special status species	GDAWR	Due to the distances of Adotgan Point, Kilo Wharf and the historic Seaplane Ramp nesting areas from the proposed action under Alternative 1,	Seaplane Ramp nests was discovered on April 22, 2006 and confirmed after the incubation period of discovery on July 19,2006 GPS Location: N 13.27.86/F 144.39.68.9 Total number of Egg casings (hatched):79 Total number of full term embryo's: 10 Predated eggs: 1 with embryo ½ eaten The total number in this clutch is 90. The findings during this site visit, and with thorough inspections to the potential nests concludes that it is evident that the displacement of sand, indentation marks on the vegetation and egg casings, including skeletal remains found in the mound (clutch) was created by a sea turtle. Please reference DAWR Incident report 7-19-2006 and is not a historical site, rather a recent site. The reference to Seaplane Ramp as a historic nesting site needs to be removed from the FEIS/OEIS.

J-018-089

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comment.

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J-018-090	143	2	11-77	22	11.2.2.2 Central	GDAWR The Navy recognizes that there are many on-going and recent past studies on the subject of potential exposures to sea turtles and other marine species from pile driving actions. Farther research and validation of these studies are necessary prior to being able to determine the applicability of the methodologies and results to the proposed action within this Draft EIS/OEIS. The Navy will continue to research these studies and where appropriate, incorporate and apply methodologies, analysis, and results to the ongoing impact analysis to sea turtles from the proposed action. Applicability of these studies will also be coordinated through consultations with NMFS. The Final EIS/OEIS will contain revised sea turtle impact analysis as developed through the process described above.	This is not in line with 40 CFR Section 1502.16 Affected Environment, which states that "The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental affects which cannot be avoided should the proposal be implemented..." In other words, the DOD must analyze the full range of direct, indirect, and cumulative effects of the preferred alternative, if any, and of the reasonable alternatives identified in the draft EIS. Obtaining these studies should not require an exorbitant cost and the studies needs to be included in the FEIS/OEIS as well as the environmental affects.
J-018-091	144	2	11-88		Table 11.2-13	GDAWR These impacts would occur during dredging and in-water construction activities of the wharves (i.e. pile driving) and LCAC and AAV operations area associated with Inner Apra Harbor, including dredged spoils tug and scow movements through Outer Apra Harbor to the ocean disposal site.	This is contradictory to what is stated in Volume 4 Chapter 2 Section 2.3.5 about the disposal options for dredge material. This statement needs to be revised in the FEIS/OEIS to state that beneficial reuse and upland disposal will be considered first before ocean disposal.

J-018-090

Thank you for your comment. Consideration has been given to your suggestions and the document has been modified as appropriate. The FEIS was modified to refer to a Biological Assessment that includes more information on this matter.

J-018-091

Thank you for your comment. The DoD is considering several options for disposal of dredged material, including upland placement, ocean disposal, and beneficial uses such as shoreline stabilization, fill for berms, and fill for the Port Authority of Guam, as discussed in the EIS (Chapter 2, Volume 4). Using dredged material for beneficial reuse projects would depend upon the suitability of the material for these projects as well as whether the proposed action timeline coincides with the need for material for a reuse project. Detailed analysis cannot be done at this time because specific projects have not yet been identified with certainty. While beneficial reuse is a priority for the DoD, the final decision on dredged material management will be made during the final design and permitting process. Detailed analysis of the potential impacts from using dredged material for reuse projects will be conducted during the permitting phase.

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J-018-092					GDAWR	Proposed Operations. (Also, see Fig. 2.5-7. MWDC site plan. The site plan includes facilities for working dogs.) No BTS USDA dogs kennels are planned.	The GDAWR highly recommends and insists that facilities to house USDA BTS working dogs be identified to meet mission needs. USDA BTS dogs are crucial to implementation and interdiction of BTS. In addition, the interdiction of pests from incoming military equipment is crucial to preventing spread of invasive species to Guam and within the region.	
J-018-093	2	2-29		Fig. 2.2-3	GDAWR	Illustrates the beddown of various facilities of the cantonment.	GDAWR recommends that Alternative 3 be selected to lessen the impacts to the Overlay Refuge. Alt. 3 will require 377 acres.	
	147	2	2-31	Map	Fig. 2.2.4	GDAWR	The Cantonment/Housing Area Alternative 1 depicts a Utility area in the Potts Junction Area in proximity to the HMU, along Rte 3A.	The FEIS should describe the extent of the Utility area at Potts and address the impact this utility facility would have on the HMU mitigation site. Any acquisition of land would also need to be identified.
J-018-094					GDAWR	The table indicates that about 1200 FCLP are planned (370 --AAPB, and 740 NWF).	The table does not mention the noise level this would have and how it would impact the T & E species. The FEIS should address noise levels and how it would minimize impacts. Flight operations should require a straight in approach and a required AGL minimum. The threatened MFBA are known in the area. The FEIS must identify how the impact will be mitigated.	
J-018-095	149	2	2-55	Figure	Fig. 2.3-10	GDAWR	The figure illustrates new SUA for the Pagat-Anderson South Area extending into the Coastal areas to the East, over 4-miles.	The extension of these SDZ and SUA are depicted restricting access to these areas -- on land, sea and airspace. The FEIS should address how this will be mitigated.

J-018-092

Thank you for your comment. DoD is working with USDA to provide the necessary facilities for the BTS working dogs. As for incoming military equipment, various DoD Service Instructions call for washdowns of vehicles in appropriate facilities either at departure or arrival points, and inspection of cargo.

J-018-093

Thank you for your comment. The preferred alternative is selected based on many factors, in addition to terrestrial natural resources.

Utilities are evaluated in Volume 6 of the EIS.

J-018-094

Thank you for your comment. Potential noise impacts to listed species are presented in Volume 2, Section 10.2, including Tables 10.2-2 and 10.2-3 and Figures 10.2-6 and 10.2-7. Based on the presented analysis, impacts due to noise from the proposed activities would not be significant to species. Flight operations would be conducted in accordance with standard Navy training and safety requirements for FCLP operations.

J-018-095

Thank you for your comment. The FEIS has been updated to include a discussion of the coordination, scheduling, and mitigation actions that are in place to ensure areas that lie underneath the SUA provide for existing procedures for monitoring threatened and endangered species to continue.

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J-018-096	150	2	2-56	2	2.3.2.2	GDAWR Ammunition Storage Alternatives. MSA1 use for ECMs would not entail changes in the ESQD	The FEIS must identify an alternate LEDPA site - the proposed location of 12-ECMs in AAFB's MSA1 is in good native limestone habitat. T&E species utilize the area. The protection of habitat is essential to recover species, especially the Overlay Refuge. The FEIS must address how access by GDAWR will be provided to monitor and recover species on DoD lands.
	151	2	2-58		Figure 2.3-12	GDAWR Proposed USMC (ECM Location) 12 ECMs, each: 250-269,000 lb NEW	Location of the 12 ECMs is Mariana crown nesting habitat and Mariana fruit bat foraging area. GDAWR recommends that the habitat not be disturbed.
J-018-097	152	2	2-59		Figure 2.3-13	GDAWR Firing and Non-firing range alternative considered: Location of Route 15, Pagat Point firing range (retained alternative).	Proposed range at Pagat Point, will impact recreation, cultural resources and T&E species. To meet purpose and need existing firing ranges in DoD lands (AAFB or Navy) should be considered to avoid impacts that would occur at Pagat.
	153	2	2-62	2	2.3.2.5 Firing General Military Skills Training Alternatives	GDAWR The East-West and the west coast alternatives described in Table 2.3-7 were eliminated following advice of the office of the Governor. The amount of submerged land...unacceptable impact on recreational activities and traditional fishing areas....	The East coast alternative and Pagat Point have similar issues as the East-West and West Coast alternatives described in Table 2.3-7. The FEIS should analyze an alternative that includes upgrading existing ranges at DoD lands - expanding Tarague range towards Scout Beach.

J-018-096

Thank you for your comment. No practicable alternative location was identified for the 12 ECMs.

J-018-097

Thank you for your comment. DoD was required to determine whether military relocation requirements could be met by excess, underutilized or otherwise available property held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the FEIS (Volume 2, Chapter 2), after applying operational and environmental screening criteria, no contiguous DoD area on Guam was identified that could support all the land use and operational requirements of the action.

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J-018-098	154	2	2-82	8	2.5.1	GDAWR	Amphibious vehicles will be washed down in the Apra Harbor area prior to loading or unloading to prevent the spread of invasive species, as per the COMNAV Marianas Instruction 5090.10A. A BTS perimeter fence will be installed.	The FEIS needs to identify appropriate biosecurity measures to prevent the spread of all invasives within the region. The FEIS must address how invasives are removed from the amphibious vehicles. Washdown procedures are not adequate for removing BTS and possibly other invasives. If a BTS barrier perimeter fence is installed, it must be augmented with other BTS control tools, such as traps, visual searches, and dog inspections. The DEIS indicated sterilization of waste prior to the disposal of the material.
J-018-099	155	2	2-88		Table 2.5.2	GDAWR	Serra/Tingo Wharvet – proposed plan to dredge from -35 to -38 ft MLLW (10.7 to -11.6 M), approximate 508,877 CY of dredged material will be removed.	The FEIS should address control of silt material and location of de-watering and disposal sites. Any construction in the area must take into account the possible presence of sea turtles. Recording incidental sightings while completing other duties is not an adequate survey method for quantifying sea turtle use of the harbor.
J-018-100	156	2	2-88		Table 2.5.2	GDAWR	Southwest of Victor Wharf: A BTS perimeter fence is indicated.	The FEIS should address the integration of BTS control tools within the fence line in order to remove snakes from the area. The FEIS should also address other monitoring techniques for invasives that may be transported – other traps, CRB, etc.
J-018-101	157	2	2-97	3		GDAWR	This area (43,478 m2) will be cleared for MBU/AAV beddown. The trees in this area will be removed.	The FEIS should identify what species of trees will be removed, and indicate disposal. The DoAg's FSRD would require that these trees be saved if possible for use in other sites.

J-018-098

Thank you for your comment. The DoD is developing a Micronesia Biosecurity Plan (MBP) to address potential invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). For additional information on the MBP and existing and interim measures for invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-018-099

Thank you for your comment. The discussion of proposed dredging in the Inner Apra Harbor and its impacts to water quality and marine resources as well as the use of best management practices and project specific mitigation measures to reduce impacts is included in Chapters 4 and 11 of the Final EIS.

J-018-100

Thank you for your comment. Please see response to J-018-098.

J-018-101

Thank you for your comment. The evaluation of impacts for vegetation removal is in Chapter 10 of Volume 2.

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J-018-102 J-018-103	158	2	22-61	2.3.2.5	GDAWR	Firing General Military Skill Training Alternatives – Alt. A and B for the mentioned training ranges. Alt A would encompass 921ac land and 4,439 ac of Pacific ocean for the SDZ. Alt. B would require 1,129 ac of land, and sea training ranges and SDZ.	Though the candidate sites were eliminated, SDZs for the two alternatives encroach on private lands and on state waters. FEIS should address how it will mitigate the restricted access. The FEIS must also identify habitat that would be removed and compensate.
J-018-104	159	2	22-68	2.2.1.1	GDAWR	Proposed Facilities – ACE Beddown. A biosecurity Plan is mentioned that will address invasive species concerns with ACE.	The FEIS should address how the biosecurity plan will be fully funded to implement mitigative actions throughout the region to prevent the spread of invasives associated with the increase in traffic.
J-018-105	160	2	22-76	2.4.2	GDAWR	Alternative Analysis: Airfield Functions: Four sites were considered and Andersen AFB was determined to be the most suitable for airfield functions.	The FEIS should indicate the total increase in air traffic anticipated by the proposed action.
J-018-106	161	2	4-130	2 USCG Berthing 4.2.8.3	GDAWR	"Placing of USCG berthing at the Oscar/Papa wharves meets the environmental criterion in comparison to other alternatives as it is further away from Big Blue reef than one of the other alternatives and avoids the Sasa Bay Preserve that is adjacent to the third alternative..."	The statement recognizes the Sasa Bay Marine Preserve, as an important designated habitat for Guam. It is important that this area is not impacted by the proposed action.
J-018-107	162	2	6-25	Table 6.2.1.	GDAWR	Baseline and proposed flight operations for Andersen AFB. Total flights proposed for 2014 indicate 99,344 flights per year.	The FEIS must address the impacts of the increase in flights on the threatened Mariana Fruit Bat. Are these flights inclusive of the FCLPs?
J-018-108	163	2	8-33	Table 8.1.4	GDAWR	Proposed GRN Projects in Central Region	The table contains a list of roadway projects related to DoD activities. The FEIS should identify the impacts to marine and freshwater habitats from the implementation of roadway projects. The FEIS must also identify the monitoring and measures necessary to mitigate impacts.

J-018-102

Thank you for your comment. DoD understands and recognizes the significance of cultural and recreational sites located on DoD property in Guam. Restricting access to certain DoD areas at certain times is required to maintain public safety. It is the intent of DoD to maintain public access to DoD lands that contain cultural sites consistent with safety and operational requirements. Access will be granted at approved times such as when the lands are not being used for military training. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

J-018-103

Thank you for your comment. Impacts to terrestrial habitat are evaluated in Chapter 10 of Volume 2.

J-018-104

Thank you for your comment. Please see response to J-018-098.

J-018-105

Thank you for your comment. The FEIS has been updated to include a discussion of the total increase in air traffic anticipated by the proposed action and impacts for the alternative sites.

J-018-106

Thank you for your comment. Consideration has been given to your suggestion and the document has been modified as appropriate.

J-018-107

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J-018-109	109 164	2	8-5		GDAWR	Marine Protected Areas – The federal government does not acknowledge that the federal submerged lands can be designated GovGuam marine preserves and is not bound to comply with land use constraints associated with the preserves	DAWR continues to encourage DoD to acknowledge the existence of the Sasa Bay Marine Preserve.
J-018-110	110 165	2	8-75	Table 8.2-1 Summary of Main Cantonment Impacts- Alternatives 1,2,3, and 8	GDAWR	Construction: Nil, There would be no impacts due to construction.	Construction includes the removal of vegetation and habitat for T&E species and species of conservation need. The FEIS must compensate for all loss of habitat.
J-018-111	111 166	2	9-18	3 9.2.2.1 Non-DoD Land Construction	GDAWR	The acquisition of the lands along Route 15 for training purposes by the Marines would result in eliminating access to, and therefore, the use of, the recreational resources situated in the affected area.	Mitigation for loss of access to resources along Route 15 should be addressed. Access to Anao Point through DoD lands should be identified for access to the recreational resources within the area. The FEIS must outline the method to acquire access and the possible frequency of access.
J-018-112	112 167	2	9-2	Figure 9.1-1 Recreational Resources of Guam- North	GDAWR	Recreational resources of Northern Guam.	Recreational resources in the Pagat Point, Route 15 Lands are not identified. Guam Raceway Park, hiking trails, fishing spots, cave exploration, and hunting.
J-018-113	113 168	2	9-32	9.2.8 Summary of Potential Mitigation Measures	GDAWR	Table 9.2-1. Summary of Potential Mitigation Measures. (as written)	Potential mitigation measures identified in Table 9.2-1 do not mitigate for the loss of access to the resources in the Route 15 and other areas affected by the action. The FEIS must identify mitigative measures that reduce the impact of the actions on the users.
J-018-114	114 169	2	9-7	Figure 9.1-4 Recreational Resources... Andersen South...	GDAWR	Pagat Point area.	Pagat cave was not identified as a recreational resource in the Figure.

Thank you for your comment. Impacts from flight noise are evaluated in Chapter 10, Volume 2.

J-018-108

Thank you for your comment. Volumes 2 and 4, Chapter 11 discuss the potential impacts to Marine Biological Resources, Chapter 6 and 10 address impacts to Water Resources and Terrestrial Biological Resources, respectively from the proposed action.

J-018-109

Thank you for your comment.

J-018-110

Thank you for your comment. Impacts to vegetation and habitat are evaluated in Chapter 10, Volume 2.

J-018-111

Thank you for your comment. Please see response to J-018-102.

J-018-112

Thank you for your comment. Descriptions of the recreational resources on non-DoD properties in north Guam are provided in Volume 2, Section 9.1.2.4 of the EIS as well as Appendix G in Volume 9.

J-018-113

Thank you for your comment. It is the intent of DoD to maintain public access to the cultural and historic sites at Pagat and Marbo consistent with safety and operational requirements. Restricting access to certain DoD areas at certain times is required to maintain public safety. Final plans concerning access to sites potentially impacted by the proposed action have not been developed. DoD looks forward to working with

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J-018-115	4	10-2		10.2.1.2 Determination of Significance	GDAWR	For this EIS/OEIS, a major consideration is biosecurity.	The term 'consideration' should be replaced with 'priority conservation action to be implemented as part of basic operations within the Pacific'.
J-018-116	4	10-2		10.2.1.2 Vegetation	GDAWR	Impacts would be determined significant if any primary limestone forest (mature forest dominated by native species) would be cleared, unless determined to be very minor in the context of the surrounding forest areas.	Determination for significant impact to limestone forest should include all forest types, not restricted to mature forest dominated by native species. All habitat on Guam is essential for native species and any removal is considered significant. Previously disturbed and secondary forest provides important space for the recovery of native species. Guam is a relatively small land mass and land is of premium value.
J-018-117	4	11-1	2	11.1	GDAWR	<u>11.1 Affected Environment</u> The Jade Shoals site, located to the northwest of Western Shoals and Big Blue Reef, ...	The DEIS is incorrect in stating that Jade Shoals is located to the northwest of Western Shoals and Big Shoals. Jade Shoals is located to the northeast of Western Shoals and Big Shoals. The FEIS needs to correct this and state that Jade Shoals is located to the northeast of Western Shoals and Big Shoals.

stakeholders to develop plans for cultural stewardship and access that balances operational needs, public safety concerns, and the continuing public use and enjoyment of these sites.

J-018-114

Thank you for your comment. Recreational resources in the vicinity of the Pagat Trail, which also includes the caves, are provided in Volume 2, Section 9.1.2.4 of the EIS.

J-018-115

Thank you for your comment. Biosecurity actions are specified in Volume 4, Section 10.2.2.6.

J-018-116

Thank you for your comment. Impacts are considered significant only for removal of primary limestone forest for the vegetation category which does not consider animals. Impacts to animal habitat are evaluated separately under the wildlife and special-status species categories of the analysis.

J-018-117

Thank you for your comment. Text has been revised as stated.

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J-018-118 173	4	11-1	3	11.1	GDAWR 11.1 Affected Environment This area was dredged in 1946 to allow safe access to the newly completed Inner Apra Harbor.	The DEIS fails to provide any references of a document referring to the 1946 dredging or maps from a document to confirm the areas that were actually dredged. The FEIS needs to provide references of a document referring to the 1946 dredging and a map from a document to confirm the areas that were actually dredged.
174	4	11-1	3	11.1	GDAWR 11.1 Affected Environment The elapsed time since dredging of the original channel suggests that much of the coral within the depth zone to be dredged for the aircraft carrier project (-49.5 ft [-15 m] mean lower low water [MLLW] plus 2 ft [0.6 m] of overredge) is regrowth, which would indicate a community with a maximum age of 62 years (Dollar et al. 2009).	The DEIS fails to scientifically validate whether the coral community in the project area and turning basin is regrowth and fails to scientifically determine the age of the coral community in that area. The only evidence that is used in the DEIS to make these determination is based on dredging that they say occurred in 1946. The FEIS needs to scientifically validate whether the coral community in this area is regrowth and scientifically validate the age of the coral community in the area.
J-018-119 175	4	11-1	4	11.1	GDAWR 11.1 Affected Environment Construction of the aircraft carrier wharf would involve placing fill material in approximately 3.6 acres (ac) (1.5 hectares [ha]) of nearshore and intertidal waters for either alternative.	The DEIS fails to mention what type of fill. The FEIS needs to mention what type of fill will be used.

J-018-118

Thank you for your comment. The exercise the commenter requests is unnecessary as documents from this time period would not be readily available. During the dive surveys, it was obvious to the coral biologists where previous dredge areas started and ended. No text revision.

J-018-119

Thank you for your comment. Although the type of fill is described in Chapter 2, Section 2.3.4.1, Volume 4, text has been added to the EIS in Chapter 11 to describe the type of fill material.

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J-018-120

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
176	4	11-104	3	11.2.5.2	GDAWR	The project area is previously disturbed; most of the coral that would be dredged is marginally to modestly healthy (Smith 2007; Dollar 2009) and consists of "in-growth" on the bare reef surfaces that were dredged approximately 60 years ago during the creation of Inner Apra Harbor (Navy 2009a).	The DEIS comment is misleading and attempts to undervalue the coral reef habitat within the project area. The photoquadrat method used to determine these variables is inadequate as stated in previous comments. There are coral communities and other species on the shoals and in depths greater than 60 ft. that the DEIS appears to not be taking in account. This statement needs to be revised in the FEIS and an assessment of the corals and other species below the 60 ft. depth needs to be included within the FEIS.
177	4	11-106	3	Table 11.2-16	GDAWR	Cessation of dredging operations during the period of spawning (7-10 days after the full moon in July) in consultation with the Guam Department of Water Resources.	The DEIS incorrectly names the wrong department. The Guam Department of Water Resources needs to be changed to the Guam Department of Agriculture in the FEIS.
178	4	11-106	5	Table 11.2-16	GDAWR	No ships would be allowed to enter Sasa Bay at night.	Ships should not be entering Sasa Bay at all. There is increased likelihood of collisions with sea turtles. The FEIS should state that no ships should be entering Sasa Bay. Furthermore, DEIS provides no explanation on why the ships need to enter Sasa Bay, the size of the ships, or how far the ships will be entering Sasa Bay.

J-018-120

Thank you for your comments.

Comment 1. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

Comment 2.

The FEIS was updated as appropriate.

Comment 3.

GDAWR Comments to DEIS/OEIS Guam and CNMI Military Relocation						
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#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Section			
J-018-121				GDAWR	11.1.2.2 Coral and Coral Reef Community Data As described later in this chapter, the 656 ft (200 m) distance represents a gross overestimate of the projected indirect impact area, and allows for collection of baseline data at the associated patch reef and shoal areas. As described in the SEI (2009) plume modeling summary discussed later in this chapter (Section 11.2.2.2 and Figures 11.2-2 and 11.2-3), only the area located 39 ft (12 m) beyond the direct dredge impact area is anticipated to receive cumulative sedimentation totaling at least 0.2 inches (in) (6 millimeters [mm]); 0.2 in (6 mm) was established as the cumulative sedimentation threshold for corals.	GDoA disagrees with his statement. The limited indirect impact area does not represent the area potentially to be impacted by dredging. Your reviewer John McManus PhD in Appendix J, Supplemental Aircraft Carrier Marine Surveys, also agrees that the delimited area by no means represents the area potentially to be impacted by dredging. Lessons learned from previous dredging projects within Apra Harbor, such as Kilo Wharf (Adotgan Point Ammunition Wharf monitoring reports 1986) should be applied to the CVN. The FEIS needs to take into account indirect impacts that will occur outside of the 656 ft distance and beyond the 60 ft depth and the lessons learned from previous dredging projects within Apra Harbor.
179	4	11-11	1		11.1.2.2	
				GDAWR	11.1.2.2 Coral and Coral Reef Community Data There are four large patch reefs (Jade, Western, Big Blue, and the unnamed reef) as shown on Figure 11.1-9.	This statement is misleading because it attempts to exclude mentioning the Middle Shoals and appears to try and minimize its importance. The Middle Shoals patch reef system is just as large as the other patch reefs mentioned. The FEIS needs to include the Middle Shoals as one of the large patch reefs.
180	4	11-11	4		11.1.2.2	

The FEIS was updated as appropriate.

J-018-121

Thank you for your comment.

Comment 1.

The 200 meter (m) indirect zone used in the DEIS was based upon discussions with resource agencies which indicated that indirect impacts would be contained within the shallow reef area which is approximately 200 meters from the outside edge of any dredging footprint. Subsequent to discussions with the resource agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for a 188 m buffer area.

The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced.

Observations of sedimentation from Kilo Wharf are inapplicable to proposed dredging for the transient CVN pier because of its location further inside Apra Harbor and its associated reduced wave action. Implementation of BMPs would sufficiently reduce indirect impacts associated with sedimentation.

Comment 2.

Text modified in FEIS as appropriate.

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J-018-122

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
181	4	11-11	4	11.1.2.2	GDAWR	11.1.2.2 Coral and Coral Reef Community Data The project area where dredging would occur (direct impact area) does not contain shallow shoal patch reefs.	This is not a true statement and attempts to mislead people. The direct impact area contains parts of patch reefs such as Jade Shoals, Unnamed Shoals, Middle Shoals, and other unnamed reefs. The FEIS needs to correct this statement and include these reefs and within the document.
182	4	11-13	7 th and 16 th row	Table 11-1.1	GDAWR	Total dredge area with coral	The DEIS states that the total dredge area with coral for both direct and indirect impacts is 171.78 ac for Alternative 1 and 154.69 ac for Alternative 2. These numbers are inconsistent with what has been stated in the DEIS. The FEIS needs to correct these inconsistencies.

J-018-122

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

1. Text and figure have been revised to show five "large shoal" areas and the direct impact area and 200 m coral study area, which is not the same as the indirect impact area.
2. The statement in the DEIS is correct. The larger number the commenter refers to is inclusive of the indirect impact areas. The statement in the DEIS (and FEIS) is referring to the direct dredging impact area (i.e. with coral and w/out coral). No text revision necessary.

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J-018-123

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
183	4	11-15	2	11.1.2.2	GDAWR	11.1.2.2 Coral and Coral Reef Community Data It is also evident that the area within the project boundaries, as well as within the dredge area boundaries, does not contain any of the continuous areas of very high cover (>70% coral) that is the dominant cover category on the western margins of the large shoal reefs bordering the project area. While the mapping results indicate that about 10% of coral for both alternatives is in the highest cover class (>70%), such areas are not concentrated in any particular biotope or region, but are spread across the dredge zones in relatively low densities, mainly at the edges of the dredge perimeters.	These statements are misleading because it attempts to minimize the value of the coral reef habitat within the project area. The dominant cover category on the western margins of the large shoal reefs are within the project boundaries and are fairly continuous. The DEIS also fails to take into account the indirect impacts that will affect corals below the 60 ft. depth. These statements need to be revised in the FEIS to state "The area within the project boundaries, as well as within the dredge area boundaries, contains fairly continuous areas of very high cover (>70% coral) that is the dominant cover category on the western margins of the large shoal reefs bordering the project area. The mapping results indicate that about 10% of coral for both alternatives is in the highest cover class (>70%) spread across the dredge zones, mainly at the edges of the dredge perimeters. Furthermore, the impacts to corals and other species, such as sponges, below the 60 ft. depth need to be included within the FEIS.

J-018-123

Thank you for your comment. The FEIS includes detailed information on coral coverage in the dredge area.

The 200 meter indirect zone used in the DEIS was based upon discussions with resource agencies which indicated that indirect impacts would be contained within the shallow reef area which is approximately 200 meters from the outside edge of any dredging footprint. Subsequent to discussions with the resource agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for 188 m buffer area.

The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced.

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GDAWR Comments 2-16-2010

J-018-124

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
184	4	11-19	7 and 8	11.1.2.2	GDAWR The coral habitat expected to be impacted by the proposed aircraft carrier project currently is, in general, "of marginal to modest ecological value."	11.1.2.2 Coral and Coral Reef Community Data However, Big Blue Reef west provides significant ecological function and is sensitive to human induced environmental degradation, thereby meeting two of the four criteria for HAPC designation. The coral habitat expected to be impacted by the proposed aircraft carrier project currently is, in general, "of marginal to modest ecological value."	The DEIS makes contradictory statements. It states that Big Blue Reef west provides significant ecological function, yet in the next paragraph states that the coral habitat expected to be impacted is of marginal to modest ecological value. This is misleading and is another attempt to minimize or downplay the value of the coral reef habitat within the proposed aircraft carrier project. The statement "The coral habitat expected to be impacted by the proposed aircraft carrier project currently is, in general, "of marginal to modest ecological value," needs to be removed from the FEIS. This statement is not in line with 40 CFR Section 1502.1 Purpose, which states that it (meaning the environmental impact statement) shall provide full and fair discussion of the significant impacts etc. A determination is being made within the DEIS on the coral reef habitat based on an inadequate impact assessment. To reiterate corals and other species, such as sponges, below the 60 ft. depth were not assessed by the Navy in their impact assessment. These impacts to corals and other species, such as sponges, below the 60 ft. depth need to be included within the FEIS.
185	4	11-2			GDAWR	Figure 11.1-1 Bathymetric Map of the Study Area and Proposed Alternatives	Figure 11.1-1 fails to include the name of the reef to the northwest of Jade Shoals that is to be impacted by dredging. The FEIS needs to include the name of the reef.

J-018-124

Thank you for your comment.

Comment 1.

The FEIS has been modified as appropriate based upon your comment.

Comment 2.

Figure 11.1-1 includes labels on all the reefs with known names. We are not aware of a name for the reef located to the northwest of Jade Shoals.

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J-018-125

#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph			
186	4	11-21	1	11.1.2.2	<p>11.1.2.2 Coral and Coral Reef Community Data The coral reefs at the shoal areas and Turning Basin appear to be of marginal to modest ecological value, based upon the eight criteria.</p>	<p>The DEIS makes contradictory statements. It states that Big Blue Reef west provides significant ecological function, yet in the next paragraph states that the coral habitat expected to be impacted is of marginal to modest ecological value. This is misleading and is another attempt to minimize or downplay the value of the coral reef habitat within the proposed aircraft carrier project. The statement "The coral habitat expected to be impacted by the proposed aircraft carrier project currently is, in general, "of marginal to modest ecological value," needs to be removed from the FEIS. This statement is not in line with 40 CFR Section 1502.1 Purpose, which states that it (meaning the environmental impact statement) shall provide full and fair discussion of the significant impacts etc.</p> <p>A determination is being made within the DEIS on the coral reef habitat based on an inadequate impact assessment. To reiterate corals and other species, such as sponges, below the 60 ft. depth were not assessed by the Navy in their impact assessment. These impacts to corals and other species, such as sponges, below the 60 ft. depth need to be included within the FEIS.</p>

J-018-125

Thank you for your comment.

Comment 1. Text in FEIS modified as appropriate to clarify discussion of impacts.

Comment 2. The 200 meter (m) indirect zone used in the DEIS was based upon discussions with resource agencies which indicated that indirect impacts would be contained within the shallow reef area which is approximately 200 meters from the outside edge of any dredging footprint. Subsequent to discussions with the resource agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for 188 m buffer area.

The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced.

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#	Location			Section	Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph				
J-018-126 187	4	11-21 and 11-23	7 on 11-21 and 3 on Page 11-23	11.1.2.2	GDAWR	Sediment Effects on Coral and Pre- and Post-Monitoring of Dredging Sediment Effects on Coral Reefs	The DEIS fails to include in these two sections the Adogan Point Ammunition Wharf monitoring reports (1985). The findings from the reports mainly state that the sediment plume was transported beyond 200 m. The FEIS needs to include in the document a discussion of the sediment plume from the Kilo Ammunition Wharf.
188	4	11-22	3	11.1.2.2	GDAWR	11.1.2.2 Coral and Coral Reef Community Data Sofonis and Anthony (2008) found that the coral <i>Turbinaria m esenterina</i> on nearshore reefs in the central Great Barrier Reef lagoon...	<i>Turbinaria m esenterina</i> should be spelled <i>Turbinaria mesenterina</i>
189	4	11-26	2	11.1.2.2	GDAWR	Marine Research Consultants (2005) and Smith (2004) have documented well-developed communities of reef corals in the northern portion of the Inner Apra Harbor Channel. Remote sensing using satellite imagery allowed mapping and quantification of the area coverage of the coral communities. Integrating the mapped area of coral cover revealed a total area of 3.32 ac (1.34 ha) of sparse coral and 6.8 ac (2.77 ha) of dense coral, for a total area of approximately 10.2 ac (4.11 ha) of coral cover in the Inner Apra Harbor Entrance Channel (Figure 11.1-14)	The Marine Research Consultants (2005) and Smith (2004) studies and Figure 11.1-14 is inconsistent with the data presented in the DEIS from Dollar (2009). Marine Research Consultants (2005) and Smith (2004) in the DEIS state that there well-developed communities of reef corals in the northern portion of the Inner Apra Harbor Channel while Dollar (2009) does not mention this well developed community in the DEIS at all. Why the inconsistency?

J-018-126

Thank you for your comment.

Comment 1.

The 200 meter (m) indirect zone used in the DEIS was based upon discussions with resource agencies which indicated that indirect impacts would be contained within the shallow reef area which is approximately 200 meters from the outside edge of any dredging footprint. Subsequent to discussions with the resource agencies, modeling with appropriate best management practices has indicated that indirect impacts would be limited to 12 m to the outside edge of the dredging footprint; hence, the analysis provides for 188 m buffer area.

The Navy understands that this generalized zone of indirect impact is not refined sufficiently to address USACE concerns and have solicited the assistance of USACE Environmental Research and Design Center (ERDC). The refined level of indirect impacts associated with the dredging activities based upon additional analysis is anticipated to be greatly reduced.

Observations of sedimentation from Kilo Wharf are inapplicable to proposed dredging for the transient CVN pier because of its location further inside Apra Harbor and its associated reduced wave action. Implementation of BMPs would sufficiently reduce indirect impacts associated with sedimentation.

Comment 2.

Text modified in FEIS to correct spelling of this species.

Comment 3.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
J-018-128							
192	4	11-35	1	11.1.3	GDAWR	The scalloped hammerhead is reported to spawn, although rarely (Navy 2009b), in areas outside the Inner Apra Harbor Entrance Channel (NOAA 2005b).	This is incorrect. Anecdotal evidence suggests that pupping and not spawning occurs around in in Sasa Bay and Inner Harbor. The FEIS needs to correct this and a study should be conducted to verify this information and included within the FEIS.
193	4	11-36	3	11.1.3.1	GDAWR	The greater variability in fish assemblages among sites within the depth range of 40-60 ft (12-18 m) is likely explained by previous dredging of many of these sites.	The DEIS does not provide any evidence or studies to support this claim. It is unlikely that previous dredging increased the fish variability of these sites. The statement needs to be removed from the FEIS.

Comment 2.

Text modified in FEIS to correctly quote the Viehman study.

J-018-128

Thank you for your comment.

Comment 1. Text modified in FEIS as appropriate, and information presented confirmed.

Comment 2. The text in the FEIS indicates that fish assemblages are likely more variable in nature due to the fact that dredging occurred, resulting in patchy and disjointed habitat types. It appears that the commenter has possibly mistaken this statement with an indication that fish species diversity and/or richness are higher due to past dredging activities; this is not what the text in the FEIS is implying.

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#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment
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J-018-129				GDAWR	Smith (2007) observed nine green sea turtles, five of which were on Big Blue Reef. All turtles sighted at Big Blue Reef were 15 to 23 in (40 to 60 cm) in length, with no visible fibropapillomas tumors or other signs of injury. No hawksbill sea turtles were observed.	The DEIS fails to provide an updated report on sea turtles to include number of sea turtles. No methodology on sea turtle surveys is provided for Smith (2007) because the report is not included in the DEIS. However, a lot of information is used from it. From discussions with the Navy, sea turtle observations were based on incidental sightings during the benthic surveys. In other words, sea turtles were not the main focus of the benthic surveys. They were recorded if they were seen while conducting the benthic surveys. Sea turtles on Guam are usually weary of individuals and will leave when individuals are near. Thus, assessing sea turtles on Guam are a bit of a challenge and incidental sightings are not an appropriate method to assess sea turtles. The DEIS fails to provide an adequate and updated assessment on sea turtles. An adequate sea turtle assessment needs to be conducted by the Navy with individuals who have experience and are experts with sea turtles and included in the FEIS. Furthermore, the Smith (2007) report needs not be included in the FEIS. The GDoA conducts aerial surveys and part of the survey involves counting the number of sea turtles observed in the water. The GDoA
194	4	11-37	3		11.1.4	

J-018-129

Thank you for your comment.

The Smith et al. (2007) reference was added to the FEIS as an appendix.

The Navy currently implements standard operation procedures, mitigation measures and BMPs that consider federally protected species and their well-being. The Navy has co-existed with sea turtles in the Harbor for over 60-years. The Navy, in a partnership with the Fish and Wildlife Service, monitors sea turtle activities within Apra Harbor and around Guam. There are no records of sea turtles nesting on beaches within Apra Harbor that would be impacted by the proposed action and there have been no reported observations of sea turtles grazing within the area to be dredged. The Navy will also implement mitigation measures and BMPs during in-water and land-based construction activities (i.e. dredging and wharf construction) to lessen any potential impacts to sea turtles and sea life in general. Additionally, the Army Corps permit will require measures to protect biological resources. These measures may include the following: biological monitors on vessels (making sure sea turtles and dolphins [although rare in Apra Harbor] do not approach the area); halting of dredging activities, if these animals enter the buffer zone, until the sea turtle and/or dolphin voluntarily leave the area, low lighting, and as described above, joint Navy/Guam Resource Agency monitoring of nesting beaches though out Guam, to name a few.

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J-018-130

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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195	4	11-37	3	11.1.4	GDAWR	A cooperative effort between the Navy and resource agencies is ongoing for monitoring sea turtle nesting activity, however tagging programs and density information for sea turtles in Apra Harbor is deficient.	A cooperative effort between the Navy and resource agencies is currently almost non-existent for monitoring sea turtle nesting activity. It is difficult for GDAWR staff to access sea turtle nesting areas in Navy property. Navy does not provide funding to the GDAWR for sea turtle work. No information is provided to the GDAWR on sea turtle nesting in Navy property. The FEIS needs to clarify the statement and state that the Navy needs to make an effort to cooperatively work with the resource agencies for monitoring sea turtle nesting activity.
196	4	11-39	1	11.1.4	GDAWR	Historic records of sea turtle nesting include a hawksbill reported at a beach near Summy Cove in 1997, and a general report of nesting at a beach near the Sea Plane Ramp (COMNAV Marianas 2007a) (refer to Figure 11.1-18.)	The DEIS makes an inaccurate statement. The nest at Sea Plane Ramp is not considered historical as this happened within the last 2½ years. Sea turtles usually return to nest every 3 to 5 years. The FEIS needs to state that nesting at Sea Plane Ramp is not a historic sea turtle nesting site.

J-018-130

Thank you for your comment. See previous response to this duplicate comment.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
J-018-131					GDAWR	11.1.1 Navy Coral Assessment Methodology This report was peer reviewed by eight scientists and these reviews are also in Volume 9, Appendix J.	The document fails to provide information on the reviewer's experience in general, or as it pertains to coral reef impact assessments and the Habitat Equivalency Analysis (HEA). Many of the reviewers may not have any experience or expertise with coral reef impact assessments and HEA and may not be giving accurate comments. The FEIS needs to provide the reviewers experience and expertise to validate their comments.
197	4	11-4	2	11.1.1			
198	4	11-4	3	11.1.1	GDAWR	11.1.1 Navy Coral Assessment Methodology Ecological Assessment of Steep Corals and Associated Organisms in the Eastern Portions of Apra Harbor, Guam (Smith 2007).	The DEIS fails to include this report as an appendix. The FEIS needs to include this report as an appendix.
199	4	11-4	6	11.1.1	GDAWR	11.1.1 Navy Coral Assessment Methodology This document was peer reviewed by eight renowned coral scientists and the reviews are included in Volume 9, Appendix J.	The document fails to provide any information on the reviewer's experience in general, or as it pertains to coral reef impact assessments and the HEA. Many of the reviewers may not have any experience or expertise with coral reef impact assessments and HEA and may not be giving accurate comments. The FEIS needs to provide the reviewers experience and expertise to validate their comments.

J-018-131

Thank you for your comment.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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J-018-132	200	4	11-49	6 and 7	11.2.2.2	<p>The indirect impact areas would be affected at varying degrees from sediment accumulation. The assessment of indirect impacts is a substantial overestimate of the actual indirect impact and based on a 656 ft (200 m) buffer zone. The actual indirect impact area would be a much smaller area than that based on the 40 ft (12 m) cumulative sediment deposition modeling.</p> <p>During initial meetings with the agencies to determine the extent of the study area, the Navy suggested a 100 m "buffer zone" beyond the dredge footprint. USFWS suggested making it 200 m, which was agreed upon by the Navy. It is important to note that there was no actual basis for this number in terms of indirect impacts; it was simply to define a survey area that could encompass any potential indirect effects. It is in no way connected to the 40 ft (12 m) buffer that comes from the SEI (2009) cumulative plume modeling. It evolved into the "Indirect" impact area only because no one ever suggested that it be anything else, and that it can be stated with high certainty that it is indeed very conservative (Dollar 2009).</p>	<p>The DEIS only took into account model runs at the most for 24 hours of dredging. The DEIS states on page 11-49 of Volume 4 that total dredging operation is expected to last 8 to 18 months to complete the entire proposed action based on dredging 24 hr/day. How can you predict the transport and impacts of the sediment plume to the coral reef ecosystem based only on a 24 hour duration. The DEIS fails to take into account the effects of sediment for longer periods of dredging. In order to predict the transport and effects of sediment plume on the coral reef ecosystem, model runs need to be conducted for longer durations. This analysis needs to be conducted and included into the FEIS.</p> <p>These two paragraphs in the DEIS are conflicting. The first paragraph states that the 200 m buffer zone is an overestimate. Then in the second paragraph it states that the buffer zone (indirect impact area) is very conservative. The FEIS needs to clarify if the indirect impact area is conservative or not. GDoA agrees with the DEIS that the 200 m buffer zone (indirect impact area) is conservative. From previous dredging projects within Apra Harbor such as Kilo Wharf / Adetoon Point</p>

J-018-132

Thank you for your comments. USACE ERDC is running their own model and will be compared with the Navy's. Text has been changed; however, the 200 m "buffer zone" was conservative in the sense that models show a maximum effect of 144 ft (44 m).

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J-018-133

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
201	4	11-49	9, 10, and 11	11.2.2.2	GDAWR	<p>The following summarizes the direct and indirect impacts to corals from Alternative 1 actions (Table 11.2-1):</p> <ul style="list-style-type: none"> • Areas with the greatest coral abundance (>70 to <90%) would comprise the smallest portion (10%) of the total coral coverage category that would be lost due to proposed dredging. • Areas with the least amount of coral coverage (0 -<10%) would comprise the largest portion (approximately 36%) of the total coral coverage category that would be lost due to proposed dredging. • About 62% of the area proposed for dredging contains corals with a coverage of less than 30%. Approximately 3% of the total area proposed for dredging contains corals in the 70-90% coverage category and 10% for the 50-90% range of coverage. 	<p>The DEIS fails to take into account corals and other species, such as sponges, greater than the 60 ft. depth. These impacts to corals and other species, such as sponges, below the 60 ft. depth need to be included within the FEIS.</p>
202	4	11-50	1	11.2.2.2	GDAWR	<p>The total area impacted is about 172 ac (69.52 ha), which includes direct and indirect impacts of 72 ac (28.80 ha) and 101 ac (40.71 ha), respectively. This equates to a percent coral cover impact of 62%, which includes direct (35%) and indirect (46%) impacts of the total area affected, respectively.</p>	<p>The DEIS fails to take into account corals and other species, such as sponges, greater than the 60 ft. depth. These impacts to corals and other species, such as sponges, below the 60 ft. depth need to be included within the FEIS. Also, does the DEIS take into account the coral reef at the mouth (entrance) of the inner harbor. The FEIS needs to take into account these corals also.</p>

J-018-133

Thank you for your comment. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

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J-018-134							
203	4	11-50	4	11.2.2.2	GDAWR	Indirect impact analysis, as described earlier, assessed a 656 ft (200 m) buffer zone. It is important to restate that there is no basis for the 200 m buffer zone in relation to the indirect impact area, which is in no way connected to the 40 ft (12 m) actual indirect impact zone (SEI 2009). However, it can be stated with high certainty that the buffer zone is indeed very conservative (Dollar 2009).	GDoA agrees that the 200 m buffer zone is very conservative as stated in Dollar et al. (2009) because the sediment plume has the potential to be transported outside the 200 m buffer zone. This is consistent with the findings from the Adotgan Point Monthly Monitoring Reports (1986). The findings from the report state that the sediment plume was transported beyond 200 m.
204	4	11-51	4	11.2.2.2	GDAWR	SEDIMENT DEPOSITION MODELS. The Current Measurement and Numerical Model Study for CVN Berthing (SEI 2009) is included in Volume 9, Appendix E, Section E.	The DEIS only took into account model runs at the most for 24 hours of dredging. The DEIS states on page 11-49 of Volume 4 that total dredging operation is expected to last 8 to 18 months to complete the entire proposed action based on dredging 24 hr/day. The findings from the Adotgan Point Ammunition Wharf monitoring reports (1986) state that the sediment plume was transported beyond 200 m. How can you predict the transport and impacts of the sediment plume to the coral reef ecosystem based only on a 24 hour duration. The DEIS fails to take into account the effects of sediment for longer periods of dredging. In order to predict the transport and effects of sediment plume on the coral reef ecosystem, model runs need to be conducted for longer durations. This analysis needs to be conducted and included into the FEIS.

J-018-134

Thank you for your comment. The 200 m is conservative in the sense that anticipated sediment effects are expected out to 144 ft. (44 m) based on models being verified by USACE ERDC. Text has been revised to state these anticipated impact areas (e.g. 12 m = adverse effect and 44 m = less than significant effect). See response to previous comment.

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J-018-135				GDAWR	Silt curtain effectiveness was simulated based on 145 days of TSS measurements inside and outside of the silt curtain deployed for the Alpha-Bravo Wharves dredging project in inner Apra Harbor. These measurements showed that the silt curtains retained 90% of the material inside of the curtain. Model computed TSS levels compared well with the Alpha-Bravo Wharves project measurements outside the silt curtain.	<ol style="list-style-type: none"> The findings from the Adotgin Point Ammunition Wharf monitoring reports (1986) state that the sediment plume was transported beyond 200 m. The DEIS fails to state when these 145 days of TSS measurements were taken and if TSS measurement were taken for longer than 145 days for the Alpha-Bravo Wharves dredging project and not used. If these measurements were taken during a time period when wind speeds are generally weak or all the TSS measurement data were not used then the results of the model would not reflect the true effectiveness of the silt curtain. The Inner Apra Harbor is more protected than the outer Harbor so the two areas may not be comparable. TSS measurement for the Kilo Wharf dredging project should have been used as well to compare the effectiveness of the silt curtain. As stated, the model was only run at most for 24 hr/day of dredging when the CVN dredging is to last 8 to 18 months. This could impact the effectiveness of the silt curtain. The FEIS needs to a) state the time period when the 145 days of TSS measurements at Alpha-Bravo were taken and if measurements were taken for longer than 145 days, b) use TSS measurements from the Kilo Wharf Project, and c) run the model for longer than a 24 hr/day of dredging.
205	4	11-52	2	11.2.2.2		

J-018-135

Thank you for your comment. The Navy is aware of issues involving the subcontractor managing the silt curtain mitigation measures at the Kilo Wharf dredge site. Changes to the height of the silt curtains and some operational changes have been made to correct these issues. However, the Kilo Wharf project and the proposed action occur in very different areas of Apra Harbor. The setting of Kilo wharf is much more exposed to wind and wave action that impact the BMPs and mitigation measures. The proposed action area is anticipated to be less challenging with regard to the Navy's ability to minimize environmental impacts from sediment plumes. The dredging plume models that were run for the Draft EIS were based on high silt curtain sediment retention of 90% observed at other locations in Apra Harbor having similar conditions to the proposed action area.

The USACE ERDC will be verifying the Navy's sediment models by running their own transport models. This information will be incorporated into the Compensatory Mitigation Plan prepared by the Navy post ROD.

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J-018-136					GDAWR	Similar scenarios for the remaining model runs indicate little extension of the plumes beyond the project area (SEI 2009, Volume 9, Appendix E, Section E of this EIS/OEIS).	The DEIS only took into account model runs at the most for 24 hours of dredging. The DEIS states on page 11-49 of Volume 4 that total dredging operation is expected to last 8 to 18 months to complete the entire proposed action based on dredging 24 hr/day. The findings from the Adotgan Point Ammunition Wharf monitoring reports (1986) state that the sediment plume was transported beyond 200 m. How can you predict the transport and impacts of the sediment plume to the coral reef ecosystem based only on a 24-hour duration. The DEIS fails to take into account the effects of sediment for longer periods of dredging. In order to predict the transport and effects of sediment plume on the coral reef ecosystem, model runs need to be conducted for longer durations. This analysis needs to be conducted and included into the FEIS.
206	4	11-52	3	11.2.2.2			

J-018-136

Thank you for your comment. See previous responses.

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207	4	11-52	5	11.2.2.2	GDAWR	Sediment deposition resulting from the dredging would be largely confined to the immediate vicinity of the specific dredge site. Maximum sediment deposition of 1,742 mg/cm ² , or 0.4 in (10 mm), was calculated assuming 24 hr of dredging at a rate of 1,800 cy/day (1,376 m ³ /day) (Model Case 6.3). The modeling indicated that sedimentation exceeding 40 mg/cm ² , a cited threshold for coral impacts, would extend an average distance of 144 ft (44 m) from the dredging.	The DEIS only took into account model runs at the most for 24 hours of dredging. The DEIS states on page 11-49 of Volume 4 that total dredging operation is expected to last 8 to 18 months to complete the entire proposed action based on dredging 24 hr/day. The findings from the Adotagan Point Ammunition Wharf monitoring reports (1986) state that the sediment plume was transported beyond 200 m. How can you predict the transport and impacts of the sediment plume to the coral reef ecosystem based only on a 24-hour duration. The DEIS fails to take into account the effects of sediment for longer periods of dredging. In order to predict the transport and effects of sediment plume on the coral reef ecosystem, model runs need to be conducted for longer durations. This analysis needs to be conducted and included into the FEIS.

J-018-137

Thank you for your comment. See previous responses.

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208	4	11-54	4	11.2.2.2	GDAWR	CUMULATIVE SEDIMENT DEPOSITION MODEL. Possible cumulative sedimentation during the project was assessed by extrapolating in time and space the daily results, assuming a 24-hr dredging operation and dredging production of 1,800 cy (1,376 m3) per day (SEI 2009 Model Cases 6.1 to 6.7).	The DEIS only took into account model runs at the most for 24 hours of dredging. The DEIS states on page 11-49 of Volume 4 that total dredging operation is expected to last 8 to 18 months to complete the entire proposed action based on dredging 24 hr/day. The findings from the Adotgan Point Ammunition Wharf monitoring reports (1986) state that the sediment plume was transported beyond 200 m. How can you predict the transport and impacts of the sediment plume to the coral reef ecosystem based only on a 24-hour duration. The DEIS fails to take into account the effects of sediment for longer periods of dredging. In order to predict the transport and effects of sediment plume on the coral reef ecosystem, model runs need to be conducted for longer durations. This analysis needs to be conducted and included into the FEIS.

J-018-138

Thank you for your comment. See previous responses.

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209	4	11-66	7	11.2.2.2	GDAWR It should be noted that sea turtles have not been observed foraging or resting within the proposed project area during multiple dive surveys performed there; it has been observed to function as a transit area to and from Sasa Bay (Navy 2009d).	This statement is not supported by any evidence or studies conducted within the proposed project area. From discussions with the Navy, sea turtle observations were based on incidental sightings during the benthic surveys. In other words, sea turtles were not the main focus of the benthic surveys. They were recorded if they were seen while conducting the benthic surveys. Sea turtles on Guam are usually wary of individuals and will leave when individuals are near. Thus, assessing sea turtles on Guam are a bit of a challenge and incidental sightings are not an appropriate method to assess sea turtles. The DEIS fails to provide an adequate and updated assessment on sea turtles. An adequate sea turtle assessment needs to be conducted by the Navy with individuals who have experience and are experts with sea turtles and included in the FEIS. The GDoA conducts aerial surveys and part of the survey involves counting the number of sea turtles observed in the water. The GDoA was not asked for this information from the Navy.	

J-018-139

Thank you for your comment. The information on sea turtles provided by divers and boat tenders is applicable based on the thousands of hours spent observing on the surface in boats and in the water at these locations. Although specific tracking data for sea turtles would be ideal and provide valuable information, the EIS uses best available data.

Please provide the Navy with studies showing that sea turtles in Guam are more wary of individuals, and that they leave when individuals are near making them more challenging to study than other areas in the Pacific.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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210	4	11-66	9	11.2.2.2	GDAWR Due to the distances of Adotgan Point, Kilo Wharf and the historic Seaplane Ramp nesting areas from the proposed action under Alternative 1, it is unlikely that any nesting-related activities would be affected by the action alternatives, including night work and the associated lights and noise.	Seaplane Ramp is not a historic nesting site. GDOA reported nesting only a few years ago. The FEIS needs to correct this statement and state that Seaplane Ramp is a recent sea turtle nesting site. The FEIS needs to include information on the type and power of lights as they may affect nesting activity. Simply stating that sea turtle nesting activities are unlikely to be affected due to the distances is not adequate.	
211	4	11-66	10	11.2.2.2	GDAWR In summary, the Navy recognizes that there are many on-going and recent past studies of potential noise exposures to sea turtles and other marine species from pile driving actions. Further research and validation of these studies are necessary prior to being able to determine the applicability of the methodologies and results to the proposed action within this DEIS.	This is not in line with 40 CFR Section 1502.16 Affected Environment, which states that "The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental affects which cannot be avoided should the proposal be implemented...." In other words, the DOD must analyze the full range of direct, indirect, and cumulative effects of the preferred alternative, if any, and of the reasonable alternatives identified in the draft EIS. Obtaining these studies should not require an exorbitant cost and the studies needs to be included in the FEIS as well as the environmental affects.	

J-018-140

Thank you for your comment. Please see previous response to these comments.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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212	4	11-66	10	11.2.2.2	GDAWR	The Navy would continue to monitor these studies and where appropriate, incorporate and apply methodologies, analyses, and results to the ongoing impact analysis to sea turtles from the proposed action. Applicability of these studies would also be coordinated through consultations with the National Marine Fisheries Service. The Final EIS/OEIS will contain revised sea turtle impact analysis as developed through this process.	The Navy is implying that it will pick and choose studies that fit its purpose instead of objectively evaluating all adverse environmental effects as stated with 40 CFR Section 1502.16 Affected Environment. This is not in line with 40 CFR.
213	4	11-67	2	11.2.2.2	GDAWR	Approximately 5,500 non-native species were recorded in these surveys, of which most remain restricted to Apra Harbor (Paulay et al. 2002). Potential long-term impacts to the marine habitat within Apra Harbor from non-native marine organisms, pathogens, or pollutants taken up with ship ballast water (or attached to vessel hulls) are a real threat.	The number is 85 non-native species. 5500 is the total number of marine species recorded from Guam, both native and non-native. The FEIS needs to correct this inaccuracy.
214	4	11-67	3	11.2.2.2	GDAWR	These species are found to be more prevalent on artificial structures than natural reef bottoms (Paulay et al. 2002), thus some non-native species recruitment from the inner harbor area to the new aircraft carrier wharf pilings may be expected. This may enhance the community assemblage and diversity of the area.	Adding non-native species to the habitat does not enhance the community assemblage. Non-natives are shown to be more prevalent on man-made substrates. For this reason, artificial reefs are not a favored choice for mitigation. GDoA is not in favor of adding more substrate that can be colonized by non-native species.

J-018-141

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comments.

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215	4	11-68	2	11.2.2.2	GDAWR	The operational indirect impacts would be far less than those modeled for 10 to 24 hours of dredging (Volume 9, Appendix E, Section E of this EIS/OEIS), as the deposition contours do not extend to Big Blue Reef.	1. The DEIS only took into account model runs at the most for 24 hours of dredging. The DEIS states on page 11-49 of Volume 4 that total dredging operation is expected to last 8 to 18 months to complete the entire proposed action based on dredging 24 hr/day. The findings from the Adotgan Point Ammunition Wharf monitoring reports (1986) state that the sediment plume was transported beyond 200 m. How can you predict the transport and impacts of the sediment plume to the coral reef ecosystem based only on a 24 hour duration. The DEIS fails to take into account the effects of sediment for longer periods of dredging. In order to predict the transport and effects of sediment plume on the coral reef ecosystem, model runs need to be conducted for longer durations. This analysis needs to be conducted and included into the FEIS. 2. The DEIS does not take into account corals and other specie, such as sponges below the 60 ft. depth. The FEIS needs to take the coral below the 60 ft. depth into account.
216	4	11-69	1	11.2.2.2	GDAWR	However, there may also be additional recruitment potential of juvenile finfish from Sasa Bay to the aircraft carrier wharf as an extended nursery area.	Man-made substrate does not replace mangroves or naturally occurring structure. Again, man-made substrate is favored by non-native species.

J-018-142

Thank you for your comment. Please see previous comment responses. Please also review the HEA and supporting studies provided in Volume 9, Appendix J, for more detailed information regarding the sediment modeling.

Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS is updated to reflect the latest developments in this review.

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J-018-143	217	4	11-69	3	11.2.2.2	GDAWR	Seasonal disturbances to potentially spawning scalloped hammerhead sharks and high concentrations of adult bigeye scad.	If dredging continues for 18 months, two pupping seasons of the hammerheads could be disrupted. Likewise, two seasons of recruitment for the big eye scad.
	218	4	11-71	4	11.2.2.2	GDAWR	Identification of Polaris Point as the least environmentally damaging of the two alternatives considering both construction and operational impacts (further away from Big Blue Reef)	This alternative is closer to the Sasa Bay MPA, increasing the risk of impact to the mangrove and nursery areas found within Sasa.
J-018-144	219	4	11-71	4	11.2.2.2	GDAWR	Use of appropriate silt curtains and/or other silt containment BMPs to fully enclose areas (maximum extent practicable and within performance levels of curtains) where in-water operations are occurring along with frequent monitoring of their effectiveness to contain suspended sediments.	Silt curtains and other containment plans have already been shown to be not effective at other military dredge sites in Apra Harbor (Kilo Wharf, Inner Harbor channel)
	220	4	11-73	15	11.2.2.4	GDAWR	Cessation of dredging operations during the period of peak coral spawning (7-10 days after the full moon in July) in consultation with the Guam Department of Water Resources (GDAWR).	GDAWR stands for the Guam Division of Aquatic and Wildlife Resources (GDAWR). The FEIS needs to make this correction.
J-018-145	221	4	11-73	17	11.2.2.4	GDAWR	No ships would be allowed to enter Sasa Bay at night.	No ships should be entering Sasa Bay to begin with. You are increasing the likelihood of collisions with sea turtles. The FEIS needs to state that no ships should be entering Sasa Bay. Furthermore, DEIS provides no explanation on why the ships need to enter Sasa Bay, the size of the ships, or how far the ships will be entering Sasa Bay.

J-018-143

Thank you for your comment. The EFHA evaluates potential impacts to these PHCRT MUS. The DEIS acknowledges the proximity of both alternatives to sensitive areas and their anticipated impacts.

J-018-144

Thank you for your comment. A number of protective measures would be taken to minimize the distribution of the turbidity plume that would unavoidably be generated by the proposed dredging operations. These measures are noted in Chapters 2, 4, and 11 of Volume 4. Silt curtains are one example of these types of protective measures. Standard turbidity curtains are approximately 20-30 feet (6-9 meters) in length and have a weighted bottom to maintain the effectiveness of the curtain against the movement of currents within the water body. The Kilo Wharf project and this proposed action occur in very different areas of Apra Harbor. The setting of Kilo Wharf is much more exposed to wind and wave action. The proposed action area is anticipated to be less challenging with regard to our ability to minimize environmental impacts.

J-018-145

Thank you for your comment.

1. Correction has been made.
2. Mitigation will be revised accordingly.

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222	4	11-75	2	11.2.2.5	GDAWR	The compensatory mitigation is subject to approval by USACE, under the CWA, through the Section 404/10 permit requirements (USACE, USEPA, USFWS, and NOAA 2009).	The DEIS fails to include the Government of Guam Resource Agencies on the list of agencies, especially since the impacts will affect their island. The FEIS needs to include the GDoA on the list in addition to the federal agencies because GDoA is responsible for the control of fish, coral, and wildlife on Guam (SGCA Chapter 60 and 63).

J-018-146

Thank you for your comment. The GovGuam Agencies and applicable regulations are listed in Volume 8. The EIS statement the commenter is referring to specifically refers to Compensatory Mitigation, which is overseen by USACE.

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223	4	11-75	5	11.2.2.5	GDAWR	To address the concern of USFWS and USEPA that coral cover as a single metric is inadequate, the revised HEA model is based on percent coral cover plus rugosity (horizontal: vertical measurements) to capture the 3-D complexity of the reef.	<p>1. GDA does not agree with method used to determine rugosity as mentioned in Appendix J, Assessment of Benthic Community Structure in the Vicinity of the Proposed Turning Basin and Berthing Area for Carrier Vessel Nuclear (CVN), Apra Harbor Guam. This study stated that "LIDAR data are processed to derive reef slope (vertical relief divided by horizontal distance) at each pixel in the scene. Since each pixel has the same horizontal distance, pixels with high slope indicate high vertical relief". A high slope does not mean a high vertical relief. Based on field observations, a high slope can have a low vertical relief. Furthermore, why is Lidar data being used to determine rugosity? Was any groundtruthing conducted to determine if the use of the Lidar data for rugosity was accurate? An <i>in situ</i> method to determine rugosity should be conducted and included within the FEIS.</p> <p>2. An adequate resource assessment such as the use of an <i>in situ</i> method to determine coral size (size frequency distribution) needs</p>

J-018-147

Thank you for your comment. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

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J-018-148	224	4	11-76	2	11.2.2.5	GDAWR A HEA was used in other Navy dredging projects in Apra Harbor, including Kilo Wharf.	The GDoA is only aware of HEA being used on one Navy project in Apra Harbor, which is Kilo Wharf. The DEIS comment alludes to the HEA being used on more than one Navy project in Apra Harbor, which is incorrect. This statement needs to be revised and included in the FEIS to state "A HEA was used in the Navy's Kilo Wharf dredging project in Apra Harbor".
	225	4	11-76	4	11.2.2.5	GDAWR The assessment of benthic communities report assumes a 60 ft (18 m) dredge depth, which is an overestimate of the proposed dredge depth of -49.5 ft (-15.1 m) MLLW plus 2 ft (0.6 m) overdredge, representing an approximately 10-15% increase in assessed benthic habitat in the dredged area. For this reason, the total dredged area differs from the dredged area provided in Volume 4, Chapter 4.	The benthic community assessment does not examine effects to communities below 60R. These communities will be seriously affected by sedimentation and physical destruction from dredging in shallower water. An assessment of these communities needs to be conducted and should be included within the FEIS.
	226	4	11-77	2	11.2.2.5	GDAWR This analysis focused on the coral habitat expected to be either permanently lost due to dredging or temporarily affected by sedimentation. Much of the habitat within the dredge footprint is unconsolidated soft sediment with no coral cover (Smith 2007, Dollar et al. 2009). Soft bottom habitat was not addressed in the HEA.	Soft bottom habitat is important fish habitat, and should be included with the HEA in the FEIS

J-018-148

Thank you for your comment.

1. Text has been revised as stated.

2. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS is updated to reflect the latest developments in this review.

3. The assessment of the soft bottom community was included in the EFHA within the EIS.

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#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment
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227	4	11-77	4	11.2.2.5	GDAWR The acreage of coral habitat expected to be affected by dredging, including direct (dredging) and indirect (dredging-related sedimentation) impacts. Based on pixel counts from the remote sensing map, the total area ("plan" view) with any level of coral coverage is about 25.20 ac (10.20 ha) for the Polaris Point Alternative and 23.74 ac (9.60 ha) for the Former SRF Alternative in the direct impact area.	<ol style="list-style-type: none"> 1. The DEIS makes an inconsistent and misleading statement. It states that the acreage of coral to be affected is to include both direct and indirect impacts. However, the next sentence only includes the direct impact area. This is misleading to individuals who are reading the document. 2. The input fails to include impacts to corals and other species, such as sponges, deeper than the 60 ft. depth. 3. Are the corals at the mouth of the inner harbor included in the inputs? 4. The FEIS needs to include inputs into the HEA both for the direct and indirect impacts as well as impacts to coral and other species, such as sponges, below the 60 ft. depth and corals at the mouth of the inner harbor. 5. To reiterate, the use of the photoquadrat method to collect the data and the use of the coral metric/roughness for the HEA is inadequate.

J-018-149

Thank you for your comment.

1. The statement is correct and is appropriate differentiating between impacts associated with direct coral removal and indirect effects from sedimentation and/or the combination of them both. No text change.

2. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS is updated to reflect the latest developments in this review.

3. Yes.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
J-018-150 228	4	11-77	7	11.2.2.5	GDAWR	The total area (three dimensional view) of habitat with some coral coverage is approximately 33 ac (13 ka) for Alternative 1 Polaris Point, and approximately 32 ac (13 ha) for Alternative 2 Former SRF.	<p>1.This is misleading and appears to minimize the value of the coral reef habitat. The DEIS states that the total area with coral coverage is approximately 71.44 ac for Alternative 1 Polaris Point, and approximately 70.95 ac for Alternative 2 Former SRF (Table 11.1-1). The FEIS needs to correct or explain this.</p> <p>2.To reiterate, a high slope does not mean a high vertical relief. Based on field observations, a high slope can have a low vertical relief. Furthermore, why is Lidar data being used to determine rugosity? Was any groundtruthing down to determine if the use of the Lidar data for rugosity was accurate? An <i>in situ</i> method to determine rugosity should be conducted and included within the FEIS.</p>

- 4. See comment No. 2.
- 5. See comment No. 2.

J-018-150

Thank you for your comment.

- 1. The total dredge area with coral is 25.20 and 23.74 for Alt. 1 and 2 respectfully. The total area dredged is 71.18 and 60.77 for Alt 1 and 2, respectfully. The text and table (11.1-1 and others) have been clarified and revised in the EIS.
- 2. Comment noted. See Volume 9, Appendix J for details. "Ground truthing" was performed at all sites.

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#	Location			Section	Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph				
229	4	11-78	3	11.2.2.5	GDAWR	For direct impacts, the HEA assumed an initial 100% loss in ecological services (i.e., the resource suffers a complete loss of ecological function). For indirect impacts, affected habitat is expected to experience an initial 25% loss. This estimate is consistent with the expectation that cumulative sedimentation caused by dredging is expected to be low (i.e. < 0.40 in [\leq 1 cm]), and the relatively lower sensitivity of dominant corals in the affected area (<i>Porites rus</i> and <i>Porites cylindrica</i>) to such levels of sedimentation.	The HEA does not address the cumulative impacts of exposing these corals to repeated levels of excess sedimentation. This likely will result in a loss rate higher than 25%. An analysis of the exposure to repeated levels of excess sedimentation needs to be conducted and included in the FEIS.
230	4	11-78	6	11.2.2.5	GDAWR	Step 2 requires a mitigation project and artificial reefs were the mitigation approach used in the HEA. There is a discussion later in this section on the rationale for using artificial reefs.	Artificial reefs are not the preferred mitigation alternative. Artificial reefs do not restore a high percentage of ecological function, and the man-made substrate of artificial reefs will encourage non-native species to colonize them.

J-018-151

Thank you for your comment.

1. A Cumulative Sediment Deposition Model was run and is included in the EIS. Figure 11.2-3 depicts the estimated limits of sediment accumulation exceeding 6 mm (adverse effects).
2. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor is one available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

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J-018-152 231	4	11-83	4	11.2.2.7	GDAWR	This option would be a direct application of a HEA derived artificial reef project in Apra Harbor. The Navy would install an artificial reef in approximately 80+ ft (24.4 + m) of water (to ensure its survival even in a super-typhoon) using one or more agreed upon artificial reef concepts. Reef alternatives may include "Z blocks" (used in Hawaii), Biorock, and Reefballs. Suggestions of other artificial reef options would be welcomed. Placement would be on the harbor floor and would not affect hard substrate. A potential mitigation site would be located within the ESQD are of Kilo Wharf (to prevent the reef from being used as a Fish Aggregation Device that would invite recreational or commercial fishing or diving activities). As part of the artificial reef proposal, the HEA restoration project would include the potential use of transplanted coral as part of its compensation strategy.	Placement of the artificial reef in 80 feet of water ensures a slow rate of recovery due to current and clarity of water in the harbor. The man-made substrate will favor non-native species more than a natural substrate would. Placing the artificial reef in an area inaccessible to the public does not replace lost recreational or subsistence values. GDoA is opposed to the installation of artificial reef as compensation mitigation. The FEIS must identify compensation that restores function (i.e., ecosystem, recreation, and subsistence).

J-018-152

Thank you for your comment. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor is one available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

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J-018-153

#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph			
232	4	11-83	7 and 8	11.2.2.7	GDAWR <i>Option 1: Artificial Reefs within Apra Harbor or Other Locations</i> Carr and Hixon (1997) found that artificial reefs with structural complexity and other abiotic and biotic features similar to those of natural reefs would best mitigate in-kind losses of reef fish populations and assemblages from natural reefs—specifically they compared colonization and subsequent assemblage structure of reef fishes on coral and artificial (concrete block) reefs where reef size, age, and isolation were standardized.	1. The DEIS provides no evidence for the use of artificial reefs to replace lost ecosystem functions and services. One reference is provided in the DEIS, which is Carr and Hixon (1997). This paper evaluated the role of artificial reefs on fishes and does not evaluate the use of artificial reefs as a functional replacement of natural coral reefs. 2. GDoA supports the use of in-lieu fee as the preferred mitigation and watershed restoration and management as the alternative mitigation. GDoA does not support artificial reefs as an option for mitigation because it does not replace the lost ecosystem functions.

J-018-153

Thank you for your comment. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor is one available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

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J-018-154 233	4	11-83	9	11.2.2.7	GDAWR	Suggestions of other artificial reef options would be welcomed. Placement would be on the harbor floor and would not affect hard substrate. A potential mitigation site would be located within the ESQD arc of Kilo Wharf (to prevent the reef from being used as a Fish Aggregation Device that would invite recreational or commercial fishing or diving activities).	The statement is inconsistent with available evidence that suggest that artificial reefs aggregate existing reef stocks (Pears and Williams 2005). Fish Aggregating Devices are defined as permanent, semi-permanent or temporary structures or devices made from any material and used to lure fish. Just because recreational or commercial fishing or diving is restricted or not allowed at the artificial reefs does not mean that they are not fish aggregating devices. Whether the artificial reef is placed within the ESQD or not, the artificial reefs will still serve as fish aggregating devices. To reiterate, GDoA does not support artificial reefs as an option for mitigation because it does not replace the lost ecosystem functions.

J-018-154

Thank you for your comment. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor is one available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

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J-018-155					GDAWR	As part of the artificial reef proposal, the HEA restoration project would include the potential use of transplanted coral as part of its compensation strategy.	A review of coral compensatory mitigation for coral reef impacts in the Pacific Islands indicated that coral transplanting was not effective as compensatory mitigation (Bentivoglio 2003). Rojas et al. (2008) transplanted corals in Guam from Inner Apra Harbor to Sumay Mound. The results indicate that <i>Porites rus</i> performance was better with approximately a 93% survival rate as compared to <i>P. cylindrica</i> with approximately a 23% survival rate. However, the study was only a 18 month study and does not demonstrate the long term effectiveness of coral transplanting on Guam in regard to compensatory mitigation. The survival rate for both corals has probably decreased after 18 months. The GDoA recommends that the FEIS state that coral transplanting be conducted as a best management practice and corals from the dredge area be provided to the GDoA for educational and scientific purposes. Any corals given to entities besides the GDoA will be in violation of §63601 of 5GCA.
234	4	11-83	9	11.2.2.7			

J-018-155

Thank you for your comment. Comment on coral transplanting is noted.

A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor is one available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

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235	4	11-84	2	11.2.2.7	GDAWR	<i>Option 2: Watershed Restoration and Management</i>	GDoA supports the use of In-lieu fee as the preferred mitigation and watershed restoration and management as the alternative mitigation.
236	4	11-85	3	11.2.2.7	GDAWR	The watershed area on the figures is approximately 4,694,980 ac (1,900,000 ha) along the southwestern coast of Guam, extending from south of Naval Base Guam to the southern point of Guam and Cocos Island.	The DEIS states an inaccurate number regarding the acres of watershed area along the southwestern coast of Guam. The total land area of Guam is 544 sq km (<i>The World Factbook 2009</i>) or approximately 135,000 acres. Errors of this magnitude call into question the validity of other figures used in this DEIS. The correct acres of watershed area along the southwestern coast of Guam need to be recalculated and included within the FEIS.

J-018-156

Thank you for your comments and bringing this to our attention.

1. Comment noted regarding GDoAs support of watershed restoration and management.
2. As stated in the EIS, this information was provided directly for inclusion in the EIS by the Guam Bureau of Statistics and Planning (BSP 2009). It is pertinent that Guam agencies work together and provide correct information to the Navy. Survey's are being performed to accurately assess the areas. The Navy will recalculate BSPs estimates of the watersheds as the citation provided (*The World Factbook 2009*) is questionable. GIS data and drainage area information from WERI will be used.

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237	4	11-85	7	11.2.2.7	GDAWR A Cetti Bay watershed restoration project was attempted as compensatory mitigation for coral loss at Kilo Wharf. Because land use was not totally controlled and management agreements could not be concluded, the project has not been successful.	The DEIS states that the Cetti Bay watershed restoration project has not been successful. This is an unfair and inaccurate statement because the Cetti Bay watershed restoration project is a ten year project and currently the project is only in its second or third year. Logistical issues are more of a concern than control of land. This unfair and inaccurate statement needs to be removed from the FEIS. A conclusion on the success of the Cetti Bay watershed project should be made after the project is completed.

J-018-157

Thank you for your comment. The document has been reviewed and modified as appropriate based upon your comment.

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J-018-158					GDAWR	<i>Shallow Water Reef Enhancement.</i> This option would include the transplanting of a significant quantity of coral that would be removed by the proposed dredging project.	A review of coral compensatory mitigation for coral reef impacts in the Pacific Islands indicated that coral transplanting was not effective as compensatory mitigation (Bentivoglio 2003). Rojas et al. (2008) transplanted corals in Guam from Inner Apra Harbor to Sumay Mound. The results indicate that <i>Porites rus</i> performance was better with approximately a 93% survival rate as compared to <i>P. cylindrica</i> with approximately a 23% survival rate. However, the study was only a 18 month study and does not demonstrate the long term effectiveness of coral transplanting on Guam in regard to compensatory mitigation. The survival rate for both corals has probably decreased after 18 months. The GDoA recommends that the FEIS state that coral transplanting be conducted as a best management practice and corals from the dredge area be provided to the GDoA for educational and scientific purposes. Any corals given to entities besides the GDoA will be in violation of §63601 of 5GCA.
238	4	11-90	3	11.2.2.7			

J-018-158

Thank you for your comment.

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J-018-159	239	4	11-90	3	11.2.2.7	GDAWR Studies have shown that larger intact colonies survive transplanting much better than small or fragmented colonies. Larger colonies also have far greater reproductive potential than small ones.	The DEIS states that studies have shown that larger intact colonies survive transplanting much better than small or fragmented colonies. However, the DEIS fails to provide any evidence supporting this statement. The FEIS needs to include the studies.
	240	4	11-90	5	11.2.2.7	GDAWR <i>Coastal Water Resource Management - Upgrade Wastewater Management Systems.</i> This option would involve upgrading Guam treatment plants and ocean outfalls to have secondary treated effluent to improve coastal water quality that would in turn enhance coral health in the coastal zone of Guam.	The DEIS fails to provide any evidence that upgrading the wastewater management system will replace lost ecosystem functions and services. Infrastructure improvements should not be considered as mitigation for loss of natural resources. Upgrading Wastewater Management Systems will mainly improve public health related issues. Human health and natural resource loss are two different areas for mitigation.
	241	4	11-91	4	11.2.3	GDAWR 11.2.3 Alternative 2 Former SRF	All concerns expressed for the Polaris Point alternative are the same for the former SRF alternative. The only exception is the proximity to the Sasa Bay MPA.

J-018-159

Thank you for your comment.

1. The FEIS will contain additional information regarding potential projects for compensatory mitigation. The compensatory mitigation plan will not be ready until post ROD, however the Navy will continue to work with the USACE and EPA/GEPA and do whatever is necessary to satisfy the requirements of Section 10/404 and Section 401 permit documentation.
2. As stated in the EIS, the DoD will be participating in the refurbishment and upgrade of Guam's Northern District WWTP. This action alone will assist the GWA in meeting its coastal water quality standards for the benefit of sea life and people of Guam. How can improved water quality and meeting GWQS (something Guam has not done in 30+ years) NOT benefit the marine biological resources? Improved water quality, be it from upland reforestation (decreasing sedimentation) or an increased efficiency in the treatment of sewage (decreasing TSS, turbidity, chemical constituents, biological organisms [Enterococcus], etc.) is a natural resource benefit.
3. Alternative 1 and 2 are very similar. The differences have been identified in the LEDPA discussion.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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J-018-160					GDAWR	The coral community to be dredged is not pristine because it lies within an existing navigation channel that was first dredged during the creation of the Inner Apia Harbor some 60 years ago. Dive surveys indicate that overall coral community composition within the dredge area are of marginal to modest ecological value, based upon eight criteria (i.e., percentage of sea floor covered by coral, reef complexity and rugosity, species diversity, coral health, size frequency distribution of coral colonies, diversity and abundance of sessile macro-benthos other than corals [e.g., sponges], diversity and abundance of mobile macro-invertebrates, and the diversity and abundance of finfish).	The DEIS comment is misleading and attempts to undervalue the coral reef habitat within the project area. The photoquadrat method used to determine these variables is inadequate as stated in previous comments. There are coral communities and other species on the shoals and in depths greater than 60 ft. that the DEIS appears to not be taking in account. This statement needs to be revised in the FEIS and an assessment of the corals and other species below the 60 ft. depth needs to be included within the FEIS.
J-018-161					GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Glass Breakwater, Security/Force Protection A</u> wharf at this location would be vulnerable to attack from ships in the Philippine Sea and difficult to defend.	The DEIS fails to state how it would be vulnerable and difficult to defend. A proper analysis for this alternative needs to be conducted addressing this alternative and included in the FEIS. The rationale can be applied to the other locations as well so an explanation is needed. For example, it is just as easy to fire a missile to the Glass Breakwater as it is to Polaris Point.

J-018-160

Thank you for your comment. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

J-018-161

Thank you for your comment. Glass Breakwater juts out into the sea and is further away from the core areas of the base. A location that is more remote presents a greater security concern than those located closer to the inner harbor.

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J-018-162							
244	4	2-10	6	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Glass Breakwater, Environment</u> Extensive fill would be required to provide the amount of shoreside land area for activities and accommodate the movement of more than 5,600 personnel on and off the ship.	The DEIS fails to state how much fill would be required. A proper analysis for this alternative needs to be conducted addressing this reason and included in the FEIS.
245	4	2-10	7	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Glass Breakwater, Environment Cost, Technology, and Logistics.</u>	The DEIS fails to state what exactly are the cost, technology, and logistics criterion. A proper analysis for this alternative needs to be conducted addressing this reason and included in the FEIS. The FEIS needs to state specifically what these criterion are.
246	4	2-10	11	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Glass Breakwater, Environment</u> The site is a great distance from the base, which is problematic for personnel quality of life activities and supply replenishment.	The DEIS fails to state what this distance is. A proper analysis for this alternative needs to be conducted addressing this reason and included in the FEIS. The FEIS needs to state what this distance is.
247	4	2-11	7	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Dry Dock Island, Environment</u> Extensive fill would be required to provide the amount of shoreside land area for activities and to accommodate the movement of more than 5,600 personnel on and off the ship.	The DEIS fails to state how much fill would be required. A proper analysis needs for this alternative needs to be conducted addressing this reason and included in the FEIS.

J-018-162

Thank you for your comment. Design level detail was not done for each of the alternatives considered and dismissed. The purpose of screening criteria is to provide an initial test to determine whether a potential alternative is practicable before moving forward. Security/force protection is of utmost concern, and potential locations (such as the Glass Breakwater and Dry Dock Island) that did not meet this criterion had to be dismissed. Thus, a full blown analysis on design detail for these locations, is not warranted.

A formatting error occurred in the DEIS. Cost, Technology, and Logistics should have been shown as an italicized heading not a bullet. This has been corrected. The bullets following this item explain why the location does not meet this screening criterion.

The EIS has been updated to include the approximate distance from base amenities.

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J-018-163 248	4	2-11	9	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Dry Dock Island, Cost, Technology, and Logistics</u> The site is a great distance from the base, which is problematic for personal quality of life activities and supply replenishment.	The DEIS fails to state the distance. A proper analysis needs for this alternative needs to be conducted and included in the FEIS. The FEIS needs to state the distance.
249	4	2-11	11	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Dry Dock Island, Cost, Technology, and Logistics</u> The utilities on Dry Dock Island that support Echo and Delta Wharves do not have the capacity to support a carrier.	The DEIS fails to state the utilities on Dry Dock Island. A proper analysis needs for this alternative needs to be conducted and included in the FEIS. The FEIS needs to state what the utilities are on Dry Dock Island, compare the Dry Dock Island utilities that support Echo and Delta Wharves' utilities with its capacity to support a carrier.
250	4	2-11	13	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Dry Dock Island, Cost, Technology, and Logistics</u> The site would create incompatible uses with existing recreational use of parts of Dry Dock Island.	The DEIS fails to state the existing recreational uses on parts of Dry Dock Island. The FEIS needs to state the existing recreational uses and an analysis conducted showing how it is incompatible.
251	4	2-12	2	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Delta/Echo Wharves, Operational/Navigational Delta/Echo Wharves</u> were dismissed because the required buffer zones around the aircraft carrier would obstruct harbor traffic.	The DEIS fails to state what the required buffer zones are. The FEIS needs to state what the required buffer zones are.

J-018-163

Thank you for your comment. The EIS has been updated to include the distance from Dry Dock Island to base amenities.

The EIS has been updated to include some information about utilities and recreational uses in the vicinity of Dry Dock Island.

The EIS has been updated to include a description of the security buffers around the aircraft carrier for the Delta/Echo location.

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252	4	2-12	8	2.3.1	GDAWR	<u>2.3.1 Wharf Location Alternatives Considered, Sierra Wharf, Operational/Navigational</u> The width of the narrow channel leading to Inner Apra Harbor would not allow for the minimum buffer distance around an aircraft carrier to be met without obstructing harbor traffic.	The DEIS fails to state what the required buffer zones are. The FEIS needs to state what the required buffer zones are.
253	4	2-13	2	2.3.2	GDAWR	<u>2.3.2 Wharf Alignment, Polaris Point</u> The specifications for an aircraft carrier require an approach clearance area of 600 ft (183 m) extending from the edge of the entire length of the wharf.	The DEIS fails to provide a reference for this specification. The FEIS needs to state a reference.
254	4	2-13	2	2.3.2	GDAWR	<u>2.3.2 Wharf Alignment, Polaris Point</u> Survey data indicated there is coral along the outcrop that would have to be removed to provide the 600 ft (183 m) of clearance in front of the wharf at the eastern end.	The DEIS fails to include a report for the survey data. In other words, no evidence regarding the removal of the outcrop is provided within the DEIS. The FEIS needs to include a report for the survey data.
255	4	2-13	5	2.3.2	GDAWR	<u>2.3.2 Wharf Alignment, Polaris Point</u> There would be additional construction costs to achieve the stability required.	The DEIS fails to state the additional cost. The FEIS needs to state the additional costs.

J-018-164

Thank you for your comment. The EIS has been revised describing the required buffer zones to meet security and force protection requirements for a CVN at Sierra Wharf that will affect the entrance channel to Inner Apra Harbor. The EIS has been updated to provide a reference for the approach clearance around an aircraft carrier. Evidence regarding the removal of the outcrop for the diagonal wharf alignment at Polaris Point is contained in the cost estimates of dredge material calculations and coral mitigation provided in the CVN Capable Berthing Study (July 2008) which is included in Volume 9 of the Appendices.

The same CVN berthing study provides the estimated costs for both the wharf structure parallel to shore at Polaris Point and the pier structure extending diagonally offshore. A comparison between the two main pier structures using steel pipe piles shows a difference of roughly \$20.5 million for the additional constructions costs needed to achieve stability for the diagonal pier alignment.

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J-018-165 256	4	2-13	8	2.3.2	GDAWR	2.3.2 Wharf Alignment, Former SRE The second dismissed alignment would also be aligned east-west, but would be recessed into the existing shoreline allowing the dry dock traffic to pass, but this option would excavate significant amounts of existing land area.	The DEIS fails to state the quantity of land that would need to be excavated. A proper analysis needs to be conducted regarding this alternative and included within the FEIS.
257	4	2-14	5	2.3.3	GDAWR	2.3.3 Channel Options The CVN-Capable Berthing Study (NAVFAC Pacific 2008) assessed three channel alignment options that are applicable to both alternative wharf locations as follows and as shown on Figure 2.3-2.	The DEIS fails to include the CVN-Capable Berthing Study (NAVFAC Pacific 2008) as an appendix. The FEIS needs to include this study to the appendix.
258	4	2-14	9	2.3.3 Channel Options	GDAWR	2.3.3 Channel Options As shown in Figure 2.3-2, the sharp bend option follows the same location as the existing navigational channel, but the channel would be widened to 600 ft (183 m) to meet the UFC channel width requirements for a nuclear powered aircraft carrier.	The DEIS fails to clarify if the entire existing channel from the channel entrance as shown in Figure 2.3-2 would be widened 600 ft (183 m) or a portion of the existing channel. The FEIS needs to state and show in Figure 2.3-2 what portion of the existing channel needs to be widened 600 ft.

J-018-165

Thank you for your comment. The text has been revised to provide an enhanced discussion of the alternatives evaluated and dismissed, where appropriate. Clarifications have been provided in the text as noted in the comment.

The CVN Capable Berthing Study is already included as an Appendix (See Appendix K).

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J-018-166 259	4	2-19	7 and 8	2.3.4	GDAWR	<p>2.3.4 Structural Design While both the sheet pile bulkhead and concrete caissons are used in Apra Harbor, it was determined that a pile supported wharf for this proposed action is preferable for several reasons, including superior seismic performance, less dredging, and less cost.</p> <p>All design options would disturb the same area and have comparable impacts, but there are structural advantages to a steel pile supported wharf as described below.</p>	<p>The DEIS makes conflicting statements regarding environmental impacts from design options. It states that a pile supported wharf would require less dredging then it goes on to state that all design options would disturb the same area and have comparable impacts. The DEIS does not objectively evaluate the different design options. The FEIS needs to objectively evaluate the different design options and clarify these conflicting statements. Without objective evaluation, it is impossible to decide on a preferred design option.</p>
						<p>2.3.4 Structural Design. 2.3.4.1 Steel Pile Supported Wharf This structural design alternative would result in a concrete deck superstructure 90-ft (27-m) wide by up to 1,325-ft (404-m) long, supported by all vertical piling...</p>	<p>The DEIS lacks diagrams of the structural designs, lacks figures showing the placement of the concrete and steel piling on the coral reef environment. Without this information you can't make a determination on what design alternative would be preferred. The FEIS needs to include the structural designs and figures showing the placement of the concrete and steel piling on the coral reef environment or add a reference as to where it could be found within the FEIS.</p>

J-018-166

Thank you for your comment. Regarding the structural design options for the wharf structure associated with both alternatives, the EIS in Section 2.3.4, Chapter 2, Volume 4 provides differentiating characteristics between the pile-supported structure, a sheet-pile bulkhead, and the caisson-based wharf structure. The caisson-based design is described as requiring additional dredging than a pile-supported structure and both the caisson-based design and sheet-pile bulkhead design have had a history of poor seismic performance. To provide the EIS reader more detailed information regarding the previous study about the wharf design options, the CVN Berthing Study that is referenced in this section is included in the technical appendix, Volume 9, Appendix K. Clarifications have been added to the text of the EIS to remove any confusing statements.

Figures 2.5-4 and 2.6-4 in Chapter 2, Volume 4 provide the relative wharf locations in plan view relative to the surrounding reef structures. Both figures show the location of the proposed wharfs and as noted in the text, the placement of the fill and pile-supporting structures would occur beneath the wharf deck. More detailed drawings would be developed as the design process becomes more finalized.

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J-018-167							
261	4	2-21	4	2.3.4	GDAWR	2.3.4 Structural Design, 2.3.4.2 Sheet Pile Bulkhead Sheet pile bulkhead construction has long been considered economical in many ports and military harbors due to its simplicity, ease and speed of construction, ...	The FEIS needs to include the structural designs and figures showing the placement of the concrete and steel piling on the coral reef environment or add a reference as to where it could be found within the FEIS.
262	4	2-21	8	2.3.4	GDAWR	2.3.4 Structural Design, 2.3.4.3 Concrete Caissons Reinforced concrete caissons are widely used for the construction of vertical breakwaters and gravity quay walls...	The FEIS needs to include the structural designs and figures showing the placement of the concrete and steel piling on the coral reef environment or add a reference as to where it could be found within the FEIS.
263	4	2-22	10	2.3.5.1	GDAWR	2.3.5 Dredging, 2.3.5.1 Methodology, Mechanical Dredges Placement of dredged material into open scows that hold the material for transport to an offloading site. The offloading site can be upland or open water with proper permits.	The DEIS fails to state where the offloading site is located. The FEIS needs to include the offloading site or reference in the FEIS where to find this information.
264	4	2-22	3	2.3.5.1	GDAWR	2.3.5 Dredging, 2.3.5.1 Methodology, Hydraulic Dredges Placement of dredged material into upland placement site where dewatering occurs with return flow discharge into receiving water body; loose or fine material is not released into the water column during transfer of dredged material.	The DEIS fails to state where the offloading site is located. The FEIS needs to include the offloading site or reference in the FEIS where to find this information.

J-018-167

Thank you for your comment. Figure 2.5-5 provides the general cross-sectional details of design for the piling supported structure available at this phase of design and environmental analysis. As noted in Chapter 2, Volume 4, the piling supported wharf structure has the least amount of dredging and is less susceptible to seismic failure relative to the other two wharf structure alternatives including the caisson-based design as noted in Chapter 2, Volume 4. There is no detailed caisson-based design for either alternative at this time and the leading choice design both in cross-section and plan view has been provided for each alternative. The cross-section would be the same for both alternatives and the plan views are shown in 2.5-4 and 2.6-4 for Alternatives 1 and 2, respectively. The Upland Placement Study (2008) has been added to Volume 9, Appendix K which includes information about the offloading sites.

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J-018-168					GDAWR	2.3.5 Dredging, 2.3.5.1 Methodology. Hydraulic Dredges Historically, mechanical dredging has been used in Apra Harbor, and would likely be the preferred method. Mechanical dredging is assessed as the environmentally conservative method (maximum adverse impact) of dredging in the EIS/OEIS because it has the greater combined potential for environmental impacts from direct and indirect impacts to coral reefs due to sediment redistribution.	<ol style="list-style-type: none"> 1. The DEIS fails to provide sufficient justification and analysis to use mechanical dredging since it has the greater combined potential for environmental impacts than hydraulic dredging. The FEIS needs to include a justification and an analysis for the use mechanical dredging over hydraulic dredging. 2. The DEIS makes a conflicting statement concerning the environmental impacts of mechanical dredging. It states that it is an environmentally conservative method but then it states it has maximum adverse impacts. The FEIS needs to state, "Mechanical dredging is assessed as the least environmentally conservative method..."
265	4	2-22	6	2.3.5.1			

J-018-168

Thank you for your comment. The differences between the environmental effects of mechanical and hydraulic dredging are discussed in Chapter 2, Volume 4 and Appendix D of the EIS. Mechanical dredging involves use of a clamshell or fixed bucket that excavates the dredge sediment from the harbor floor and then carries the sediment in the full bucket through the water column before lifting the bucket out of the water and placing the dredged sediment in a nearby barge or scrow. During this movement, a small fraction of the collected sediment will escape from the bucket and create suspended sediment in the lower and higher levels of the water column. On the other hand, a hydraulic dredge works solely on the harbor floor and any suspended sediment will emanate only in the lower portion of water column. As a result, the plume of suspended sediment is generally greater with use of conventional clam shell bucket as compared with a hydraulic dredge. However, use of hydraulic dredging is generally limited to soft bottom sediment on relatively flat surfaces. Mechanical dredging, which has historically been used in Apra Harbor, was chosen as the dredging method for evaluating environmental impacts as it presents the most adverse impact scenario.

A sediment plume is an inevitable effect of in-water construction activities. The Navy proposes to minimize sedimentation by using best management practices such as silt curtains and operational controls of dredging equipment. Final mitigation measures for all dredging activities will be determined and agreed upon during the permit phase of the projects.

The intent of "environmentally conservative" was to equate it with "maximum adverse impact." The text has been revised.

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J-018-169 266	4	2-31			GDAWR	Figure 2.5-1 Alternative 1 Polaris Point	1) Figure 2.5-1 of the DEIS is missing the outline of the reef and the reef's name that will be impacted by the dredging right after the bend and right above Jade Shoals. The FEIS needs to include the outline and name of the reef that will be impacted. 2) Figure 2.5-1 of the DEIS is missing the name of the reef between Western Shoals and Big Blue Reef. It just says reef. The FEIS need to include the proper name of the reef between Western Shoals and Big Blue Reef.
267	4	2-36	1	2.5.2.1	GDAWR	Figure 2.5-1 illustrates the buoys and range lights that would have to be relocated or removed to avoid obstructing the channel.	The DEIS fails to state where the buoys and range lights will be relocated. The FEIS needs to indicate where the buoys and range lights will be relocated in a figure.
268	4	2-41	8	2.5.3.2	GDAWR	2.5.3.2 Construction Common to Both Action Alternatives. Dredging Dredging operations have been modeled as 24 hours per day operation for the duration of 6 to 9 months, but depending upon dredging efficiency, could last from 8 to 18 months.	The DEIS fails to state when dredging will begin. The FEIS needs to state when dredging will begin.

J-018-169

Thank you for your comment. The reefs to which the comments are referring are not named reefs. The named reefs in the vicinity of the proposed action are identified in multiple figures in Chapter 2, Volume 4 and Chapter 11, Volume 4.

Due to the need to widen and relocate the centerline of the navigational channel and turning basin to support the ingress and egress of the transient aircraft carrier, range lights and mooring buoys locations need to be relocated. Figures 2.5-1 and 2.6-1 identify the needed modifications. The exact locations of the relocated buoys has not been established. Final design of the entrance channel widening and turning basin for either alternative will define the new buoy locations and specify the new orientation of the range lights to support navigational movements in the harbor.

The EIS does not state when the dredging will begin since no specific date has been established. As noted in Chapters 2 and 4, Volume 4, the estimated time to complete the dredging is 8 to 18 months.

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J-018-170

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269	4	2-46	4	2.6.1	GDAWR	<p><u>2.6 Alternative 2: Former SRF, 2.6.1 Operation</u></p> <p>1) Access to the site is from existing primary (Marine Drive and Sumay Drive) and secondary roads (4th Street and Main Street) through Naval Base Guam and into the Guam Economic Development and Commerce Authority (GEDCA) lease area.</p> <p>2) No decision has been made at the present time in connection with the future reuse of the Former SRF lands to include a new lease for commercial ship repair facility purposes beyond the current 2012 lease expiration date.</p>	<p>1) The DEIS fails to show on a map where the GEDCA lease area is located. The FEIS needs to show on a map where the GEDCA lease area is located.</p> <p>2) The DEIS fails to give a date when the GEDCA lease will expire only a year. The FEIS needs to give a date along with year on when the lease will expire.</p>

J-018-170

Thank you for your comment. The lease area has been added to Figures 2.5-1 and 2.6-1. The lease expires on October 1, 2012.

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J-018-171					GDAWR	Figure 2.6-1 Alternative 2 – Former SRF	<p>1) Figure 2.6-1 of the DEIS is missing the outline of the reef and the reef's name that will be impacted by the dredging right after the bend and right above Jade Shoals. The FEIS needs to include the outline and name of the reef that will be impacted.</p> <p>2) Figure 2.6-1 of the DEIS is missing the name of the reef between Western Shoals and Big Blue Reef. It just says reef. The FEIS needs to include the proper name of the reef between Western Shoals and Big Blue Reef.</p>
J-018-172	270	4	2-47		GDAWR	2.6.2 Shoreside Structures, Security/Biosecurity. Biosecurity A comprehensive Biosecurity Plan is being developed in cooperation with the USFWS, USDA, USGS, National Invasive Species Council (NISC), the state of Hawaii, the Commonwealth of the Northern Mariana Islands (CNMI), and GovGuam.	The DEIS fails to give a date when the Biosecurity Plan is expected to be completed. The plan needs to be completed prior to the release of the FEIS and included within the FEIS. Furthermore, funds for implementing the Biosecurity Plan needs to be provided by DOD as mentioned in 40 CFR Section 1505.3. This section states that agencies may provide for monitoring to assure their decisions are carried out and should do so in important cases.
	271	4	2-49	10		2.6.2	

J-018-171

Thank you for your comment. The reef that the commentator notes near Jade Shoals does not have an official name.

This figure has been revised to show the name of the reef (Middle Shoals) between Western Shoals and Big Blue Reef.

J-018-172

Thank you for your comment. A percentage increase of invasive species cannot be predicted with any accuracy and the species that may become problematic are difficult to determine. The Micronesia Biosecurity Plan (MBP) that is being developed in conjunction with the proposed action will provide an analysis. The MBP will also provide inspection recommendations for cargo entering and leaving Guam and will recommend steps to prevent spread of invasive species. The MBP will address all aspects of the potential for the transport of brown treesnake and all potential non-native invasive species to other Pacific Islands and to Guam due to military activities originating on Guam. The Navy is in ongoing discussions with the U.S. Fish and Wildlife Service regarding specific procedures and requirements for inspections of cargo and these will be incorporated into the EIS. The MBP is being completed in stages. The first stage is the risk assessments and these are scheduled for completion through this summer. The final approved MBP is expected in spring of next year. Because the MBP will not be completed in time for some of the proposed actions, interim measures are proposed and these have been added to the FEIS in Chapter 10 of Volume 2. A commitment to the DoD-related portion of the MBP for all high risk and high priority activities has been added to the FEIS. The plan would be coordinated and discussed with GDAWR as well as other parties and a Memorandum of Understanding or similar agreement with these parties would be sought. Information pertaining to the MBP and general biosecurity issues are discussed in Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species, and in Volume 2, Chapter 11, Section 11.2.2.6 for marine

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J-018-173

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272	4	2-53	16	2.6.3	GDAWR	2.6.3 Construction, 2.6.3.1 Alternative 2 - Specific Surveys of these buildings have been conducted for asbestos-containing material, lead-based paint, and PCB-containing electrical equipment.	The DEIS fails to include a report for the building surveys. Therefore, no results are provided for the asbestos-containing material, lead-based paint, and PCB-containing electrical equipment. The FEIS needs to include a report with results for the survey data.
273	4	2-56			GDAWR	Figure 2.6-5 Former SRF Dredge Areas	Figure 2.6-5 of the DEIS fails to indicate the name of the reef that will be impacted by dredging and is right above Jade Shoals. The FEIS needs to show the name of the reef in Figure 2.6-5.
274	4	2-6	16	2.3	GDAWR	2.3 Security/Force Protection The minimum buffer distance between a security threat and a potential naval target is 450 ft (137 m), although the minimum could be greater depending on the force protection conditions. In addition to the specified minimum distances, the Commander, U.S. Pacific Fleet has discretionary authority to determine separation distances based on site-specific assessments of potential threats. Wharf locations that did not meet security/force protection requirements were not considered feasible.	The DEIS is not clear on whether the minimum buffer distance is 450 ft (137 m) or not in regard to the wharf location. Wharf locations are being dismissed if they did not meet the minimum buffer distance, however the distance is not clearly stated in the alternatives because it is discretionary. The FEIS needs to state exactly what the minimum buffer distance is for the CVN project and what distance was used for each of the alternatives. This needs to be stated in this section. Is the minimum buffer distance 450 ft (137 m) or is it another distance?

species. Volume 2, Chapter 14 (marine transportation) has been updated to include estimated increases of cargo traffic associated with both organic growth and the military buildup.

J-018-173

Thank you for your comment. A reference has been provided for the building surveys and text has been updated to indicate results.

The reef indicated in the comment does not have a name.

For clarification purposes, Section 2.3, Volume 4 has been revised to add text to state that the minimum security clearance distance under Alpha and Bravo security conditions is 250 ft (76 m) from the aircraft carrier hull. Under Charlie and Delta security conditions, the minimum distance is 450 ft. (137 m). The Commander, U.S. Pacific Fleet has discretionary authority to change/increase those distances based upon assessments of site specific threats.

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J-018-174							
275	4	2-7	2	2.3	GDAWR	2.3 Cost, technology, and logistics Cost, technology, and logistics refers to how expensive the project would be, whether or not there would be technological limitations to project execution, or whether logistically, the project is not feasible due to distance from support facilities, for example. Factors associated with higher project costs could include construction techniques and/or labor or materials. Wharf locations that did not meet the cost, technology, and logistics criterion were dismissed from further analysis.	The DEIS fails to state exactly the cost, technology, and logistics criterion. The FEIS needs to state specifically what these criteria are. For example, what are the cost limitations and what is the minimum distance from the support facilities. None of these are mentioned.
276	4	2-7	11	2.3.1	GDAWR	2.3.1 Wharf Location Alternatives Considered. Guam Commercial Port, Security/Force Protection Location number (3) was dismissed as a potential aircraft carrier berthing option because it would be vulnerable to attack from ships in the Philippine Sea and difficult to defend.	The DEIS fails to state how it would be vulnerable and difficult to defend. A proper analysis for this location needs to be conducted addressing these reasons and included in the FEIS. The rationale can be applied to the other locations as well so an explanation is needed. For example, it is just as easy to fire a missile to the Glass Breakwater as it is to Polaris Point

J-018-174

Thank you for your comment. Additional text has been added to these sections for clarification.

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J-018-175					GDAWR	2.3.1 Wharf Location Alternatives Considered, Guam Commercial Port, Operational/Navigational Locations at the port proximal to the channel were dismissed because the required buffer zones around the aircraft carrier would effectively close harbor access to the majority of the available commercial port operations including cargo handling. This is an untenable situation for Guam, which relies on receiving over 95% of its commodities by sea.	The DEIS fails to state what the required buffer zones are. A proper analysis for this location needs to be conducted addressing these reasons and included in the FEIS.	
J-018-176	5				GDAWR	Siting and construction of associated facilities to support training and operations for the Army AMDTF on Guam.	Does Guam have the capacity to support training and operations for the Army AMDTF, in addition to Threatened and Endangered Species Recovery, private civilian build up, private businesses, and other foreseeable development?	
J-018-177	5				GDAWR	Percentage of Habitat Type on Guam that is Affected = 0.07% for Overlay refuge, essential habitat for bats and kingfishers, and crow, crow recovery zone.	The FEIS must clarify the Percentage of Habitat type on DoD lands that is affected by the current DEIS and other past projects (including projects prior to 2005, informal consultations and projects only requiring EAs). Table should include all losses, including any clearing for roads, borrow pits, etc.	

J-018-175

Thank you for your comment. Section 2.3, Chapter 2, Volume 4 provides the specific buffer zone distances for Conditions Alpha and Bravo and Charlie and Delta. As noted in this section, the minimum buffer distance between a security threat and a potential naval target is 450 ft (137 m) under Charlie and Delta security conditions, although the minimum could be greater depending on the force protection conditions. For Alpha and Bravo security conditions, the minimum specified distance is 250 ft (76 m) from the aircraft carrier hull. Additional text has been added with these clarifications.

J-018-176

Thank you for your comment. These factors were included in the planning analysis for Army AMDTF facility/space requirements. Effects on threatened and endangered species are addressed in Chapter 10 of Volume 5.

J-018-177

Thank you for your comment. Collective impacts including percentage of habitat on Guam affected is described in Volume 7. For cumulative impacts DoD determined that review of projects back to 2005 was reasonable. Past actions are accounted for by using the current habitat as baseline to evaluate impacts. Cumulative impacts have been further evaluated in the FEIS.

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J-018-178 280	5	10-11/12		10.2.3.1	GDAWR	Munitions Storage Alternative 1 (Preferred Alternative)...Wildlife	Although Volume 2, Section 10.2.2.6 identifies BMPs while removing the actual habitat of the Mariana fruit bat, Mariana crow, and Guam Micronesian Kingfisher, the FEIS must compensate for the loss of 2.3 acres of habitat that will be cleared by this action.
281	5	10-12	1	10.2.3.1	GDAWR	<i>Mariana Fruit Bat</i> : Impacts would be mitigated to less than significant with a suite of mitigation actions as described in Volume 2, Section 10.2.2.6. Construction would be during the day so would result in a less than significant impact from noise and activity.	Mitigation actions should include the compensation of foraging ground lost within the 2.3 ac. There is native vegetation in the area, such as the native cycad, that bats feed on. (applies to other proposed Alternatives in this section).
282	5	10-13	1-3	10.2.3.1	GDAWR	Operation: no impacts to vegetation; less than significant impacts to wildlife and special-status species.	There is no mentioning of impacts to access to the HMU for non-DoD personnel. The FEIS needs to clarify how unescorted access to the HMU during operations will be provided, to GDAWR or other cooperators.
283	5	10-14	1	10.2.3.2	GDAWR	<i>Mariana fruit bat</i> . Because construction would occur at night, impacts would be less than significant.	Delete 'night' and insert 'day'. Night work will have a greater than significant impact for the fruit bats.
284	5	10-19		Table 10.2-8	GDAWR	No mitigation required for Munitions storage alternatives and weapons emplacement alternatives under Vegetation.	Mitigation should be addressed and implemented for construction of the preferred alternative for the Munitions storage and weapons emplacement. Table 10.2-6 and 7 indicated SI-M under construction for special status species. Access for recovery of species will be impacted as well as native vegetation. Impacts to recovery need to be mitigated.

J-018-178

Thank you for your comment.

As currently noted in Chapter 10 of Volume 5, mitigation measures, including compensation for the 2.3 acres of habitat removed, would be included under the mitigation measures described in Volume 2, Chapter 10.

Access restrictions will only be put in place if required for the military mission. If access restrictions are necessary the Navy will work with GDAWR to provide the needed monitoring data.

The wording will be changed to indicate construction would be during the day.

Impacts to vegetation for the munitions storage and weapons emplacement would be less than significant. This is for vegetation only - habitat is assessed separately for wildlife and special-status species. Conservation measures proposed for wildlife and special-status species as specified in Table 10.2-8.

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J-018-179 285	5	10-4	1 st bullet point	10.2.1.3	GDAWR	Activities associated with the military expansion (i.e., construction, expansion, renovation, and military training activities) may result in habitat loss and physical disturbance...	The DEIS should read "Activities associated with the military expansion... will result in habitat loss and physical disturbance... Native wildlife, such as bats and crows, adapted to degraded habitat or habitat dominated with <i>Pitex</i> . These forest types are just as important than forest dominated with native species. Impacts will be significant and will need to be mitigated."	
J-018-180 286	5	10-4	3 rd bullet point	10.2.1.3	GDAWR	The issue 'of utmost concern' is BTS interdiction and an effective, enforceable, and fail-proof procedure for inspecting all military cargo, personnel, and equipment entering the CNMI must be instituted. The Navy must assure funding to sustain a 100% inspection rate of all cargo, vehicles, munitions, and household goods.	The issue of utmost concern is not just BTS entering CNMI (and elsewhere). Invasive species entering Guam is of great concern. The FEIS and ROD must state that the Navy shall fund the development and implementation of a sustainable bio-security plan prior implementation of any other actions proposed in the DEIS.	
J-018-181 287	5	10-6		10.2.2.2	GDAWR	Headquarters/Housing Alternative 2.	The FEIS must not include Alternative 2 as a viable alternative as it includes the removal of over 376 acres of habitat in the Navy/AirForce Barrigada area. Guam tree snails were found in this site and the area is important habitat for the Marianas fruit bats.	
288	5	10-7		Figure 10.2-1	GDAWR	Vegetation and Special-Status Species Impacts, Headquarters/Housing Alternative 2- Navy and Air Force Barrigada.	The FEIS should relocate the Army Housing for Alternative 2 to minimize the amount of limestone forest removed. Shifting the location of the HQ/housing to the WSW of Navy Barrigada (dominated with shrub/grasslands and developed lands) will minimize significant impact to limestone forest and Guam tree snail.	

J-018-179

Thank you for your comment. The text referenced are issues identified during the scoping process and do not describe the actual analysis conducted. No changes are proposed.

J-018-180

Thank you for your comment. The DoN is developing a Micronesia Biosecurity Plan (MBP) to address potential non-native invasive species impacts associated with this EIS as well as to provide a plan for a comprehensive regional approach. Brown tree-snake issues are included in the MBP, however, the MBP encompasses other potentially invasive non-native species. The MBP will include risk assessments for invasive species throughout Micronesia and procedures to avoid, minimize, and mitigate these risks. It is being developed in conjunction with experts within other Federal agencies including the National Invasive Species Council (NISC), U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), the US. Geological Survey (USGS), and the Smithsonian Environmental Research Center (SERC). The plan is intended to be a comprehensive evaluation of risks in the region, including all Marine Corps and Navy actions on Guam and Tinian. The Navy will develop biosecurity measures to address non-native invasive species issues that will supplement existing practices. For additional information on the MBP and existing and interim measures for non-native invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2, Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-018-181

Thank you for your comment. Alternative 2 is considered a viable alternative but one of the reasons it is not preferred is because of the

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J-018-182 289	5	10-8	2	10.2.2.2	GDAWR	<i>Special-status species.</i> Proposed construction activities would impact the Guam tree snail.	The FEIS should relocate the Army Housing for Alternative 2 to minimize the amount of limestone forest removed. Shifting the location of the HQ/housing to the WSW of Navy Barrigada (dominated with shrub/grasslands and developed lands) will minimize significant impact to limestone forest and Guam tree snail.
290	5	10-8	2	10.2.2.2	GDAWR	<i>Special-status species.</i> Mitigation would include the relocation of snails to another suitable location. With this mitigation, impacts would be less than significant.	Removal/ relocation of snails may be stressful for the species and result in mortality. The suitable location for the species is where they are found as of now. Avoidance of the species shall be the preferred action. By relocating the HQ/housing, WSW in the area, the tree snails will be less impacted.
291	5	10-8	3	10.2.2.2	GDAWR	Other species that are potentially present at Barrigada have not been documented as present in the proposed Alternative 2 project areas and would not be impacted by construction. They will not be considered further under this alternative.	The Mariana fruit bat is known to use Central Guam, including Navy Barrigada, as a corridor between Northern and Southern Guam. The forest present in Navy Barrigada holds refuge for individuals making that journey as a rest spot or foraging ground. The FEIS must address fruit bats further under this alternative.
292	5	10-8	5	10.2.2.2	GDAWR	<i>Operation Wildlife.</i> Operational activities would generate noise throughout the area. However, migratory bird species or other native wildlife that would otherwise use the area are common throughout Guam and are generalists that can utilize numerous habitats that are abundant throughout Guam.	Native wildlife that most likely will use the area is the Mariana fruit bat. The Guam population is less than 100 individuals and is not common. Noise generated by operations will have an impact to bats in the area when present.

biological resources present in the area. The Army housing for this alternative cannot be relocated to the southwest because this property in National Guard land.

J-018-182

Thank you for your comment. The Army housing for this alternative cannot be relocated to the southwest because this property is National Guard land. It is recognized that relocation of the tree snails could be stressful and result in mortality. This impact is one reason why this alternative is not the preferred alternative. If this alternative is selected a plan would be developed for movement of the snails and GDAWR would be consulted. The use of Navy Barrigada as a corridor for movement of fruit bats between northern and southern Guam has not been documented in any reports we are aware of. This area is not recognized by USFWS as recovery habitat or recovery habitat for the fruit bat. The discussion cited is for wildlife impacts. A discussion of fruit bat impacts from construction has been added under the Special-Status Species section in the FEIS.

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J-018-183	5	10-8	9	10.2.2.2	GDAWR	Alternative 2 Potential Mitigation Measures: A plan to translocate Guam tree snails to another site on DoD lands would be developed and implemented after approval by the USFWS.	Coordination with GDA should occur for the mitigation of the Guam tree snail.
J-018-184 294	5	10-9		10.2.2.3	GDAWR	Munitions Storage Alternatives	The FEIS should consider the use of existing Munitions Storage as an alternative. There are existing igloos that require refurbishing and renovations to meet required standards. These igloos should be utilized by the AMDTF.
295	5	2-15		2.4.3	GDAWR	Four alternatives for the emplacement sites. Detailed information on the weapons emplacements is contained in a Classified Appendix L...	All alternatives (1-4) encompass valuable habitat and jeopardize recovery of ES in northern Guam. The preferred Alternative 4 includes "Area 50" which is a valuable conservation area. FEIS should identify how impacts to ES recovery will be compensated.
296	5	2-4	5	2.3.2.1 Administration/HQ and Maintenance Facilities	GDAWR	The administration/HQ and maintenance facilities would comprise approximately 28 acres (ac) (11 hectares [ha]) of developed land including a battalion headquarters, company facilities, and tactical vehicle maintenance facilities.	The FEIS must define 'developed land'. Is open grassland or mowed land considered 'developed land'? If so, open grassland (mowed land) is habitat for migratory birds. The proposed facilities for the Army AMDTF should be sited with facilities proposed for the Marines.
297	5	4-14		4.2.3	GDAWR	Munitions Storage Alternatives:	The FEIS must indicate an alternate site for munitions storage away from the HMU. Placing ECMs adjacent to the HMU will negate the mitigation site. The anticipated increase in security associated with the ECMs will hamper unescorted access to local and federal resource agencies to complete mitigation activities within the HMU as committed to under the Biological Opinion.

J-018-183

Thank you for your comment.

Coordination with GDAWR would occur if tree snails were to be moved.

Endangered species recovery has been addressed under conservation measures. Additional conservation measures being developed in conjunction with the Section 7 consultation with USFWS are being added to the FEIS.

Developed land is defined in Volume 2, Chapter 10. The definition has been updated in the FEIS to include mowed grass areas. Impacts to migratory birds in all areas has been considered under the Wildlife section.

The proposed munitions storage area at Andersen AFB will not impinge on the requirements of the Biological Opinion (BO). Access will be allowed to meet the BO requirements.

J-018-184

Thank you for your comment. Existing munitions storage structures with sufficient size and storage requirements are not available.

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#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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298	6	12-15	2	12.2.4.1	GDAWR	<i>Wildlife</i> : Based on studies by others and observations in other similar areas on the former FAA parcel and South Finegayan, the only native bird species likely to be present in the project areas are the yellow bittern and possibly the Pacific golden plover in open areas; both species are ubiquitous throughout Guam.	Former FAA and South Finegayan serves refuge for breeding yellow bitterns. Mitigation actions will need to be in place for the species in duration of construction. Construction will not take place if active nesting occurs; construction will continue when the nesting is complete.
299	6	12-33	3	12.2.6.1 Alternative 1: Off Base Roadways	GDAWR	Impacts to vegetation would be less than significant because no primary limestone forest would be removed.	The vegetation to be removed for GRN # 9,10,22, 22A, 38A, 39A, 41, 42A, 57, 124, 3, 35, and 36, may not be primary limestone forest, however, does provide habitat for wildlife. Road expansion to benefit DoD should be considered as impacting habitat and be included in the total amount of habitat lost when calculating for compensation.
300	6	12-10	1	12.2.3.1 Potable water Alternative 1 (preferred alternative)	GDAWR	<i>Mariana crow</i> : Based on the removal of Overlay Refuge and essential habitat areas, there would be significant impacts to the Mariana crow. This significant impact would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	Mitigation measures/BMPs described do not help the species. Any clearing of vegetation in the Overlay Refuge and/or essential habitat areas should be compensated. DoD shall compensate the loss of foraging and nesting areas from the construction by reforesting badlands, or rehabilitating disturbed forest in adjacent areas to provide more nesting and foraging areas for the crow.
301	6	12-10	2	12.2.3.1 Potable water Alternative 1 (preferred alternative)	GDAWR	<i>Micronesian kingfishers</i> : Based on the removal of Overlay Refuge and essential habitat areas, there would be significant impacts to the Micronesian kingfisher. This significant impact would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	Mitigation measures / BMPs do not help the species. Any clearing of vegetation in the Overlay Refuge and/or essential habitat areas should be compensated. DoD shall compensate the loss of foraging and nesting areas from the construction by reforesting badlands, or rehabilitating disturbed forest in adjacent areas to provide more nesting and foraging areas for the kingfisher.

J-018-185

Thank you for your comment.

The FEIS has been updated to note that the area serves as a refuge for breeding yellow bitterns, per your comment. Based on EO 13186 on "Responsibilities of Federal Agencies to Protect Migratory Birds", and the subsequent Memorandum of Understanding between DoD and USFWS signed on July 31, 2006, the FEIS has been updated to note that the DoD would minimize impacts to all migratory birds during the project. Due to the ubiquitous nature of the yellow bittern on Guam per USFWS, DAWR, and other reports and our field observations during project field studies, the proposed removal of habitat is not expected to adversely affect the population of yellow bitterns on Guam.

Removal of vegetation is considered significant if it is primary limestone vegetation. Removal of habitat is considered separately under Wildlife and Special-Status species. Road improvements are in already disturbed corridors except for GRN 124, a connector road at Finegayan. Impacts to rail recovery habitat that has recently been delineated by USFWS in that area has been added to the FEIS.

Conservation measures and BMPs to compensate for impacts to the Mariana crow and Micronesian kingfisher are being discussed in the ongoing Section 7 consultation with USFWS and are to be incorporated in the FEIS.

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302	6	12-10	3	GDAWR	<p><i>Guam rail</i>: Proposed construction activities would include the loss of shrub/grassland habitat that is potential foraging and nesting habitat for the Guam rail... Because the Guam rail is extirpated in the wild and most of Guam has habitat that is potentially suitable for the recovery of the species, removal of these areas due to construction would result in a less than significant impact.</p>	<p>Andersen AFB's INRMP clearly defines the recovery efforts for the Guam rail on Andersen proper. The INRMP and USFWS Recovery Plan for the Guam rail should be included during the decision making process. Removal of the habitat due to the proposed action will have significant impact to the recovery efforts for the rail.</p>
303	6	12-10	Table 12.2.3	GDAWR	<p>Total area removed [ac (ha)]: Overlay refuge = 11(4.5); Bat and kingfisher habitat = 14 (5.7); Crow habitat = 14 (5.7); Recovery zone-crow = 19 (7.7).</p>	<p>The FEIS needs to clearly define the cumulative impact to essential habitat (recovery zones). How much essential habitat remains for the Special-status species recovery? The amount of habitat removed from this and previous projects has a huge cumulative impact. The table misrepresents the true impact.</p>

J-018-186

Thank you for your comment.

USFWS has recently delineated recovery habitat for the Guam rail and this information has been incorporated into the FEIS. Discussion of impacts and conservation measures are ongoing under Section 7 with the USFWS and are being incorporated into the FEIS.

Collective impacts from all proposed actions and cumulative impacts are addressed in Volume 7 of the EIS. Information on habitat remaining for Federal-listed species has been incorporated into the FEIS, Volume 7.

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J-018-187	6				GDAWR	AAEB and Andersen South: Impacts would be the same as those under Alternative 1... for Construction (Vegetation, Wildlife, Special-Status Species).	Comments under Alternative 1 apply for Basic Alternative 2. These are: 1) Any removal of vegetation is significant. All vegetation types are habitat for ES. The wells are located in ES habitat and should be relocated to the 18 ac of developed areas. 2) The table does not clearly define the cumulative impact to vegetation. The table is misleading on the impact to ES recovery. FEIS must define the amount of remaining vegetation for Special-status species recovery. Construction noise and activity will have a temporary and permanent direct impact to fruit bats. Temporary: fruit bats will be forced out of foraging area. Permanent: fruit bats will no longer forage in the area. Avoiding construction in the area will minimize impacts to ES. Mitigation measures described in volume 2, section 10.2.2, are BMPs and not compensation for loss of habitat. The FEIS must clarify how and when DOD will compensate by reforesting badlands, or rehabilitating disturbed forest in adjacent areas to provide habitat. The FEIS should reference AAFB's INRMP and the USFWS Recovery Plan for the Guam rail when choosing alternatives. Removal of habitat will have significant impact to the recovery efforts for the Guam rail. The FEIS must focus on the analysis of impacts to habitat based on DOD lands.
304		12-11	3	12.2.3.2 Basic Alternative 2			

J-018-187

Thank you for your comment. Removal of vegetation is considered significant if it is primary limestone vegetation. Removal of habitat is considered separately under Wildlife and Special-Status species. Collective and cumulative impacts are addressed in Volume 7 of the EIS. Location of wells and waterlines is conceptual and may be adjusted after additional water supply studies. Disturbance outside existing utility corridors and rights-of-way would be minimized. During construction, monitoring will be conducted and construction would be halted if fruit bats are present. This has been made clear in the FEIS. Permanent impacts due to removal of habitat have been evaluated and conservation measures have been proposed. The Navy is currently in Section 7 consultation with USFWS and various conservation projects are being discussed, in addition to those proposed in Volume 2, Chapter 10 of the DEIS. These are being incorporated into the FEIS.

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#	Location			Section	Commenter	EIS/OEIS Statement	GDAWR's Comment
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305	6	12-12	2	12.2.3.2 Basic Alternative 2	GDAWR	<i>Barrigada Wildlife</i> : Smaller, less mobile species, and those seeking refuge in burrows, could inadvertently be killed during construction activities; however, long-term, permanent impacts to populations of such species would not result because these species are abundant in surrounding areas and would rapidly repopulate suitable portions of the affected area.	Populations tend to reach capacity of the habitat they inhabit. Loss of habitat will permanently displace individuals and overall population will be impacted. Removal of the population of such species (skinks, geckos, insects) can result in increase of pressure for such species in surrounding areas resulting to a slow production or lack of availability of prey items for the birds found in or visiting the area as a foraging ground.
306	6	12-12	3	12.2.3.2 Basic Alternative 2	GDAWR	<i>Barrigada</i> : Therefore, impacts to wildlife due to proposed construction activities at Andersen AFB would be less than significant under Alternative 1.	Sentence must be corrected. Section is regarding Air Force Barrigada and Alternative 2, not Andersen AFB, and Alternative 1.
307	6	12-12/13	5	12.2.3.2 Basic Alternative 2	GDAWR	<i>Guam tree snail</i> : Proposed construction activities would remove 0.5 ac (0.2 ha) of primary limestone forest habitat. This area would be surveyed prior to removal of vegetation and if present, tree snails would be relocated.	Removal of primary limestone forest should be avoided. If avoidance is impossible and tree snails are present, the translocation of snails would need to be coordinated with GDAWR.
308	6	12-12/13	1	12.2.3.2 Basic Alternative 2	GDAWR	<i>Guam tree snail</i> : This area would be surveyed prior to removal of vegetation and if present, tree snails would be relocated.	Removal of primary limestone forest should be avoided. If avoidance is impossible and tree snails are present, the translocation of snails would need to be coordinated with GDAWR.
309	6	12-13		Table 12.2-6	GDAWR	Under Basic Alternative 1 (preferred); No primary limestone forest would be removed. [LSI].	A total of 16 ac (6.5 ha) of limestone forest will be removed under the preferred Alternative for potable water (Table 12.2-2). The limestone forest is disturbed, however, it is important habitat and serves the same purpose as primary limestone forests for ES recovery. The FEIS must define compensation for all lost habitat.

J-018-188

Thank you for your comment. Although the land available for occupation by wildlife species would be reduced, populations of all species known to be present (that are not Special-Status species) are high on Guam. Reference to Andersen AFB will be removed. Removal of primary limestone forest cannot be avoided based on all planning criteria under this alternative (which is not the preferred alternative). Any translocation of tree snails would be coordinated with GDAWR. Impact to disturbed limestone vegetation is not considered a significant impact under the vegetation category, however removal of this habitat is considered significant under the Special-Status species category. Conservation measures for removal of this habitat are included in the EIS.

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J-018-189 310	6	12-13	3	12.2.3.3 Summary of Impacts	GDAWR	Impacts would be less than significant to vegetation because no limestone forest would be removed.	Table 12.2-2, 2-3,2-4, and 2-5 summarize the total area removed under each Alternative. These vegetation communities are habitat to Guam's wildlife. Disturbed limestone forest is as valuable as primary limestone forest. The FEIS must define compensation for all lost habitat.
311	6	12-13	3	12.2.3.3 Summary of Impacts	GDAWR	Impacts to wildlife would be less than significant because there would be no diminished population sizes or distributions of migratory birds or regionally important native animal species.	Removal of vegetation will alter the normal behavior of the species found in the project sites. Altering of behavior because of the use of "force" (in this case "clearing") is considered as "take" under ESA or MBTA. Wildlife impacts will be significant due to construction. Population size and/or distribution for most species will be negatively altered as result to the action.
312	6	12-13	3	12.2.3.3 Summary of Impacts	GDAWR	Significant impacts would result from construction of water wells and waterlines at Andersen AFB because some of the areas where they would be placed is Overlay Refuge and recognized essential habitat for the Mariana fruit bat, Micronesian kingfisher, and Mariana crow. These impacts would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	The FEIS must identify adequate compensation for the loss of Overlay Refuge and recognized essential habitat for Special Status Species. Volume 2, section 10.2.2 refers to BMPs and is not adequate compensation of the take of habitat. GDAWR recommends that DoD set aside equal amount of acreage to be used for recovery.
313	6	12-14		Table 12.2-7	GDAWR	Vegetation: (for all Alternatives) None specifically for vegetation.	Mitigation measure must include avoidance of unnecessary clearing of vegetation, avoidance of native tree species such as <i>Cycas marianensis</i> , and DoD must obtain a clearing permit at DoAg.

J-018-189

Thank you for your comment. An impact to disturbed limestone forest vegetation is not considered significant under the vegetation category, however removal of this vegetation type is considered significant under the Special-Status species category because it is potentially valuable habitat. The statement referenced will be modified to note that there are no regionally important native animal species present in the project area (except special-status species) and there would be no significant impact to migratory bird populations. It is recognized that there could be fewer total birds due to the loss of habitat. These determinations are in accordance with the criteria outlined in Section 12.2.1.2. Conservation measures for removal of habitat for Special-Status species is currently being discussed with USFWS under the Section 7 consultation process. Revision of BMPs and conservation measures in the DEIS from this consultation are being incorporated into the FEIS. Clearing of vegetation has been avoided to the extent practicable based on all planning considerations. As noted above, an impact to vegetation other than primary limestone vegetation is not considered significant under the vegetation category, however removal of other vegetation types may be considered significant under the Special-Status species category.

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314	6	12-14	Table 12.2.7	GDAWR	Wildlife and Special Status Species: (Alternative 1 and 2): At Andersen AFB the construction period would be limited if Mariana crows were present and there would be no work at night to avoid impacts to the Mariana fruit bat.	The FEIS must identify who will be responsible to monitor the presence of crows in the construction area, survey methods to be used and ensure that all data collection is coordinated through GDAWR.
315	6	12-14	Table 12.2.7	GDAWR	Wildlife and Special Status Species: (Alternative 1 and 2): At Andersen AFB the construction period would be limited if Mariana crows were present and there would be no work at night to avoid impacts to the Mariana fruit bat.	Fruit bats are known to roost in foraging areas and not return to the colony. The construction areas must be surveyed prior to initiation of work. The biologist completing the survey must report the presence of species to GDAWR. Information must be classified to ensure no poaching of bats follows the report. Coordination with GDAWR and USFWS will be necessary.
316	6	12-14	Table 12.2.7	GDAWR	Wildlife and Special Status Species: (Alternative 1 and 2): Establishment or expansion of new ecological reserves and conservation areas would be considered.	GDAWR agrees that the establishment of new and expansion of existing ecological reserves and conservation areas should be implemented in compensation of habitat loss due to construction for the build up.
317	6	12-14	Table 12.2.7	GDAWR	Wildlife and Special Status Species: (Alternative 1 and 2): Sea turtle natural history studies would be undertaken to better understand the species and benefit long-term military mission planning.	Sea turtle natural history studies should be included in CVN issues and not here. The sea turtle study should be replaced with fruit bat, crow, kingfisher, stalling, or rail studies (i.e., appropriate topics for this section).
318	6	12-14	Table 12.2.7	GDAWR	Wildlife and Special Status Species: (Alternative 1 and 2): High quality habitat areas would be fenced to exclude invasive species and foraging plots would be established within.	The FEIS should define "high quality habitat" for the purposes within the document. Fencing placement would need to avoid further clearing. Area surrounded by road access will be appropriate, such as Hunting Area A.

J-018-190

Thank you for your comment.

The FEIS has been modified to state that DoD will provide biologists for monitoring during construction. Methods are to be developed. Data would be available to GDAWR.

The FEIS has been modified to specify inspections prior to initiation of work, as well as inspections during construction. Sightings will not be made public.

New ecological reserves are being considered in conjunction with on-going Section 7 consultation with USFWS.

Sea turtle natural history studies will be removed from this volume per the suggestion.

Establishment of high quality habitat areas are currently being discussed in the Section 7 consultation with USFWS and this information is being incorporated into the FEIS. Removal of any additional habitat would be avoided to the extent possible.

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J-018-191 319	6	12-14		Table 12.2.7	GDAWR	Wildlife and Special Status Species: (Alternative 1 and 2): Fencing, patrols, or cameras would be used to prevent poaching.	Fencing does not prevent poaching; enforcement of regulations does. The use of roadside patrols or cameras will not prevent poaching; patrols must go in the forest where poachers go. Until recent restrictions of access to AAFB MSA, GDAWR Conservation Officers have been effective in apprehending poachers on AAFB property (i.e., in the forest where security patrols are not allowed to enter). An MOA needs to be established to allow the DoD to accept the service that local enforcement is able to provide to protect Guam's natural resources. The decision to deny unescorted access should be analyzed for the impacts on natural resources, including ES recovery.

J-018-191

Thank you for your comment. Fencing as a conservation measure is currently being discussed with USFWS under the Section 7 consultation. The Navy is proposing to hire at least one conservation law officer for Guam. This is being added to the FEIS. Access to DoD lands on Guam for patrolling by GDAWR is a DoD Joint Region policy matter and not EIS-related.

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J-018-192	6				GDAWR	Wildlife and Special Status Species: (Alternative 1 and 2): Greenbelt development would be considered for watershed protection, wildlife control, and restoration of habitat.	Mitigation may reduce impacts, however the FEIS must identify compensation to be developed and implemented for loss of habitat.
320		12-14		Table 12.2.7			

J-018-192

Thank you for your comment. Conservation measures and BMPs to avoid and minimize impacts to ESA-listed species are being discussed in the ongoing Section 7 consultation with USFWS and are to be incorporated in the FEIS. These measures will also benefit wildlife and other special-status species.

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J-018-193 321	6	12-14		Table 12.2.7	GDAWR	Wildlife and Special Status Species: (Alternative 2): Conduct survey in limestone forest water well footprint at Navy Barrigada and, if found, translocation of Guam tree snails.	Coordination with GDAWR will need to occur to develop a mitigation plan to translocate Guam tree snails. Recent coordination with DoD on resource issues has been less than exemplary. DoD must respect the Sikes Act that provides the jurisdiction for the local resource agencies to monitor Guam's natural resources on DoD property.
322	6	12-14		12.2.4 Wastewater	GDAWR		A map illustrating basic alternative 1a and 1b should be included in the EIS/OEIS.
323	6	12-15	1	12.2.4.1 Basic Alternative 1a (preferred Alternative) and 1b.	GDAWR	Construction: Vegetation: Assuming the entire 1,000 ft (305 m) would need to be cleared, 0.6 ac (0.2 ha) disturbed limestone forest would be cleared, in addition to areas of shrub/grassland and tangantangan. Impacts from this removal would be less than significant because no primary limestone forest would be removed.	The FEIS must redefine the impact as significant. Disturbed limestone forest is important forest habitat for wildlife. Removal of disturbed limestone forest will have significant impact to wildlife occurring at the former FAA parcel to the NDWWTP.
324	6	12-15	2	12.2.4.1	GDAWR	Wildlife: ... both species are ubiquitous throughout Guam.	The yellow bittern and Pacific golden plover are ubiquitous throughout Guam, and are often, within the proposed project site. They are protected under the MBTA. Forcing the species away from the area due to construction is considered take. Nesting birds should not be disturbed and allowed to fledge their young.
325	6	12-15	3	12.2.4.1	GDAWR	Wildlife: Therefore, impacts to wildlife due to proposed construction activities at Andersen AFB would be less than significant under Alternative 1a.	Paragraph 1 in page 12-15 identifies former FAA parcel to the NDWWTP for the construction of a new sewer line. DEIS is inconsistent with areas it is discussing. The sentence needs to be corrected to read former FAA, not Andersen AFB.

J-018-193

Thank you for your comment.

Coordination with GDAWR would be consulted if Guam tree snails were to be moved. DoD intends to coordinate with GDAWR on natural resource management issues on Guam.

The map showing wastewater alternatives 1a and 1b is provided in Chapter 2 of Volume 6. Reference to these figures has been added to the FEIS.

An impact to vegetation other than primary limestone vegetation is not considered significant under the vegetation category, however removal of habitat of any vegetation type is considered separately under the Wildlife and Special-Status species categories of the analysis.

The proposed actions are not expected to adversely affect the population of migratory bird species that may be present, therefore impacts were determined less than significant.

The reference to Andersen AFB has been removed.

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J-018-194	6				GDAWR	<p><i>Special status species:</i> No special status species have been identified in the area in historical studies or in recent project-specific surveys in similarly nearby areas at South Finegayan, former FAA, and GLUP 77 parcel. There would be no impacts to special status species.</p> <p>The <i>Mariana</i> fruit bat and many of Guam's native avifauna (forested birds) were known to occur in the areas mentioned in the DEIS. There have been recent reports of incidental sightings of fruit bats using the areas. There is habitat remaining within the areas that fruit bats use.</p>	
	326	12-15	4	12.2.4.1			
J-018-195	6				GDAWR	<p><i>Basic Alternative 1 (Preferred Alternative):</i> The preferred alternative for solid waste would be the continued use of the Navy Landfill at Apra Harbor until Layon Landfill is opened, which is scheduled for July 2011.</p> <p>The FEIS must identify required recycling programs to reduce the amount of solid waste disposed of on Guam.</p>	
327	12-17	1	12.2.5.1	Solid Waste			
J-018-196	6				GDAWR	<p>Total: 58 ac limestone disturbed; 46 ac mixed limestone/secondary; 11 ac tangatangon; 35 ac scrub; 14 ac mixed herbaceous scrub; and 166 ac developed land.</p> <p>Approximately 133 ac of habitat for wildlife and special-status species will be removed for upgrading roadways. FEIS should indicate the total amount of vegetation to be removed with the proposed actions. The amount of vegetation to be removed continues to accumulate, leaving fragmented habitats for wildlife and special status species.</p>	
	328	12-33		Table 12.2-15			
329	6	12-34	1	12.2.6.1 Alternative 1: off base roadways	GDAWR	<p><i>Wildlife:</i> - however, long-term, permanent impacts to populations of such species would not result because the species known to be present are abundant in surrounding areas. Therefore, impacts to wildlife would be less than significant with implementation of Alternative 1 roadways.</p> <p>The presence of species found in the proposed project site must be addressed whether the species is ubiquitous or not. The ubiquitous nature of the buildup on Guam is destroying the ability of Guam to sustain even the basis of flora and fauna. The FEIS should state that the proposed actions will change Guam forever and not necessarily for the better.</p>	

J-018-194

Thank you for your comment. We are not aware of any official report of species sightings in the area. However, based on the comment, impacts to special-status species will be changed from no impact to a less than significant impact.

J-018-195

Thank you for your comment. The new Layon Landfill is designed to accommodate municipal solid waste from all current and future DoD sources as well as civilian and commercial sources. Based on conservative waste generation rates, the new landfill will reach capacity in approximately 33 years. The DoD will be implementing diversion and recycling programs that will significantly reduce solid waste generation and will help to extend the life of the landfill. Details of these programs have been added to Volume 6, Chapter 2.

The Navy has prepared a Recycling and Solid Waste Diversion Study for DoD Bases, Guam that has established a diversion goal of 50 percent, not including construction and demolition debris. The Study considers the following alternatives: 1) DoD would construct two refuse transfer facilities, one in northern Guam and one in Southern Guam; 2) DoD would implement a source separation recycling program at all facilities; 3) DoD would construct recycling center(s); and 4) DoD would construct a materials resource recovery facility.

Additionally, the Navy has prepared a Construction and Demolition (C&D) Debris Reuse and Diversion Study for DOD Bases, Guam that addresses waste characterization, processing, recycling and disposal of construction debris. Information from this study has been used to update the FEIS.

The C&D study considers the following alternatives: 1) Contractors would continue to process all C&D debris, and DoD would construct a

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J-018-197 330	6	12-34	3	12.2.6.1 Alternative 1: off base roadways	GDAWR	<i>Mariana fruit bat:</i> There would be no temporary direct impacts from noise and activity during construction at Andersen AFB to roosting and nesting activities of the Mariana fruit bat because construction would only occur during the daytime.	The FEIS needs to clarify that there will be direct impacts to fruit bats. Bats are known to occur in and around the proposed project sites (roosting or foraging) at all times of the day. Noise generated by construction will have a significant impact to the species. Mitigation will need to be addressed and implemented. Note: Mariana fruit bats do not nest - they give birth to live young. Nesting should be removed and replaced with foraging.
331	6	12-34	3	12.2.6.1 Alternative 1: off base roadways	GDAWR	<i>Mariana fruit bat:</i> Based on the removal of Overlay Refuge and essential habitat areas, there would be significant impacts to the fruit bat. This significant impact would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	Mitigation measures described in Volume 2, Section 10.2.2 would not lessen the impact for the fruit bat. Impacts would be less by providing alternative undisturbed foraging and roosting grounds for fruit bats to avoid the project sites. In addition, the FEIS must identify how local resource agency will be allowed to continue monitoring the only remaining fruit bat colony on Guam that is located on AAFB property. Without the diligence of GDAWR for the last 30 years, fruit bat foraging and roosting areas would not be known and the proposed activities would proceed without knowing the full impact on the species. It is important that the DoD allow the regulatory agencies to continue monitoring on DoD property to improve DoD's reputation as a good steward of Guam's resources and a cooperater under the Sikes Act.

composting facility to process green waste and 2) DoD would construct a C&D debris central processing facility and a composting facility to process green waste.

Through project specific contractual requirements, DoD contractors would be required to process and divert 50% of C&D debris that is generated on each project. Another alternative would be for the DoD to construct a central processing facility that would be used to recover and reuse or recycle scrap metal, concrete (without lead-based paint), asphalt concrete, and untreated wood. Contractors would be required to haul C&D to this facility. Based on the C&D debris composition assumed in the study, the Navy will be able to achieve a C&D debris waste diversion goal of greater than 50% by the end of fiscal year 2015. A site for the central processing facility is currently being evaluated but will most likely be located in northern Guam. Disposal of C&D debris that is not divertible or recyclable will be disposed at the Navy Hardfill at Apra Harbor. The study also evaluates the construction of a composting facility to handle green waste generated by land clearing activities required for new development.

J-018-196

Thank you for your comment.

The total amount of habitat removed for all proposed actions is given in Volume 7 of the EIS.

The species present in the proposed areas of roadway improvements are described based on available information and extrapolation from other similar areas. Impacts to wildlife were evaluated based on the criteria outlined in Section 12.2.1.

J-018-197

Thank you for your comment.

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332	6	12-34	4	12.2.6.1 Alternative 1: off base roadways	GDAWR <i>Mariana crow</i> : Based on the removal of habitat areas, there would be significant impacts to the Mariana crow. This significant impact would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	Mitigation measures described in Volume 2, Section 10.2.2 would not lessen the impact for the crow. Impacts would be mitigated by providing alternative undisturbed foraging and nesting habitat for crow recovery on DoD property. In addition the FEIS must commit to repatriation of ES on military property. Without allowing the reintroduction of ES on military property, DoD will fail in any attempt to minimize or mitigate for the environmental impacts to ES and their habitat from the military buildup on Guam.
333	6	12-34	5	12.2.6.1 Alternative 1: off base roadways	GDAWR <i>Micronesian kingfisher</i> : Based on the removal of habitat areas, there would be significant impacts to the Micronesian kingfisher. This significant impact would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	Mitigation measures described in Volume 2, Section 10.2.2 would not lessen the impact for the kingfisher. Impacts would be mitigated by providing alternative undisturbed foraging and nesting habitat for kingfisher recovery on DoD lands. In addition the FEIS must commit to repatriation of ES on military property. Without allowing the reintroduction of ES on military property, DoD will fail in any attempt to minimize or mitigate for the environmental impacts to ES and their habitat from the military buildup on Guam.

During construction, monitoring will be conducted in areas where fruit bats may be present and construction would be halted if fruit bats are present. This has been made clear in the FEIS.

Final conservation measures for the fruit bat are being developed in conjunction with the Section 7 consultation with USFWS. These measures are being added to the FEIS. Access to DoD lands on Guam by GDAWR is a DoD Joint Region policy matter and not EIS-related.

J-018-198

Thank you for your comment. The Navy is proposing to implement various conservation measures on Guam to avoid and minimize proposed project impacts and to improve habitat for threatened and endangered species. These measures are currently being discussed with USFWS in conjunction with the Section 7 consultation. They are intended to support the re-introduction of native endangered & threatened species on Guam, consistent with the species recovery plans. When the constraints to successful reintroduction of native threatened or endangered species have been minimized to a point that the Navy and USFWS mutually agree will provide the opportunity for feasible and successful re-introduction, the Navy will work with USFWS to develop a programmatic biological opinion to ensure that such re-introductions are consistent with the species recovery plans and will not conflict with the military mission on Guam.

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334	6	12-34	6	12.2.6.1 Alternative 1: off base roadways	GDAWR	<i>Guam rail:</i> Based on the removal of habitat areas, there would be significant impacts to the Guam rail. This significant impact would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	Mitigation measures described in Volume 2, Section 10.2.2 would not lessen the impact for the Guam rail. Impacts would be less by providing alternative undisturbed foraging and nesting grounds for Guam rail recovery on DoD property. In addition the FEIS must commit to repatriation of ES on military property. Without allowing the reintroduction of ES on military property, DoD will fail in any attempt to minimize or mitigate for the environmental impacts to ES and their habitat from the military buildup on Guam.
335	6	12-34	7	12.2.6.1 Alternative 1: off base roadways	GDAWR	<i>Pacific Slender-toed gecko:</i> The gecko was found in recent surveys in northeastern NCTS Finegayan in a forested area. However, because the roadway impacts would be in or along adjacent disturbed areas, the species would be unlikely to be present in the project areas.	Mitigation would need to be addressed and implemented for the Pacific Slender-toed gecko. The species are known to move into areas adjacent or along roadway project sites during construction.
336	6	12-35	3	12.2.6.1	GDAWR	<i>Central Vegetation:</i> Impacts to vegetation associated with the road improvements and bridge replacements would be less than significant because minimal primary limestone forest would be removed.	Any vegetation removed is significant as Guam is a very small island and all vegetation provides habitat for wildlife and Special status species. Vegetation removal without compensation or mitigation will have significant impact to species recovery. Habitat outside of DoD lands will need to be protected and preserved for wildlife refuge.
337	6	12-37	2	12.2.6.1	GDAWR	<i>Wildlife:</i> Based on observations during field visits and observations in other similar areas on Andersen AFB, NCTS Finegayan, and Andersen South (discussed in Volume 2, Section 10.1), the only native bird species likely to be present in the inland project areas are the yellow bittern and Pacific golden plover.	The DEIS does not identify specific surveys completed to base the findings on what native species are likely to occur at the proposed bridge replacement project sites. Systematic and frequent field observations are necessary to confirm presence or absence. The DEIS fails to address the Mariana common moorhen that may occur at several of the proposed project sites.

J-018-199

Thank you for your comment.

The Navy is proposing to implement various conservation measures on Guam to avoid and minimize the impacts from the proposed project and to improve habitat for threatened and endangered species. These measures are currently being discussed with USFWS in conjunction with the Section 7 consultation. They are intended to support the re-introduction of native endangered & threatened species on Guam, consistent with the species recovery plans. When the constraints to successful reintroduction of native threatened or endangered species have been minimized to a point that the Navy and USFWS mutually agree will provide the opportunity for feasible and successful re-introduction, the Navy will work with USFWS to develop a programmatic biological opinion to ensure that such re-introductions are consistent with the species recovery plans and will not conflict with the military mission on Guam.

Based on extensive project-specific surveys, the slender-toed gecko is considered rare within the proposed project areas and is not expected to be encountered along road renovation or construction projects.

An impact to vegetation other than primary limestone vegetation is not considered significant under the vegetation category, however removal of habitat of any vegetation type is considered separately under the Wildlife and Special-Status species categories of the analysis.

Biological surveys have been completed for the EIS and results from these have been incorporated into the DEIS. The report of these studies has been included in the FEIS. Mariana common moorhens are addressed under Special-Status Species. None were observed in any project areas. For those areas where they may be occasionally present,

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338	6	12-37	3	12.2.6.1	GDAWR	<i>Wildlife:</i> Native land crabs and coconut crabs are present on the base in coastal and estuarine areas.	The DEIS fails to address mangrove crabs which occur within the Laquis and Sasa areas; both are surrounded with mangrove habitat. The FEIS must indicate mitigation to compensate the impacts.
339	6	12-37	4	12.2.6.1	GDAWR	<i>Wildlife:</i> ...however, long-term, permanent impacts to populations of such species would not result because the area impacted does not expand greatly from presently disturbed areas and would be very small in comparison to the total habitat available. In addition, most species known to be present are abundant in surrounding areas (with the exception of coconut crab).	The FEIS must clarify how there would be no long-term, permanent impacts to species that are smaller, less mobile and seeking refuge in burrows, such as mangrove crab and coconut crab. Mitigation must be developed and implemented or the FEIS must indicate compensation for the potential impacts to this species.
340	6	12-37	5	12.2.6.1	GDAWR	<i>Special status species:</i> Direct impacts to special status species in the Central Region would be less than significant.	DEIS fails to mention that the Mariana common moorhen may occur at the proposed bridge replacement sites. Mitigation must be addressed to reduce impact to the species.
341	6	12-39	5	12.2.6.5 Firing range option	GDAWR	Option A would require the realignment of Route 15, while Option B does not require realignment of Route 15; therefore, by choosing Option B, the impacts associated with proposed road projects within the Central Region study area to terrestrial biological resources would not occur.	DAWR concurs that Option B be better to eliminate any impacts associated with realignment of Route 15. However, previous issues still apply.

such as along roadways at river crossings, biological monitoring will occur in conjunction with construction projects.

J-018-200

Thank you for your comment.

Crabs near the proposed bridge replacement projects would be afforded some protection with standard BMPs for construction. Movement pathways would not be altered long-term by the construction. No impacts to the crab populations would be expected.

Mariana common moorhens were not observed in any project areas. For those areas where they may be occasionally present, such as along roadways at river crossings, monitoring by Navy biologists will occur in conjunction with construction projects and harassment would be prevented. This will be noted under the mitigation section.

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J-018-201 342	6	12-40		Table 12.2-18	GDAWR	The table indicates that there would be no removal of primary limestone forest, therefore classified as LSI.	The vegetation to be removed is described as disturbed, mixed secondary vegetation. The FEIS must identify these removals as significant as they serve as habitat for wildlife and special status species. Compensation will need to address removal of all forest habitat types, not just primary limestone forest. Guam is a small island with a limited landmass for the recovery of species. Compensation needs to address the cumulative impacts of clearing, disturbance within buffer zones around project sites, and the impacts of fragmentation of habitat to the recovery of ES.
343	6	12-40		Table 12.2-18	GDAWR	The table indicates less than significant impacts to wildlife, therefore classified as LSI.	Construction activities will displace wildlife found in project site and adjacent areas. Impact will be significant to species found within the area and adjacent areas, regardless of whether it is ubiquitous on Guam. Mitigation will need to be identified to minimize impacts.
344	6	12-40		Table 12.2-18	GDAWR	The table indicates significant direct impact due to the removal of designated essential habitat for 3 endangered species and Overlay Refuge, mitigated to less than significant.	Mitigation discussed in the text does not compensate for the take of habitat from the proposed activity. FEIS must identify compensation for all habitat loss.

J-018-201

Thank you for your comment.

An impact to vegetation other than primary limestone vegetation is not considered significant under the vegetation category, however removal of habitat of any vegetation type is considered separately under the Wildlife and Special-Status species categories of the analysis. Mitigation measures are being proposed that take into account impacts from disturbance within buffer zones around sites. Fragmentation of habitat is being minimized, for example by sighting utilities in existing corridors where possible. It is noted that utility line locations are conceptual only at this time and final locations will use existing corridors or disturbed locations whenever possible.

Impacts to wildlife species will be less than significant based on the criteria in Section 12.2.1. It is also noted that many of the conservation measures proposed for special-status species will also benefit other wildlife species.

The Navy is currently in Section 7 consultation with USFWS and various conservation projects are being discussed to avoid and minimize impacts, in addition to those proposed in Volume 2, Chapter 10 of the DEIS. These are being incorporated into the FEIS.

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J-018-202	6					
345		12-6	4	12.2.3.1 Potable water Alternative 1 (preferred alternative)	GDAWR Construction, Vegetation: Impacts to vegetation at Andersen AFB and Andy South would be less than significant because minimal primary limestone forest would be removed.	Mitigation will need to address removal of all forest habitat types, not just primary limestone forest. Guam is a small island with a limited landmass for the recovery of species. Mitigation needs to address the cumulative impacts of clearing, disturbance within buffer zones around project sites, and the impacts of fragmentation of habitat to the recovery of ES. The wells, located WNW of AAFB are in foraging grounds of the Mariana fruit bat. Removal of vegetation will result in displacement of the species. Locating wells in developed areas should be priority.
346	6			Table 12.2-2	GDAWR Total area removed. 16 ac (6.5ha) limestone forest, disturbed; 0.6 ac (0.2ha) <i>Leucaena</i> , <i>Casuarina</i> ; 0.1 ac (0.04) shrub/grasslands, savanna; and 18 ac (7.3 ha) developed.	The table provided does not clearly define the cumulative impact to vegetation communities. The FEIS must identify amount of vegetation remaining for the Special-status species recovery. The #s in the table are deceiving, as the impacts appear small, however, the cumulative impacts of clearing vegetation are greater than the individual parcels removed when fragmentation of habitat is considered in analysis.
347	6			Table 12.2-2	GDAWR Total area removed. 16-ac (6.5ha) limestone forest, disturbed; 0.6 ac (0.2ha) <i>Leucaena</i> , <i>Casuarina</i> ; 0.1 ac (0.04) shrub/grasslands, savanna; and 18 ac (7.3 ha) developed.	The FEIS must outline compensation for the loss of all habitat types, as well as fragmentation of habitat. Priority sites for wells should be developed areas.

J-018-202

Thank you for your comment.

An impact to vegetation other than primary limestone vegetation is not considered significant under the vegetation category, however removal of habitat of any vegetation type is considered separately under the Wildlife and Special-Status species categories of the analysis. Mitigation measures are being proposed that take into account impacts from disturbance within buffer zones around sites. Various criteria were used to cite water wells and associated waterlines. Impacts from installation of these are evaluated in the EIS. It is noted that locations of these are conceptual only at this time and final locations will use existing corridors or disturbed locations whenever possible.

The total habitat areas impacted are provided in Volume 7 of the EIS which addresses collective and cumulative impacts of the proposed projects.

The Navy is currently in Section 7 consultation with USFWS and various conservation projects are being discussed to avoid and minimize impacts, in addition to those proposed in Volume 2, Chapter 10 of the DEIS. These are being incorporated into the FEIS.

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348	6	12-8	3	12.2.3.1 Potable water Alternative 1 (preferred alternative)	GDAWR	<i>Mariana fruit bat</i> : There would be no temporary direct impact from noise and activity during construction at Andersen AFB to roosting and nesting activities of the Mariana fruit bat because construction would only occur during the daytime.	Fruit bats are known to occur in the area where the wells are located (refer to Figure 12.2.2). Avoidance is the preferred alternative. Noise and activity from construction will have a temporary and permanent direct impact to the fruit bat. Temporary roosting fruit bats will be forced out of the area. Permanent: fruit bats will no longer occur in the area due to the activity. Avoiding the area and not allowing for construction in the area will be more appropriate for the species. FEIS must compensate for all loss of habitat. Note: fruit bats roost not nest.
349	6	12-8	3	12.2.3.1 Potable water Alternative 1 (preferred alternative)	GDAWR	<i>Mariana fruit bat</i> : Based on the removal of Overlay Refuge and essential habitat areas, there would be significant impacts to the fruit bat. This significant impact would be mitigated to less than significant with measures described in Volume 2, Section 10.2.2.	Mitigation measures described in volume 2, section 10.2.2 are BMPs to minimize impacts during the proposed actions. The FEIS must identify how the clearing of vegetation in the Overlay Refuge and/or essential habitat areas will be compensated. Compensation for the loss of vegetation (foraging areas) from the construction could include reforestation, badlands, or rehabilitating disturbed forest in adjacent areas to provide more roosting and foraging areas for the fruit bat. Compensation timetable should be in line with construction for the wells; if compensation activities are stalled then construction should be halted. Area needs to be maintained and monitored to ensure success.
350	7	2-10		Table 2.1-1 Summary of BMP's	GDAWR	Natural Resource Management (Terrestrial):	DEIS fails to mention vegetation concerns: unnecessary vegetation removal, recycling cleared vegetation as mulch, maintenance of cleared disturbed areas due to construction and operation.

J-018-203

Thank you for your comment.

Various criteria were used to sight water wells and associated waterlines. Impacts from installation are evaluated in the EIS. As stated, impacts from operations are expected to be minimal since water wells would need servicing infrequently. It is noted that locations of these features are conceptual only at this time and final locations will use existing corridors or disturbed locations whenever possible. The Navy is currently in Section 7 consultation with USFWS and various conservation projects are being discussed to avoid and minimize impacts, in addition to those proposed in Volume 2, Chapter 10 of the DEIS. These are being incorporated into the FEIS. Vegetation impacts were considered in the DEIS. Mulching of cleared vegetation will be implemented if practicable. All cleared areas will be maintained.

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J-018-204 351	7	2-10	Table 2.1-1 Summary of BMP's	GDAWR	Natural Resource Management (Terrestrial):	DEIS fails to discuss BMPs for Mariana fruit bat; noise generated by construction and operation disturbing fruit bat roost and foraging sites, night time work is limited, prevent unnecessary vegetation clearing.	
J-018-205 352	7	2-21	Table 2.2-1 Summary of Potential Mitigation Measures	GDAWR	Geological and Soil Resources- No mitigation measures.	FEIS should consider the potential for fuel leaks during construction (hydraulic fuel, petroleum, etc.). All project sites should have easily accessible absorbent pads. Frequent inspection of vehicles for fuel leaks should occur to prevent soil contamination.	
J-018-206 353	7	2-22	Table 2.2-1	GDAWR	TB-1: Adopt the Andersen AFB aircraft operations monitoring program and adaptive management strategy for Mariana fruit bats and crows and modify as necessary for project-specific actions.	The FEIS needs to include the Adaptive Management Strategy for Mariana fruit bats and crows. FEIS must ensure adequate coordination with GDAWR and USFWS occurs for the mitigation measures to occur.	
354	7	2-22	Table 2.2-1	GDAWR	TB-2: Translocate Guam tree snails at Navy Barrigada to another site on DoD lands after approval by USFWS (not required for preferred alternative).	The FEIS must clarify what is not required for preferred alternative - translocation of snails or getting approval? DoD must coordinate with GDAWR.	
355	7	2-22	Table 2.2-1	GDAWR	TB-2: Translocate Guam tree snails at Navy Barrigada to another site on DoD lands after approval by USFWS (not required for preferred alternative).	Translocation of Guam tree snails will need to be coordinated with GDAWR. Snails are protected under local ES list.	
356	7	2-22	Table 2.2-1	GDAWR	TB-3: Conduct biological surveys for the Mariana fruit bat and Mariana crow before clearing.	The FEIS must clarify who will survey for bats and crows and method/s to be used to determine presence of roosting bats. The FEIS should indicate that coordination with GDAWR is mandatory. No actions associated with the buildup or BRAC should hinder GDAWR's ability to continue surveying Guam's native species.	

J-018-204

Thank you for your comment. Volume 7 has been updated in the FEIS to incorporate numerous changes in BMPs and conservation measures. Biological monitoring before and during construction has been added to ensure fruit bats are not disturbed.

J-018-205

Thank you for your comment.

Precautions to prevent contamination of soil from fuel and other potentially hazardous materials is discussed in Chapter 17, Hazardous Materials and Waste.

J-018-206

Thank you for your comment.

An adaptive management strategy for fruit bats and crows is to be developed. USFWS and GDAWR would be kept apprised of the status through the Integrated Natural Resources Management Plan.

The language on tree snail translocation has been clarified in the FEIS. If translocated, coordination with GDAWR would occur.

The FEIS has been updated to state that Navy biologists would monitor for fruit bats and crows. Access to DoD lands on Guam by GDAWR is a DoD Joint Region policy matter and not EIS-related.

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J-018-207	7				GDAWR	TB-10: Update the existing Navy Ungulate Management Plans to include the new lands proposed for training and cantonment areas.	The FEIS must include the Navy Ungulate Management Plan. The plan will need to be reviewed and approved by GDAWR and USFWS as control methods may impact natural resources and the recovery of ES, as well as require local permits.
357		2-22		Table 2.2-1			
J-018-208	7				GDAWR	TB-12: Establish high quality habitat with perimeter fencing to exclude invasive animals and for establishment of foraging plots.	The FEIS and ROD must define "high quality habitat". Perimeter fencing requires clearing for installation, therefore area must be strategically selected to avoid the need to mitigate a mitigation action.
358		2-22		Table 2.2-1			
	7				GDAWR	TB-13: Install fencing or patrols to prevent poaching.	Fencing will not prevent poaching. The enforcement of Guam's game management regulations will control poaching. The FEIS should state that DOD will allow GDAWR conservation officers unescorted access to enforce regulations on DOD property. All habitat removal associated with the installation of fences will need to be compensated.
359		2-22		Table 2.2-1			
	7				GDAWR	TB-14: Conduct biological surveys for Endangered Species Act- (ESA) listed species before construction clearing.	The FEIS must clearly define who and how the surveys will be completed. The surveys should be in cooperation with GDAWR. Surveys should not be restricted to construction clearing. Surveys (monitoring) should be conducted for the duration of the construction.
360		2-22		Table 2.2-1			
	7				GDAWR	TB-15: Monitor birds using "Tropical Monitoring of Avian Productivity and Survival" survey methodology.	FEIS will need to define who and how often the monitoring will be conducted. Coordination with GDAWR and USFWS is necessary.
361		2-22		Table 2.2-1			

J-018-207

Thank you for your comment.

The Ungulate Management Plan is currently under development and will not be included within the FEIS. The plan will be provided to GDAWR through the Integrated Natural Resources Management Plan for review. Any local permits required to implement the plan would be obtained.

Bird monitoring specified under TB-15 is for Volume 3 - Tinian.

J-018-208

Thank you for your comment.

Locations for establishing high-quality protected habitat areas as a conservation measure are currently being discussed with USFWS under the Section 7 consultation. Fencing may or may not be included. If included the disturbance from installation of the fence would be minimized.

To prevent poaching the Navy is proposing to hire at least one conservation law officer for Guam. Access to DoD lands on Guam by GDAWR is a DoD Joint Region policy matter and not EIS-related.

The FEIS has been updated to state that Navy biologists would monitor for listed species before and during construction.

Bird monitoring specified under TB-15 is for Volume 3 - Tinian.

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GDAWR-Comments 2-16-2010							
#	Location			Commenter	EIS/OEIS Statement	GDAWR's Comment	
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J-018-209	362	7	2-22	Table 2.2-1	GDAWR	TB-16: Develop and implement a Tinian monarch management plan.	DoD will need to coordinate and work closely with CNMI-DFW and USFWS to develop and implement a plan. DoD will need to secure funding for the implementation of the plan for CNMI.
	363	7	2-22	Table 2.2-1	GDAWR	TB-17: Reforest plots to improve habitat.	The FEIS needs to indicate that DoD will coordinate with Guam Forestry and GDAWR to develop a plan to reforest habitat.
	364	7	2-22	Table 2.2-1	GDAWR	TB-19: A survey would be conducted in the R1, 15 range footprint areas prior to clearing for <i>Heritiera longipetiolata</i> with subsequent translocation or propagation if found, mature trees identified in previous studies would not be removed.	Vegetative buffers around mature trees will need to be maintained to protect trees from typhoons and/or invasive insects.
J-018-210	365	7	2-22	Table 2.2-1	GDAWR	TB-20: Establish Base policies, instructions, or orders to ensure that cats and dogs are documented and all pets are controlled and not allowed at Haputo ERA.	Policies, instructions, or orders should include restrictions to other recreational areas such as DoD beaches, scenic areas, golf course, etc.
J-018-211	366	7	2-22	Table 2.2-1	GDAWR	TB-21: Monitor the Mariana fruit bat, Micronesian kingfisher, and Marianas crow in areas surrounding demolition, breacher, and small arms training areas to determine potential noise impacts and if this monitoring determined that these species were being affected, techniques to reduce noise generation, such as noise barriers, would be employed.	The FEIS needs to clarify who will be monitoring and how often will the monitoring occur. The Island swiftlet should be included for monitoring at Naval Magazine. Cooperating with, and providing access to GDAWR staff will increase monitoring efforts.
J-018-212	367	7	2-22	Table 2.2-1	GDAWR	TB-23: Investigate invasive insect management options for the ESA-listed fire tree and SOGCN cycad.	The FEIS should indicate coordination with DoAg, and UOG will need to occur. <i>Heritiera longipetiolata</i> , <i>Intsia bijuga</i> and other SOGCN tree species should be included for this action.

J-018-209

Thank you for your comment. DoD will work with the USFWS and CNMI-DFW through the Integrated Natural Resources Management Plan to develop the Tinian monarch plan. DoD will seek input from Guam agencies through the Integrated Natural Resources Management Plan on reforestation efforts. Buffers around *Heritiera longipetiolata* trees will be maintained if possible. Some trees already have forest cleared up to them.

J-018-210

Thank you for your comment. The Marine Corps recognizes the various issues associated with household pets and has adopted a new order "Domestic Animal Control" (MCO 1000.22 Chapter 6, August 11, 2009) that would be applicable to the forces relocating to Guam. A few of the key points relevant to pet population control are: 1) Bachelors are not be allowed to have pets, 2) families are limited to 2 dogs, 2 cats or 1 dog and 1 cat, 3) all pets are to be registered with local veterinary treatment center, 4) vaccination and microchips are required and 5) spay and neutering is strongly encouraged but not required. The microchip requirement would deter abandonment, because the owners know in advance that they could be identified as being responsible for an abandonment. This new order is added to Volume 8 of the Final EIS and Volume 7 summary table of Best Management Practices. Pets are restricted from conservation areas, including Haputo Beach.

J-018-211

Thank you for your comment. The monitoring for potential noise impacts would be by Navy biologists. This conservation measure is being reevaluated under the Section 7 consultation with USFWS. This reevaluation is being provided in the FEIS. Swiftlets are already being monitored.

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J-018-213	7				GDAWR	TB-24: Establish or expand new ecological reserves and conservation areas.	Essential habitat for special status species had been identified in the Overlay Refuge. Adopting the identified essential habitat as an ERA is highly recommended for the recovery of the species. Expanding existing ERAs will be beneficial for the recovery of T&E species. Coordination with USFWS, GDAWR and other stakeholders will need to occur.
368		2-23		Table 2.2-1			
J-018-214	7				GDAWR	TB-25: Conduct sea turtle natural history studies to better understand the species and benefit long-term military mission planning.	In addition to studying the species, conservation efforts to minimize impacts on turtle activity within DoD lands is needed. Unnecessary vegetation clearing in coastal habitat (potential sea turtle nesting areas) needs to be prevented. Awareness within the Command needs to be increased to prevent unauthorized clearing such as occurred at Tarague Beach.
369		2-23		Table 2.2-1			
J-018-215	7				GDAWR	TB-26: Limit construction period if Mariana crows are present during the day. No construction at night to avoid impacts to Mariana fruit bat.	The FEIS should indicate who will determine the presence of crows and/or bats at the construction site. Construction must stop during the day in the presence of fruit bats.
370		2-23		Table 2.2-1			
	7				GDAWR	TB-27: Monitor the Tinian monarch and Mariana common moorhens would be conducted in areas surrounding the ranges to determine potential disturbance impacts and, if impacted, noise reduction techniques would be employed.	TB-27 should also be included as potential mitigation measure for Volume 6, bridge replacement projects. If nesting birds are present, construction activity should cease until nestlings fledge.
371		2-23		Table 2.2-1			

J-018-212

Thank you for your comment. This action would be programmed through the Joint Region INRMP. Coordination with DoAg and UoG would occur for investigation of insect management options. Emphasis would be on *Serianthes nelsonii* due to its status.

J-018-213

Thank you for your comment. Reserve areas are being discussed with USFWS under the Section 7 consultation. Management of these areas would be coordinated with stakeholders.

J-018-214

Thank you for your comment. Your concern is not directly related to the EIS but has been noted.

J-018-215

Thank you for your comment.

Navy biologists will be monitoring the construction. Construction would halt in the presence of fruit bats or crows.

Monitoring for Mariana common moorhens during bridge replacement projects has been added to the FEIS.

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J-018-216	7			GDAWR	TB-28: Conduct additional surveys for the Pacific slender-toed gecko at NCTS Finegayan and habitat enhancement at NMS if necessary.	The FEIS must clarify what criteria will determine whether habitat enhancement at NMS for the Pacific slender-toed gecko is necessary. Habitat enhancement must also be defined. Other native reptile species were identified and discussed briefly in Volumes 2 and 5. These native reptile species should be included under TB-28.	
	372	2-23	Table 2.2-1				
	373	2-23	Table 2.2-1	GDAWR	TB-29: Establish greenbelt for watershed protection, wildfire control, and restoration of habitat.	TB-29 should be included in all Volumes and not be restricted to Volumes 2 and 6.	
	374	2-23	Table 2.2-1	GDAWR	TB-30: Exclusion fencing and foraging plots would be set up for protection of wildlife and special-status species.	Strategic planning for the placement of exclusion fencing is recommended to minimize further losses of vegetation and avoid having to mitigate for mitigation. Coordination with USFWS, GDAWR and other stakeholders will need to occur.	
375	2-23	Table 2.2-1	GDAWR	TB-33: Natural resource awareness briefings would be conducted for construction personnel.	In addition to conducting briefings for construction personnel, in-coming and existing military personnel and their dependents must be briefed and aware of the natural resources on Guam.		
J-018-217	7			GDAWR	MB-33: Dredging/filling in the marine environment would be scheduled to avoid coral spawning and recruitment periods.	Scheduling should also avoid nesting sea turtles.	
	377	2-23	Table 2.2-1	GDAWR	MB-34: Provide marine biological resources education and training on EFH, ESA, and MMPA....	Marine Preserves should be included in the education and training program.	
	378	2-23	Table 2.2-1	GDAWR	MB-35: Consider the suite of compensatory mitigation project proposals for impacts to coral reef communities: 1. Artificial reefs, 2. ...	GDAWR does not approve of artificial reefs as an option for compensatory mitigation.	

J-018-216

Thank you for your comment.

Although the full distribution and population of the slender-toed gecko is not known, it is documented as present on NMS and is found throughout the Pacific. Therefore, the species is unlikely to be significantly impacted. The impact on the Guam population is unknown. However, conservation measures proposed for endangered species will aid the species. To better define the Guam population, an INRMP project would be programmed to better define the distribution and abundance on military lands. Because even the distribution and requirements of the species is not well understood habitat enhancement needs are not known therefore the statement about habitat enhancement has been removed. Other reptile species will not be significantly impacted based on project-specific surveys therefore are not included.

TB-29 is general mitigation that applies to all project impacts.

Exclusion fencing may or may not be included in final mitigation plans after discussions under the Section 7 consultation. If included additional clearing would be minimized.

Requirements for natural resource briefings for marines and distribution of environmental education materials for families have been added to the FEIS.

J-018-217

Thank you for your comment.

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J-018-218	379	7	2-23	Table 2.2-1	GDAWR	MB-36: Increased effort toward ERA enforcement (Haputo) and other ESA, MMPA, and EFH policies.	Allowing DAWR Conservation Officers access to DoD lands will increase efforts toward natural resources enforcement.
	380	7	2-23	Table 2.2-1	GDAWR	MB-36: Increased effort toward ERA enforcement (Haputo) and other ESA, MMPA, and EFH policies.	Marine Preserves will need to be added, as well as Hunting regulations and policies.
J-018-219	381	7	2-3	Table 2.1-1 Summary of BMP's	GDAWR	Operation: Control the carabao population (through hunting, etc.) in order to prevent soil erosion by feral ungulates.	Control efforts should not be restricted to carabao population. Feral pig and deer populations are abundant in Naval Magazine. According to local resource regulations, DoD must obtain a permit from GDAWR to pursue 'game species'.
J-018-220	382	7	2-5	Table 2.1-1 Summary of BMP's	GDAWR	Item 5, Biosecurity Plan: The Navy has provided funding for a biosecurity plan.	The FEIS and ROD must clarify how DoD will ensure that the biosecurity plan is 100% funded, including the gaps in biosecurity in other jurisdictions. Otherwise the risk of introduction and spread of invasive species throughout the region due to the increase in traffic due to the proposed action will not be mitigated. The risk to the Pacific region posed by the buildup is too large to take.
J-018-221	383	7	2-9	Table 2.1-1 Summary of BMP's	GDAWR	Minimize the risk of uncontrolled spills and releases through industry and Navy accepted methods for spill prevention, containment, control, and abatement.	The FEIS must identify what the "Navy accepted methods for spill prevention, containment, control, and abatement". The FEIS must identify who is responsible to monitor or assess spills in DoD lands. DoD should also adhere to the accepted methods developed by Guam EPA, USEPA, ACOE, and USFWS.

J-018-218

Thank you for your comment.

J-018-219

Thank you for your comment. Discussion of carabao control has been removed.

J-018-220

Thank you for your comment. A commitment to the DoD-related portion of the Micronesia Biosecurity Plan for all high risk and high priority activities has been added to the FEIS. Additional information on the MBP and on interim measures to be taken prior to the full development of the MBP has been added to the FEIS. For additional information on the MBP and existing and interim measures for invasive species control, please refer to Volume 2, Chapter 10, Section 10.2.2.6 for terrestrial species and Volume 2, Chapter 11, Section 11.2.2.6 for marine species. Volume 2 Chapter 14 has been updated to include information on projected increased marine traffic associated with both organic growth and increases due to the military buildup.

J-018-221

Thank you for your comment. Volume 7 includes summary tables of BMPs and mitigation measures that are identified throughout the EIS. The details on waste management are provided in Volume 2, Chapter 17.

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J-018-222 384	7	3-28	3.3.9.1 Summary of Preferred Alternative's Impacts	GDAWR	The island-wide loss of special-status species habitat, due to clearing of vegetation required by the proposed construction projects ranges from 1% to 6%.	The proposed construction project should focus on the number of acreage to be removed within DoD lands, where the habitat is available for native wildlife. The FEIS should indicate a percentage of take versus remaining habitat on DoD property. The habitat proposed for removal is native forest set aside as essential habitat and Overlay Refuge. The amount of habitat that remains for native wildlife recovery needs to be assessed as well as the level of fragmentation that exists.
	7	3-30	1 3.3.9.2 No Action	GDAWR	Under no action, stressors that degrade habitat quality would remain and the present declining trends for terrestrial biological resources would continue.	Federal agencies have a responsibility to preserve and protect natural resources on DoD property. There are many tools that need to be implemented such as Navy and AAFB INRMPS, USFWS recovery plans, GCWCS, and GNWR-CCP. All focus on habitat quality and recovery of native species.
J-018-223 386	7	3-30	1 3.3.9.2	GDAWR	There is a high risk under both no action and the preferred alternative of the BTS being accidentally transported to other Pacific Islands, but no action there may be less attention and focus on the problem.	There is great attention and focus on BTS and other invasive species entering and exiting Guam prior to the DEIS. DoD must continue vigilance with 100% inspections for BTS, as well as providing continuous bit control in cargo staging areas by USDA Wildlife Services. The Sikes Act authorizes DoD to incorporate provisions for invasive species management in INRMPS for military installations on Guam. The FEIS must clarify whether DoD will fund those projects. The statement indicates that DoD does not believe they can control the bits from leaving via military cargo. If so, the buildup should not occur before the snake can be controlled island-wide.

J-018-222

Thank you for your comment.

Overlay Refuge occurs only on DoD lands therefore percent reduction reflects loss on only these lands. USFWS has recently defined recovery habitat. Comparison of loss of this habitat due to proposed actions compared to the total amount available on DoD lands has been added to the FEIS.

Description of no action conditions reflects the current situation on all lands on Guam.

J-018-223

Thank you for your comment. The statement being commented on is inaccurate and has been removed.

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J-018-224

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
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387	7	3-30	2	3.3.9.2	GDAWR	Under no action, limestone forest areas are being degraded by invasives plants, in particular the canopy tree <i>Pithecellobium</i> , and this trend would continue. The BTS, ungulates, and other invasive plants and animals would continue to degrade and/or prevent the recovery of the natural flora and fauna in the project areas.	Clearing, burning, development, and abandonment of domestic pets, associated with the actions degrade and/or prevent the recovery of the natural flora and fauna. Without the proposed actions, there would be no additional development, clearing or fragmentation of habitat. GDAWR recovery projects would continue to improve habitat of native species and repatriate. The FEIS should state how GDAWR will be allowed unescorted access to continue monitoring and restoring native species on DoD lands.
388	7	3-30	2	3.3.9.2	GDAWR	Poaching, which presently occurs in military lands, would continue because many of the military lands, particularly the Navy lands, are not fenced.	Fencing will not prevent poaching; poaching can only be eliminated through the enforcement of Guam's hunting regulations and prosecution of offenders. DOD must acknowledge DoAg GDAWR's jurisdiction to manage Guam's natural resources by applying for degradation permits to implement their ungulate control plan and allowing unescorted access to DoAg's conservation officers to patrol DOD property for poachers.
389	7	3-31	3	3.3.9.2	GDAWR	The most recent counts indicate that fewer than 50 bats remain on Guam.	The DEIS must indicate where the 'fewer than 50 bats remain on Guam' are located, particularly if they roost/forage on military lands where preferred alternatives occur. Where is the reference for this statement? The FEIS must identify the surveys completed that determined the statistic.

J-018-224

Thank you for your comment.

DoD believes the statement commented on about continued degradation under the no action alternative is accurate based on all available information.

DoD believes the statement commented on about poaching under no action alternative is accurate. Access to DoD lands on Guam by GDAWR is a DoD Joint Region policy matter and not EIS-related.

The statement of number of fruit bats on Guam will be amended to state that the fruit bat population at Pati Point continues to decline. The number of fruit bats will be removed (details on numbers are provided in Volume 2, Chapter 10).

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J-018-225	7				GDAWR	Although hunting of bats has been illegal under local law in both Guam and the CNMI since the 1970's, hunting remains a chronic threat.	Hunting is more of a chronic threat in CNMI, particularly in Rota, because of the lack of enforcement. On Guam, the major threat is loss of habitat due to development and BTS predation on pups. Recent declines in the bat colony on Guam are more likely attributed to the recent approach lights project at Pati Point. The FEIS must correct the statement.
	390	3-31	5	3.3.9.2			
	7				GDAWR	There are many acres of suitable habitat available on non-federally controlled land, but land is not the limiting factor.	Land is a limiting factor as Guam is a relatively small island. Plus, the majority of land identified as suitable habitat is within the Refuge Overlay where most of the proposed actions occur. Loss of habitat within the Refuge Overlay is a limiting factor and a major threat to species recovery. All habitat loss must be compensated.
	391	3-32	3	3.3.9.3			
J-018-226	7				GDAWR	Projects listed for AAFB is incomplete.	Several projects were not identified in the table: Air Cargo Drop project, HMU, Ungulate enclosure, North runway approach lights, Dog kennels (additional to beddown project), and IRP clean-ups.
	392	4-6		Table 4.3-1			
	8				GDAWR	Endangered Species Act	Table must include the Government of Guam's regulations for the Endangered Species Act, which the GDoA enforces.
	393	2-2		Table 2.1-1			
	8				GDAWR	5 Guam Code Annotated § 63302: License required for cutting, removal or mutilation of live trees on public lands.	Permitting Agency would be GDoA.
	394	3-1		Table 3.1-1			
J-018-227	8				GDAWR	5 Guam Code Annotated § 63601: Permit required for takes of live coral from the area surrounding the Territory of Guam, extending from the shore of the island outwards to the 10 fathom contour.	Permitting Agency would be GDoA.

J-018-225

Thank you for your comment. DoD believes the statement about hunting as a chronic threat to fruit bats on Guam is accurate. Loss of habitat has been added to the FEIS as a major threat. The statement about land not being the limiting factor for species recovery has been amended in the FEIS to state that it is only one controlling factor. Reference to the Guam's Endangered Species Act has been added to the FEIS. The correct permitting agency for the Guam code has been added to the FEIS.

J-018-226

Thank you for your comment. The Air Force provided the list of projects and have provided an updated list included in the Final EIS.

J-018-227

Thank you for your comment.

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J-018-228	8				GDAWR	Required permit and approval not identified in table.	5 GCA §6122: relative to the protection of land or property from damaged caused by wild birds, and wild animals (ungulates). Permitting Agency would be GDAWR. The FEIS and DoD must acknowledge Guam's jurisdiction to manage Guam's natural resources on military property.
396		3-1		Table 3.1-1			
	8				GDAWR	Some terrestrial habitat for special status species would be permanently lost on Guam.	"Some" is an understatement. Under Alternative 2, 53% of the Marine Location is on Overlay Refuge and puts in jeopardy the recovery of Guam's ES. In addition, the proposed firing range in Pagat will constitute a loss of habitat. The preferred terrestrial habitat on Guam is located within DoD lands on Overlay Refuge. The FEIS must identify an alternative that minimizes habitat loss, particularly in the Overlay Refuge. All habitat loss must be compensated.
397		4-1	6	Chapter 4			
J-018-229	8				GDAWR	Some wetlands could be permanently lost on Guam.	Impacts to wetlands must be avoided and minimized; the endangered Mariana moorhen depends on the limited freshwater habitats on Guam. Compensation for wetland loss must be implemented concurrently with the proposed actions.
398		4-1	6	Chapter 4			
	8				GDAWR	Compliance with these regulatory mandates by DoD and its contractors would reduce both short-term and long-term impacts.	Local and Federal authorities responsible for monitoring compliance with Federal and Guam laws and permits must be given unescorted access to DoD property. Self-regulation is not an option for DoD due to the history of not adhering to local and federal regulations/laws. GEPA, GDAWR, USEPA, USFWS, DEQ, and other regulatory agencies should be provided unescorted access to monitor activities.
399		5-1	4	Chapter 5			

J-018-228

Thank you for your comment.

The correct permitting agency for the regulation cited has been added to Table 3.1-1.

The statement referenced concerning habitat lost is not in error and has been retained in the FEIS. The detailed analysis for these impacts are in other other Volumes, e.g. Volume 2, Chapter 10.

J-018-229

Thank you for your comment. The FEIS contains updated information reflecting the on-going investigation of potential wetland areas. The project design will avoid wetlands to the extent practicable.

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J-018-230 400	8	5-1	5.1.2	GDAWR	Agriculturally productive soils would not be lost and the long-term productivity of these soils would be preserved.	It is not clear that there will be no contamination of soils. There is a history of the military contaminating Guam's lands and waters (eg. Cocos lagoon). The FEIS must analyze the risk during construction and operations for hazardous waste contamination.
J-018-231 401	8	5-5	5.8.1	GDAWR	Short-term impacts would remove small amounts of primary limestone forest and ravine forest and would remove large areas of potential habitat for special-status species, including several federal, Guam, and CNMI listed species.	Removal of any amount of vegetative habitat should not be considered as short-term impacts. Many, if not all, of the areas to be cleared are important for the recovery of T&E species, despite the quality of the habitat. Space is a valuable and limiting component of the habitat necessary for species recovery.
402	8	5-5	5.8.1	GDAWR	However, besides the Tinian monarch, most project areas are unoccupied by special-status species at present.	The statement is very general, and untrue. Fruit bats are known to occur at most of the proposed areas. Crows are known to occur in the MSA. Swiftlets are known to occur in NavMag, moorhens on Big Navy property and in most wetlands. The FEIS must not minimize the existence of special status species and provide accurate analysis of the impacts that will occur.
403	8	5-5	5.8.2	GDAWR	Implementation of the plans should improve the overall quality of habitat over current conditions.	The biosecurity plan, fire plan and ungulate management plan will not improve the overall quality without active restoration of habitat, repatriation of native species and reforestation. The FEIS must clarify how DoD will compensate for losses through DoD-funded actions that include the local resource agencies and long-term monitoring to ensure success.

J-018-230

Thank you for your comment.

Risks associated with Hazardous Waste contamination are discussed in Chapter 17 of the EIS, Hazardous Waste and Materials.

J-018-231

Thank you for your comment.

The statement about short-term impacts versus long-term productivity that is being referenced must be considered in the context of the analysis. Changes have been made in the wording in the FEIS to make the analysis more clear.

The statement that "most project areas are unoccupied" has been changed to "many project areas are unoccupied". The full analysis of impacts is in other volumes, e.g. Volume 2, Chapter 10.

DoD disagrees that the biosecurity plan, fire plan, and ungulate management plan would not improve overall habitat quality without other "active restoration". However, the DEIS did include some active restoration, e.g. greenbelt development, and this has been explained further in the FEIS.

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J-018-232 404	8	5-5		5.8.2	GDAWR	Restricted access would protect the species from potential poachers and prevent development of their habitat for the foreseeable future.	Restricted access should exclude local government agencies that regulate wildlife and their habitats. The FEIS must indicate that GDAWR biologists and conservation officers will be allowed unescorted access to complete their missions.
J-018-233 405	8	6-1	1	6.1.1	GDAWR	Sustainability and smart growth ... including the ability to adjust to changing geo-political realities while encouraging local economic growth, preserving the environment, and working to improve the quality of life for Guam and CNMI residents and visitors.	The FEIS must address how DoD will encourage local economic growth, preserve the environment, and work to improve the quality of life for residents. All the alternatives proposed were very direct, whereas mitigation actions were "considering". For example: DOD is considering to expand existing ERAs or to establish new ERAs. It is difficult to believe that the rapid growth of Guam associated with the military buildup will improve any environment on Guam - natural, social, or any other.
406	8	6-1	2	6.1.1	GDAWR	It is the DOD's goal that proposed development would be sized, planned, and developed in a manner that is sustainable and works to preserve and protect limited resources.	The FEIS must define how DoD meets this goal. Habitat available in DOD lands (identified as the Refuge Overlay) for the recovery of T&B species is a limited resource, yet most of the proposed actions include the destruction of Overlay Refuge habitat. The DEIS analysis includes habitat throughout Guam, however those areas (outside conservation areas) are not protected.

J-018-232

Thank you for your comment. The access issue is a DoD Joint Region Policy Matter and not specifically related to this EIS.

J-018-233

Thank you for your comment. Chapter 6 of Volume 8 has been updated in the Final EIS based on the updated sustainability planning information.

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J-018-234					GDAWR		
407	9	1	12	Appendix J	GDAWR	Appendix J, Supplemental Aircraft Carrier Marine Surveys, Email letter from JT 6. Would application of the data derived from this study provide the necessary input to a habitat equivalency analysis (HEA) model to meet accepted scientific standards for assessing direct physical impacts (dredging) to coral reefs?	The reviewers were asked a bias as well as the wrong question. The question that should have been asked is "Based on the best available science, what would be the preferred method to provide input to a habitat equivalency analysis (HEA) model to meet accepted scientific standards for assessing direct physical impacts (dredging) to coral reefs?"
J-018-235					GDAWR		
408	9	1	9	1.3	GDAWR	Figure 1-1, CVN Berthing Alternative 1 – Former Ship Repair Facility (SRF)	Alternative 1 is Polaris Point and not the Former Ship Repair Facility. The FEIS needs to correct this error because it is misleading.
J-018-236					GDAWR		
409	9	11	4	Appendix J	GDAWR	Appendix J, Assessment of Benthic Community Structure in the Vicinity of the Proposed Turning Basin. In this analysis, LIDAR data are processed to derive reef slope (vertical relief divided by horizontal distance) at each pixel in the scene. Since each pixel has the same horizontal distance, pixels with high slope indicate high vertical relief.	<p>1) What does slope have to do with rugosity? A high slope does not mean a high vertical relief. Based on field observations, a high slope can have a low vertical relief.</p> <p>2) An adequate resource assessment such as the use of an in situ method for coral size frequencies and rugosity needs to be conducted and included in the FEIS.</p>

J-018-234

Thank you for your comment.

J-018-235

Thank you for your comment. Although in the CVN Capable Berthing Study Alternative 1 is the Former SRF and Alternative 2 is Polaris Point, the EIS presents the opposite. Given that there are only two alternatives carried forward for analysis in the EIS, it is more logical to present the preferred alternative first even though this differs from the terminology used in the CVN Capable Berthing Study. The information is the same; only the numbering of the Alternative is different between the study and the EIS. Thus, it is anticipated that confusion would be minimal.

J-018-236

Thank you for your comment. The HEA referred to (Volume 4, Chapter 11 and Volume 9, Appendix E) is a description of how mitigation could look. Through coordination with our regulatory partners the Navy will develop a compensatory mitigation package that will conform to the regulatory guidance provided by USACE.

Comment Response Matrix

Draft EIS/OEIS Guam and CNMI Military Relocation

GDAWR-Comments 2-16-2010

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
J-018-237					GDAWR	Appendix J, Supplemental Aircraft Carrier Marine Surveys, Email letter from JT For your reference i am also including a word document that provides a description of each reviewers affiliation and credentials.	
410	9	2	2	Appendix J			The document fails to provide any information on the reviewer's experience in general. It also fails to provide any information on the reviewer's expertise as it pertains to coral reef impact assessments and the Habitat Equivalency Analysis (HEA). Many of the reviewers may not have any experience or expertise with coral reef impact assessments and HEA and may not be giving accurate comments. The FEIS needs to provide the reviewers experience and expertise to validate their comments.

J-018-237

Thank you for your comment. As stated, The EIS provides a description of each reviewers affiliations and credentials. Thus, the contact information for these reviewers has been provided if the commenter requires additional information. The EIS is not the appropriate format to provide experience and expertise for all cited or reference authors and materials.

GDAWR-Comments 2-16-2010							Comment Response Matrix	
GDAWR-Comments 2-16-2010							Draft EIS/OEIS Guam and CNMI Military Relocation	
#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment	
	Volume	Page	Paragraph	Section				
J-018-238	411	9	29	2	Appendix J	GDAWR	<p><u>Appendix J, Assessment of Benthic Community Structure in the Vicinity of the Proposed Turning Basin...</u> Acknowledging these limitations, size-frequency of coral colonies was evaluated from transect photo-quadrats using a built-in function of CPCe software to determine greatest chord length. Colonies lying partially within the frame were measured as the section bounded by the quadrat. Correction factors developed by Zvuloni et al. (2008) were not applied as these empirical factors were developed using computer simulations with all colonies of a size that was small compared to the sampling unit. Such a condition clearly did not apply to the coral populations in Apra Harbor (see section 4.2). In addition, use of the "center rule" (Zvuloni et al. 2008) where colonies with centers within the sampling unit are included, but those with centers outside the sampling unit excluded, is not possible with photo-quadrats as centers of colonies outside the sample frame are not visible. As a result, there is an inherent bias in the size-frequency data toward smaller distributions as colonies on the boundaries of the sampling frame will appear smaller than actual size.</p>	<ol style="list-style-type: none"> 1) This indicates that coral colony size is measured as the length or portion of the colony falling within the quadrat. Length is bounded by the quadrat. The method will overestimate smaller size classes and underestimate larger size classes because corals will not be measured completely. A large coral may appear in two quadrats and allocated to a smaller size class than what it really is. 2) Your reviewer Dr. Katharina Fabricius also stated the photo method does not allow assessment of neither size frequency nor size of large colonies (they don't fit into the photo frames). 3) An adequate resource assessment such as the use of an in situ method to determine coral size needs to be conducted and included in the FEIS.

J-018-238

Thank you for your comment.

Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS is updated to reflect the latest developments in this review.

The Navy coral surveys were conducted in-situ at the sites of the proposed project area. As noted previously, the Navy has used a scientifically recognized and defensible survey methodology. Further, the analysis was performed by recognized experts from the University of Hawaii and the National Coral Reef Institute.

Comment Response Matrix

Draft EIS/OEIS Guam and CNMI Military Relocation

GDAWR-Comments 2-16-2010

J-018-239

#	Location				Commenter	EIS/OEIS Statement	GDAWR's Comment
	Volume	Page	Paragraph	Section			
412	9	9	3	Appendix J	GDAWR	<p><u>Appendix J. Assessment of Benthic Community Structure in the Vicinity of the Proposed Turning Basin...</u> In brief, a matrix of 50 randomly distributed points was overlain on each photoquadrat image, and the organism or substrate type lying beneath each point was identified to the lowest taxonomic classification possible.</p>	<p>1) The DEIS indicates that the photoquadrat method used counted any part of a coral colony that occurred within the quadrat frame. The method is inadequate because it produces counts that overestimate colony densities due to double counting of colonies on contiguously placed quadrats.</p> <p>2) An adequate resource assessment such as the use of an in situ method for coral size frequencies needs to be conducted and included in the FEIS.</p>

J-018-239

Thank you for your comment. Habitat assessment methodologies which evaluate the function of affected aquatic resources, such as coral reef ecosystems, are an evolving science and the adequacies of existing and new methodologies are heavily debated in the scientific community. Ideally, a standard assessment technique that accurately characterizes and quantifies losses and gains of coral reef ecosystem functions would be used. However, rulemaking for the Compensatory Mitigation Rule recognizes the wide variety of aquatic resources present in the United States and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used an historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging (LIDAR) satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient CVN wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of LIDAR satellite photos, is the "best currently available science" to attempt to capture the thousands of elements that comprise the function of a coral reef ecosystem. DoD's assessment is currently under review by the US Army Corps of Engineers, the agency charged with implementing dredge and fill permits under CWA Section 404, and other Federal agencies. The FEIS will be updated to reflect the latest developments in this review.

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GEDA
GUAM ECONOMIC
DEVELOPMENT AUTHORITY

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February 17, 2010

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Attention: GPMO

RE: Comments on the Draft EIS/OEIS for Guam and CNMI Military Relocation

Hafa Adai!

This letter provides comments from the Guam Economic Development Authority (GEDA) with input from the Governor's Economic Development Subcommittee (EDS) on the Department of the Navy, on behalf of the Department of Defense (DoD), proposal to relocate Marines from Okinawa, develop aircraft carrier berthing and establish an Army Air and Missile Defense Task Force in Guam.

J-019-001 Provided that the Navy, the DoD and the federal government and its agencies take actions that assure the people of Guam a sustainable economic, social and cultural quality of life, GEDA supports the proposed actions, as our analysis of the DEIS indicates that the economic costs of the proposed actions may outweigh economic benefits. However, other than the buildup, there are no immediate alternatives on the horizon to overcome our downward spiral and grow the economy.

J-019-002 To ensure economic sustainability so that Guam residents and the island's economy obtain maximum short and long-term benefits from the buildup, DoD must implement mitigation measures. The mitigation measures provided, address the negative impacts in the DEIS and were formulated based on key economic development mandates to assist local enterprise, and promote investments of entrepreneurial capital in Guam creating vitally needed services, strengthening current industries, and developing new and emerging industries. The DoD must include recommended mitigation measures in the Final Environmental Impact Statement (FEIS) and in the Record of Decision (ROD).

J-019-003 It is unfortunate that many of the comments contained in this report could have been addressed in the DEIS as many of them were identified earlier in the scoping comments submitted by the EDS and GEDA. Our scoping comments in no uncertain terms, highlighted the direct causal relationship between the impacts of the proposed actions on the natural environment and the economic harm to the community that could have been addressed in the DEIS. Enclosed is a copy of our scoping comments.

J-019-004 On frequent occasions, GEDA and the Government of Guam requested the Navy to inform us of the extent to which scoping comments were being addressed in the DEIS. Not only did the Navy fail to provide this information but in not doing so, the Navy created a sense of mistrust that was exacerbated by inaccurate statements during meetings concerning land acquisition and local business participation. It is our sincere hope that the DoD will incorporate recommendations contained in this letter and its enclosures into the FEIS and ROD.

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"THIS INSTITUTION IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER".

J-019-001

Thank you for your comment.

J-019-002

Thank you for your comment. As mentioned, there are mitigation measures discussed throughout the FEIS. The mitigation measures that would be committed to by DoD would be identified in the Record of Decision (ROD).

J-019-003

Thank you for your comment.

J-019-004

Thank you for your comment. Responses to the issues identified in this letter are included alongside the appropriate comments.

J-019-005

As indicated above, there is a causal relationship between the impact of the proposed actions on the natural environment and the economic benefits and costs to the community. Usually, impacts that are a result of proposed actions must be discussed in sufficient enough detail to allow informed choice among alternatives, including the no action alternative. However, in Guam's case the DEIS states that economic impacts affect the island regardless of the alternative selected due to its small size. Under different circumstances, the three proposed actions would have been discussed individually to allow detailed study of impacts that result from the preferred alternatives. However, the DEIS was especially large in scale and scope; incorporating three major proposed actions into one study. Therefore, even greater importance must be given to the adverse impacts of the proposed actions and recommendations that would eliminate or mitigate these impacts on the human environment.

J-019-006

A major concern is the financial costs of the proposed actions on the people of Guam. The DEIS estimates that \$2.1 Billion in gross receipts tax, corporate tax and personal income tax would be generated over the 10 year period from 2010 to 2020. However, information provided at the Navy-sponsored Guam Industry Forum III indicates that GovGuam expects to pay over \$4 Billion in utility infrastructure costs to support the buildup and because the buildup has accelerated the need for specific projects required for organic growth. These costs do not include social service and infrastructure costs in health and medical care, education, public safety and general government services.

J-019-007

The FEIS must fully disclose these costs as it is doubtful that the federal government or the private sector would support projects that have even a 1:1 cost benefit ratio. It is recognized that other economic benefits resulting from the proposed actions may not be contained in the DEIS, however the DEIS is insufficient in that it does not consider a comprehensive quantification of infrastructure costs that will be required by GovGuam agencies. This, combined with the overestimation of the economic impact by using an economic model that clearly overstates the financial and economic projections, results in a very skewed analysis of the proposed projects on Guam.

The ebb and flow of economic activity associated with the military buildup will create enormous pressures on the residents of Guam during the "ramp up" portion of the buildup, however, to truly benefit from the effects of the buildup, Guam is challenged to maintain an increased standard of living for its residents after the operational period is achieved. While the identification of impacts is provided, focus on mitigating these adverse impacts is noticeably lacking in the DEIS. The DEIS does not offer any discussion on how Guam can accommodate the Marine relocation and still provide adequate public services, living wage employment opportunities and mitigate any sociocultural issues identified in the DEIS.

Furthermore, in GEDA's role as central manager for the government of Guam, as of December 2009, GovGuam has nearly reached its Debt Ceiling set by the Organic Act. The debt capacity of the island is based on 10% of the aggregate tax valuation property in Guam. The U.S. Supreme Court 2007 decision in the case of *Limtiaco v. Camacho* interpreted "aggregate tax valuation" to mean the assessed valuation (i.e. the amount upon which the property tax rate is levied, as opposed to the appraised value). Assessed value has been defined by Guam statute to equal 90% of appraised value.

J-019-005

Thank you for your comment. The economic impact analysis in the EIS does not differ between alternatives because the analysis is done at an island-wide level of detail - the particular location of construction or operations, as long as it is on Guam, does not significantly affect island-wide analysis.

Another study, funded by DoD, the Fiscal Impact Assessment Study will present more detailed information on the financial/fiscal condition of GovGuam's expected revenues and expenditures.

J-019-006

Comment noted.

J-019-007

Thank you for your comment. Please see Section 4.4.1 of the Socioeconomic Impact Assessment Study (SIAS), which is Appendix F, Volume 9 of the DEIS for information on the expected impacts the proposed action would have on the government of Guam's tax revenues. The analysis in the SIAS includes both direct and indirect impacts including those who move to Guam for work related to the proposed action. Another study, funded by DoD's Office of Economic Adjustment is underway, this is the Fiscal Impact Assessment that identifies the needs of the government of Guam and where the money to fund the needs could come from.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

A summary of Guam's indebtedness vs. debt ceiling is as follows, as of Dec 2009:

<u>Aggregate Value Less Exemptions (as of October 31, 2009)</u>	
Land	\$4,855,761,930
Building	<u>\$3,934,936,524</u>
Total Aggregate Value	\$8,790,698,454

<u>Calculation of Available GovGuam Debt Capacity</u>	
Debt Ceiling (10% of Aggregate Value)	\$ 879,069,845
Less GovGuam Outstanding Debt (as of 12/09)	<u>(\$ 753,084,289)</u>
Amount of Available GovGuam Debt Capacity	\$ 125,985,557

The amount available is misleading, however, as there is currently an \$88 million USDA landfill loan pending, which would be applied to the debt ceiling if USDA requires a pledge of Section 30 revenues. Including this loan, there would be less than 5% of "cushion" in the debt ceiling.

As plainly shown above, the additional borrowing capacity of GovGuam does not exist. Any additional GovGuam borrowing anticipated by DOD would be added against the debt ceiling, with the exception of autonomous agencies such as Guam Power Authority, Guam Waterworks Authority, Guam International Airport Authority and Port Authority of Guam (to the extent that it does not rely on revenues of GovGuam).

Two hallmarks of sustainable economic development, the creation of jobs and small business development are not adequately addressed in the DEIS. First of all, when factoring in any declines in unemployment rates, the DEIS should consider the relationship between unemployment rates in Guam and actual employment. The unemployment rate is not necessarily an accurate indication of the unemployment/employment situation in Guam. For example, in September 2009, the unemployment rate increased by 1% to 9.3%, reflecting an increased number of unemployed persons. However, for that same time period, the number of employed persons increased by 4% according to the report. The unemployment figure also includes teenagers who are 16 years old through 24 years old, making up 40% of the September 2009 unemployed population. The DEIS should consider how many young persons between the ages of 18-24, who were not previously in the work force, could fill the new jobs. Furthermore, as stated in the DEIS out-migration of in-migrant workers and their dependents is an issue. The unconstrained scenario assumes prompt out-migration of temporary population as military construction concludes. Indeed, this is a serious issue that should be addressed further by the DEIS. By assuming prompt out-migration, the study ignores the serious potential costs of a larger in-migrant population in Guam that will have serious adverse impacts on public resources during the buildup process and beyond. Recommendation would be to support the constrained scenario as a preferred alternative.

The DEIS states that there are challenges related to human resources due to Guam's remoteness, size and lack of experience. It blames GovGuam's performance on human resources and lack of governance, while failing to describe circumstances under which

J-019-008

Thank you for your comments, they are helpful and noteworthy. The unconstrained scenario and the constrained scenario do not represent different alternatives to the proposed action. The two scenarios are merely projections, using different modeling assumptions, and the purpose of the two varying projections is to present a range of possible outcomes.

Another study, funded by DoD, the Fiscal Impact Assessment Study will have more detail about the particular financial/fiscal condition of GovGuam as related to government income and expenditures.

J-019-009

Guam was subject for the last fifty years. Especially in the last 10 years, Guam has dealt with more than three super typhoons, an earthquake of extreme magnitude, the Asian economic crisis, mandated tax policies with no subsidized funding, and the global economic crisis to name a few. To make a simple statement implying that GovGuam has mismanaged its Government without giving the full context is irresponsible on the part of the DEIS. In addition, it does not describe how it derived the conclusion that Guam does not have skilled technical or managerial workers based on its remote location and size.

In the matter of small business development, as in any economy, small businesses are the backbone of our island's economy, the DEIS is deficient in its coverage of local business contract opportunities and constraints. The only aspect dealt with in the DEIS is Alaskan contractors and their race-based ability to obtain contracts. GEDA's scoping comments presented many other opportunities and constraints that it requested should be addressed in the DEIS which was not done. As the Navy has publicly released its NavFac Execution and Acquisition Plan which deals with contracting and since the plan provides details regarding contracting opportunities associated with the proposed action, the DEIS should evaluate the impacts on local business contract opportunities in line with the provisions of this plan. Additionally, as this plan includes DPRI as well as non-DPRI funding and other proposals such as the establishment of Joint Base Guam/Joint Region Marianas, the effects of the plan must be addressed in the Cumulative Impact section of the DEIS. There is inadequate analysis of the benefits to accrue to Guam businesses. The proponent of the action has not "set-aside" contractual funding for local or even small businesses. The "expectation" that Guam businesses will benefit from various opportunities associated with the proposed action must be identified and quantified through proper study.

The recommendations contained in this letter and its enclosures will mitigate the following impacts on the human environment from the proposed actions as identified in Volumes 2, 4, 5 and 7 of the DEIS:

- The time lag between when GovGuam needs revenue and when revenue is actually collected.
- Front-loading infrastructure costs.
- Use of other sources of revenue to fund civilian improvements as Section 30 does not contribute significantly to government revenues.
- Increase pressured for substantial borrowing resulting from increased infrastructure demands created by the proposed actions.
- The majority of value from buildup is never realized when imported goods are sold on-base and profits are not reinvested locally. Much of the expenditures by military personnel are made at on-base establishments that send profits off-island.
- The recession-like period after 2014 wherein businesses would have to end or cut back and many workers would have to out-migrate due to job loss.
- The cost of goods and services rising faster than the incomes of Guam workers.
- Less opportunity for Guam companies to participate in the construction and operational phases.
- Over-supply of housing after 2015 (assuming that financing institutions would even finance construction), driving housing prices down for residents and substantial losses for developers and landlords.

J-019-009

Thank you for your comment. Public comments on the DEIS are an important part of the decision-making process. This information becomes part of the FEIS and is evaluated when DoD prepares the FEIS and issues a Record of Decision at the end of the NEPA process. The changes you recommend have been implemented for the Final EIS. Specific contracting procedures are not discussed in the EIS.

J-019-010

- Loss of labor to higher paying jobs and pressure for increased wages in existing jobs.
- Impaired competition with inexpensive Asian tourist destinations and conflicts between military and tourist operations.
- Few new federal civil service jobs for local residents.
- Increased level of service to be provided by most local government agencies.

J-019-011

DEIS indicates that a "suite of mitigation measures are under consideration to mitigate impacts to socioeconomics". A clear description of these mitigation measures and how they are expected to mitigate socioeconomic impacts must be provided. Following are recommended mitigation measures that should be included in the ROD, to increase the benefits of the proposed actions on the human environment and the economy of Guam:

- The DoD (and federal government) must identify and allocate funding for utility and social infrastructure improvements needed on Guam as a result of the proposed actions.
- The DoD working in conjunction with the Guam Department of Revenue and Taxation and the Internal Revenue Service must implement a collaborative monitoring system to ensure that all businesses and individuals receiving military contracts and payments abide by Guam tax law.
- The DoD should remove all barriers that disallow Guam residents every opportunity to qualify for proposed action-related employment during both the construction and operational phases.
- The DoD should remove all barriers that disallow resident businesses the opportunity to participate and qualify for contract awards both as prime contractors and subcontractors.
- The DoD with support from other federal agencies including the U. S. Department of Commerce and the U. S. Department of Agriculture must provide funding support to the Government of Guam to develop an economic plan which will examine and provide recommendations on how the benefits derived from the few short years of growth spurred by military expansion will sustain the Guam economy in the future.
- The DoD with support from other federal agencies must provide funding support to design, test and implement an econometric model for the island. The model would go beyond the Gross Island Product calculations to identify income, output, and employment multipliers including the multiplier effect of military spending on Guam.
- The DOD with support from other federal agencies must provide funding support to GovGuam to mitigate adverse impacts on non-DOD land.

J-019-010

Thank you for your comment. Jobs analysis was based upon the number of dollars estimated to enter the Guam economy as a result of the proposed action. Overall, at the 2014 peak of construction and beginning of operations, the civilian labor force demand with the proposed action is 75% higher than it otherwise would have been without the project. At 2020, the difference declines to 12%. Analysis took into account historical information of people arriving on Guam from other areas (such as the Phillippines and FAS) in search of jobs, in order to determine the number of new jobs generated by the proposed action that would go to Guam residents. Overall, analysis indicated that at the 2014 construction peak, Guam residents are expected to capture approximately 2,566 jobs and off-island workers would take 15,157 jobs. By 2020, the number of these jobs filled by Guam residents would decrease to 2,211 jobs, and off-island worker jobs would decrease to 3,935 jobs.

Please see the Socioeconomic Impact Assessment Study (Appendix F of the EIS), Section 4.3.7 for information on Tourism. The analysis of the impacts on tourism generally reflect that the impacts of the proposed action would have on tourism would be mixed. Tourism may decline as some visitors may shy away from Guam due to construction activities and an increased military presence on the island but that would be made up for by increased visits from members of the military who are tourists while their ships are docked on Guam. In the Socioeconomic Impact Assessment Study (SIAS), found in Appendix F of Volume 9 in the EIS, the number of off-island H2B visa foreign laborers was estimated. Two scenarios were reviewed: the maximal number (unconstrained) and a constrained scenario. In Section 4.4 of the SIAS, there is detailed discussion and analysis of impacts to public services; some of the public services would be impacted by temporary workers and some would not. The Navy would require contractors who work on DoD projects to provide healthcare for their employees, including off-island/H2B workers. A small percentage may seek health and/or social

J-019-012

- To assist in improving GovGuam's potential for participating in the private lending market, the Department of Defense must provide funding assistance to the Guam Economic Development Authority, which by local law is charged with providing oversight and guidance to GovGuam and its agencies and instrumentalities with respect to debt financing and cash and asset management, to retain financial consultancy services to carry out increased financial management responsibilities and to ensure that debt issuances obtain the best financing terms possible.
- Similar to the requirements of the Base Realignment and Closure Act, the DoD must initiate and support administrative remedies or Congressional action to establish local business preference criteria for all proposed military expansion construction and operation contracts.
- The Joint Guam Program Office (JGPO) in conjunction with the Naval Facilities Engineering Command Marianas (NavFacMar) with oversight from the U. S. Small Business Administration must tailor scopes of work for construction and operational phases for maximum participation by local/small businesses.
- NavFacMar shall police subcontracting plans to ensure that prime contractor commitments to local/small businesses are maintained throughout the life of the contract and periodic reports shall be made public.
- The DoD must commit that the determination that the military has met small business goals must be based upon small business contracts awarded in Guam and not the rest of the nation.
- The Commander Joint Region Marianas must study the impact on local/small businesses of Base Operating Support contracts to ascertain best practices for small businesses on Guam and publicize the results of its study.
- In negotiations with the Government of Japan, the DoD and Department of State must ensure that monies available from the Government of Japan and Special Purpose Entities (SPE) to implement the proposed actions provide for maximum local/small business participation.
- The DoD must support Guam Chamber of Commerce initiatives to allow local wholesalers to compete against off-island suppliers of goods at the Navy Exchange and Commissaries.
- The DoD through the Defense Logistics Agency and the Defense Commissary Agency must require use of local franchises and discourage/disallow the practice of purchasing goods from off-island franchises when local franchises exist.
- JGPO, NavFacMar, NavFacPacific (NavFacPac) and other DoD entities must revise the NavFac Execution and Acquisition Plan to award the National Goal of at least 23% of the total funding made available for the proposed actions including funding from the U. S. and Japanese Governments and Defense Policy

services provided by Guam. However, workers would also contribute to the Government of Guam revenues in form of personal income and gross receipts taxes; corporations would pay corporate income taxes (See section 4.3.3, page 4-24 of the SIAS). The additional money would flow into Guam's revenues and, depending on executive and legislative branches decisions, could be used to provide for additional public health and social services. Relating to the population figure of about 80,000 people; it should be noted the figure represents a maximal figure when most of the construction workers are still on Guam and the military populations arrive (2014); once construction is completed, the operational population would be about 33,400 (2016) (see the SIAS, Table ES-1, on page iii). Mitigation measures (as appropriate) to address the significant impacts will be discussed in the Final EIS.

J-019-011

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-019-012

Thank for your comment and recommendations. DoD continues to work closely with Government of Guam and federal agencies on these important issues associated with the proposed military relocation program.

J-019-013

Review Initiative (DPRI) and non-DPRI funding during both the construction and operational phases to entice local and small businesses to participate in contracting opportunities while current issues associated with securing performance and payment bonds, insurance and other doing business issues are worked out.

- DoD in conjunction with the U. S. General Services Administration shall return federal lands not utilized by the military for current activities or activities associated with the proposed actions pursuant to Public Law 103-339 within one year after the signing of the Record of Decision.
- The DoD working in conjunction with the Guam Department of Revenue and Taxation and the Internal Revenue Service must evaluate the military practice of stationing active duty personnel on a three month or less rotating basis to ensure that Guam can collect income taxes as provided under Section 30 of the Organic Act.
- DoD support the intent and advise all federal agencies that while every effort must be taken by GovGuam to account for taxpayer money previously spent under federal grant programs, previous performance cannot be an obstacle to the provision of grant assistance for activities associated with military buildup.
- DoD to provide funding to establish a Guam “data clearinghouse,” to centralize and standardize pertinent economic data. Through a collaborative leadership that includes that business community, this pool of data creators and users, could set priorities and guide the formation of policy, and conduct cost-benefit analyses to include the determination of required resources to gather the data required to compile, and results of which would be the “priority-driver.” This centralized, integrated system would then be equipped to address such issues as validity and consistency of data, and could even utilize “data nomenclature” developed and standardized for Guam, and which would be credible. This information-sharing paradigm would benefit everyone involved in sustaining Guam’s economy, especially with valuable data that would enable the community to make good decisions and lasting contributions to Guam’s economic progress.
- Should the Government of Guam allow the use of its property for buildup purposes, DoD should respect a provision that disallows non-local companies from building or managing facilities on such property.
- Economic development in a resurging economy means supporting existing small businesses, the core industries of tourism and the military, and attracting appropriate businesses to the community, to encourage the creation of jobs and employment opportunities, which foster and improve a strong, diversified economy for the future. With that in mind, to mitigate this “recession-like” period after 2014, the following GEDA initiatives should receive funding support:

J-019-013

Thank you for your comment. DoD is working with Government of Guam agencies to minimize adverse impacts associated with the proposed military relocation program. Potential mitigation measures are included in the EIS. Mitigation measures that may address some of the issues raised in your comment would be selected for implementation by the DoD in the Record of Decision (ROD).

J-019-014

- “Buy Local” Incentive and Awareness Program to promote the importance and value of local businesses’ role in growing the island’s economy (as referenced in the 2005 Realigning a Resurging Economy report).
- Development and implementation of a “Made on Guam” incentive program through the revitalization of the “Guam Product Seal” program.
- Research & Technical Economic mission to Okinawa, in partnership with the University of Guam’s, Pacific Center for Economic Initiatives, to conduct an extensive study on the socioeconomic impacts of the military presence in Okinawa, to use as the bases to formulate best economic practices and business strategies for Guam’s government and business community relative to the military buildup.
- Research & Technical Economic, Employment, & Education mission to El Paso Texas, in partnership with the University of Guam’s, Pacific Center for Economic Initiatives, to conduct an extensive review of the community’s ongoing military buildup process, identify best economic practices and business strategies for Guam’s government and business community (as referenced in a White Paper written by Dr. Elizabeth Hawthorne, “The Case for Linking Education and Economic Development.”)
- Provide seed funding for a new financial assistance program, through GEDA, tailored to meet the needs of Guam-based small businesses such as obtaining bonding for federal contracting opportunities.
- Provide funding support for the development and implementation of an integrated marketing communications community educational and promotional campaign targeting the local community on positioning themselves and the island for growth through the various programs and resources available through the entities aligned under “The Power of E3 +1 (Employment, Education & Economic Development plus Ethics) as established by the Governor of Guam through the Guam Workforce Investment Board in 2004.
- Assist in the development of a regional farmers’ cooperative, leveraging the agricultural resources of the region to meet the needs of the projected growth population.
- DoD to provide funding support for GEDA’s initiative to reach the approximate 60,000 Chamorros that reside in the U.S. mainland, a significant number of them left over the past several years due to economic hardships. The mission will target areas to maximize reach, and appeal to former Guam residents of the opportunities for employment and entrepreneurship over the next several years.

J-019-015

The enclosed comments are in the form of two spreadsheets. The first identify the economic impacts, Navy’s suggested mitigation examples and additional mitigation recommendations. The second spreadsheet contains specific comments on the DEIS, in the format provided by the Navy. Both spreadsheets and this letter document perceived impacts from the proposed actions and actionable mitigation measures.

J-019-016

Finally, we strongly suggest that long standing Federal/Territorial issues including war reparations, return of unneeded federal land and other such issues and the DoD position on these issues be incorporated into the Final EIS as a demonstration of the federal

J-019-014

Thank you for your comment. The Final EIS has been updated (Volume 2) to better address impacts on social services.

J-019-015

Thank you for your comment.

J-019-016

Thank you for your comment. Topics such as war experiences, war reparations, and veterans benefits are important issues but are not part of the proposed action. Comments related to these issues were numerous and indicate underlying social and political dissatisfaction with a broader range of federal-territorial relations outside the scope of DoD legal authority. The various EIS public engagement forums provided an indirect avenue for informing local and federal policy-makers of issues that are important to a significant segment of the community.

J-019-017

government's commitment to resolve these issues. We also suggest that the policies contained in Substitute Resolution No. 275-30, adopted by *I Mina Trenta Na Lihesiaturan Guahan* be addressed in the FEIS.

J-019-018

In the end, the Final EIS, the Record of Decision and all recommended mitigation measures must result in the conclusion that benefits far outweigh costs. We thank you for the opportunity to provide comments in order to seek Navy's commitment to mitigate adverse economic effects and enhance positive economic effects from the proposed actions.

Put Respetu,



ANTHONY C. BLAZ
Administrator

Enclosures

1. Scoping Comments
2. Mitigation Recommendations
3. Specific Comments on DEIS

Cc: The Honorable Felix P. Camacho, Governor of Guam
The Honorable Mike W. Cruz, Lieutenant Governor of Guam
The Honorable Frank B. Aguon, Jr. Chairman, Committee on Economic Development, Health and Human Services and Judiciary
Members, Governor's Economic Development Subcommittee
Directors, GEDA Board of Directors

J-019-017

Thank you for your comment. Topics such as the political status of Guam are important issues but are not part of the proposed action.

Comments related to these issues were numerous and indicate underlying social and political dissatisfaction with longstanding federal-territorial status issues outside the scope of DoD legal authority. The various EIS public engagement forums provided an indirect avenue for informing some and reminding others in local and federal policy-making institutions of issues that are important to a significant segment of the Guam community.

J-019-018

Thank you for your comment.

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<p>There is a time lag between when GovGuam needs revenue and when revenue is actually collected. Infrastructure costs would be heavily front loaded. Other sources of revenue would have to be used to fund civilian improvements as Section 30 does not contribute significantly to government revenues. Increased infrastructure demands would increase pressure for substantial borrowing (Vol. 7 page 3-59; SIAS Appendix F page 4-28; SAIIS Vol. 9 Appendix F page 3-3)</p>		<p>•NavFasMar must establish protocol for notifying Dept. of Revenue and Taxation of contract awards and actual disbursements to allow GRT collection. • SecNav and SecDef must actively pursue federal funding from other agencies and support federal agency budget requests for Guam projects at all levels of the Executive and Legislative Branches of the federal government. • NavFasMar must provide continuing training to GovGuam personnel involved in preparing requests for grant, loan and direct Congressional funding. •SecDef must initiate and support efforts in Congress to craft and pass annual omnibus appropriations measures to fund local requirements directly and indirectly required by the proposed action.</p>
<p>There will be a recession-like period after 2014 wherein businesses would have to end or cut back and many workers would have to out-migrate due to job loss. The end of this boomtown period would technically be an economic recession. (Appendix F, page 4-147 table 4.3-4)</p>	<p>• Assist GovGuam with technical assistance, development and implementation of comprehensive data collection systems focused on public services provided to FAS citizens in order to facilitate GovGuam access of Compact Impact and other related funding. • Assist GovGuam with technical assistance, development and implementation of comprehensive data collection systems focused on public services provided to military individuals, in order to facilitate GovGuam access of TRICARE and other related funding. • Assist GovGuam with technical assistance, development and implementation of comprehensive data collection systems focused on patient information, records, and services accessed, in order to facilitate appropriate care administered in a timely manner.</p>	<p>To ensure the creation of new jobs after 2014, JGPO and NavFasMar shall establish a program that guarantees local employment during the operational phase. Minimize dependence on off-island and stateside hires and require that contractors, particularly those with technical specialties needed by the military hire local employees. JTRQ and other contract vehicles that provide multi-year contracting shall include provisions for training and hiring of local employees. Scholarship programs within the Navy and DoD for technical and scientific training shall be extended to Guam residents. SecNav and SecDef shall establish a policy that future family housing required by the military shall be constructed and managed by local private companies that can meet performance and capability requirements.</p>

Guam Economic Development Authority

J-019-019

Thank you for your comment. Public comments on the DEIS are an important part of the decision-making process. This information becomes part of the FEIS and is evaluated when DoD prepares the FEIS and issues a Record of Decision at the end of the NEPA process.

As you note, there would be an expected decline in economic activity as the construction phase of the proposed action winds down. However, all economic variables analyzed are expected to be at higher levels of benefit for every year in the foreseeable future than they otherwise would be without the proposed action. For instance, please note Figure 4.3-1 of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS), which shows higher levels of demand for labor during every year, with the proposed action, compared to the baseline trend which shows demand for labor without the proposed action.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

<p>J-019-020</p> <p>Guam workers will likely continue to see the cost of goods and services rise faster than their incomes. (Vol. 2, Chapter 16)</p>		<p>•JGPO shall obtain funding for and shall develop a monitoring plan in conjunction with the BLS DOL and BOSP to calculate the cost of living on an annual basis and to compare COL to household incomes. The monitoring plan shall establish thresholds which will signal the need for identifying and funding methods to ensure that the cost of goods and services do not rise faster than incomes.</p> <p>•During the construction phase, JGPO and NavFacMar must establish a policy that construction companies must purchase local agricultural and aquacultural produce.</p> <p>JGPO and NavFacMar should include this as a criterion in the award of contract options, similar to low use of small businesses as subcontractors is used in the acquisition process.</p>
<p>The operational phase may bring more significant business opportunities for Guam companies but how much of the total construction budget is awarded to Guam companies? (Vol. 9 SAIS page 4-35)</p>	<p>•DoD can reduce construction and operations tempo to reduce the adverse impacts of a large increase in construction population on Guam - eliminating the population boom and bust effect identified in the analysis. •Prohibit dependents from accompanying Marines until construction is complete</p>	<p>•JGPO and NavFacMar must analyze the nature and extent of contracting in Ocinawa for operational requirements in support of the Marines and publicize the results of this analysis within one year following the issuance of the ROD to allow local companies to prepare for contracts to be let during the operational phase. •The Sec of the Army shall prepare a similar analysis regarding the Army Missile Defense System. •JGPO, NavFacMar, and SecArmy must develop and DoD must support a plan that gives preference to local businesses in contracting during the operational phase.</p>

J-019-020

Thank you for your comment. Relating to cost of living and the proposed military buildup, it is noted that the history of inflation and recession of Guam's economy from the 1970s to present was provided on page 3-47 of the SIAS. In subsection 4.3.1.4 (beginning page 4-10) of the SIAS, the subject of impact on the standard of living is addressed, stating:

"Standard of living is a measure of purchasing power. If the standard of living increases for a person it means they can purchase more goods and services. If the standard of living declines for that person, he or she can purchase fewer goods and services. Changes in a person's standard of living are determined by their income and the prices of the goods and services they tend to purchase. A person's standard of living will increase if their income rises faster than the prices of goods and services they tend to purchase. A person's standard of living will decline if the prices of goods and services they tend to purchase rise faster than the person's income. In both the construction and operational components, the average wage of workers would increase as a function of greater demand for labor. However, the price of goods and services purchased by individuals would rise as well. It cannot be definitively predicted whether wages or the price of goods and services would increase at a faster pace. If wages earned by a particular household rise more quickly than the price of goods and services, then the standard of living would increase. If the price of goods and services rises more quickly than wages, the standard of living would decrease. For households on fixed incomes, the result would be reduced purchasing power. Those with the ability to quickly renegotiate their wages will have a better chance at maintaining or increasing their standard of living." On page 4-11 of the SIAS, the discussion continues and discusses the income of military related construction and operational jobs that will, on the average, be higher than the present average wages on Guam. It concludes: "In terms of cost of living, from 2000 to 2008 Guam workers have seen their standard of living decline by 30% and there is no reason to expect the military buildup to reverse that trend – Guam workers will likely to

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<p>J-019-021</p> <p>If new housing is constructed for workers, an oversupply after 2015 would drive housing prices down for residents, but would likely mean substantial losses for developers and landlords (assuming that financing institutions would even finance construction due to potential risk). (Vol. 7 page 3-59)</p>	<p>Assist GovGuam in seeking federal funding to expand the stock of low-to-moderate income housing on Guam, reduce impacts on housing availability and expense</p>	<p>SecNav and SecDef shall establish a policy that future family and bachelor housing required by the military shall be constructed and managed by local private companies that can meet performance and capability requirements. KAPO, SecNav and SecDef must actively support GovGuam efforts to allow Guam residents to qualify for USDA rural housing and other programs even if Census data demonstrate that geographic areas exceed program population thresholds.</p>
<p>The possibility of wage increases or loss of labor to higher paying jobs during the construction component is a highly likely outcome. The general service sector could undergo a period of difficulty due to loss of labor to higher paying jobs and pressure for increased wages and, with particular regard to tourism, this could also impact competitiveness with inexpensive Asian tourist destinations. (Vol. 9 AIS page 4-37; Vol. 7 page 3-59)</p>	<p>Inhance economic benefits and compensate for economic costs for local businesses, the Marine Corps would consider granting trainees some liberty at the end of every training mission so that they might spend money in local establishments and interact with local residents.</p>	<p>SecNav will support GovGuam requests to allow other industries besides construction to employ H-2 alien laborers to accommodate the period of difficulty. KAPO will establish a monitoring program in collaboration with GovGuam to determine when the period of difficulty ends so that the allowance for other industries to hire H-2 can be ended.</p>
<p>Local workers would take up only 25% of new federal civil service jobs. (Vol. 9 Appendix F page 4-147 table 4.3.3 and page 4-0)</p>		<p>SecNav working with the Congress as necessary shall afford those affected by earlier BRAC and A-76 terminations, early retirements and priority placements with re-employment rights for civil service jobs resulting from the proposed actions.</p>

continue to see the cost of goods and services rise faster than their incomes. While the proposed action may not represent a reversal of this trend, it will slow the rate of decline in the standard of living that has been prevalent since 2000."

Construction contracts have not been established for the proposed action so it is impossible to tell what percentage of contracts would go to Guam companies. However, the SIAS notes that about 17.5% of total construction money will be spent on Guam.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-019-021

Thank you for your comment. Public comments on the DEIS are an important part of the decision-making process. This information becomes part of the FEIS and is evaluated when DoD prepares the FEIS and issues a Record of Decision at the end of the NEPA process.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

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<p>J-019-022</p> <p>Local government would have to increase its level of service in most agencies. (Vol. 9 Appendix K and Vol. 2 Chapter 16)</p>	<p>•DoD can implement incentive programs for military spouses and dependents that apply for and are hired into GovGuam public services agency employment. •DoD can implement volunteer programs for military, their spouses and dependents. Linking these to long-term government of Guam public service agency volunteer positions. •DoD can implement collaborative efforts with the federal government and GovGuam to identify and provide grant writing assistance to Guam public service organizations and agencies that have existing AmeriCorps program, or have the potential to host an AmeriCorps program, to facilitate an increase in AmeriCorps service on Guam. •Assist GovGuam in seeking federal funding for necessary permanent number professional staff identified, as well as the number of administrative and supporting staff needed for these professions to perform their positions adequately. •Assist GovGuam in seeking federal funding for an increase in the number of private staffing and service contractors currently working for service agencies, to match staffing</p>	<p>DoD shall actively support GovGuam's request for technical assistance under the Inter-Agency Personnel Act that allows federal employees to work for GovGuam with their salaries paid for by the federal government.</p> <p>JPGO in conjunction with GovGuam shall establish an advisory Task Force headed by DoD that is responsible for alerting Navy and GovGuam decisionmakers regarding conflicts and recommending appropriate courses of action.</p>
<p>Increases in military positions may increase conflict between military, civilian and tourist operations.</p>		

J-019-022

Thank you for your comment. Your proposed mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

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Comment ID	Response	Response Date	Response Type	Response Location	Response Content	Response Status	
J-019-023	1	9	F	vi	1st para.	Proposed action may not represent a reversal of the trend that cost of goods and services will rise faster than incomes, but it would be expected to slow rate of decline in standard of living. DEIS must provide data supporting this impact so that basis for slowing rate of decline can be evaluated.	GEDA
	2	9	F	2-2	1st para.	One factor not apparently considered in the determination of how many new jobs would be filled by Guam residents is the number of graduating high school students. Guam graduates approx. 2000 students per year and military buildup should be viewed as a source of employment for these graduates.	GEDA
	3	9	F	2-4	2.1-1	What is source of information for this table? 1997-1999 shows higher figures of immigration as compared to highlighted years. What is the cause of this and how does this affect analysis? The percentages reflect Guam's Philippines born population but the ages of them upon arrival to Guam are not stated.	GEDA
	4	9	F	2-5	2.2	Need to explain why some economic topics such as potential effects on cost of living, unemployment, local business opportunities are "less conducive to quantification". It appears that these topics can be quantified but the DEIS did not do so.	GEDA
	5	9	F	2-9	2.2.4.5	Consensus appears to be that banks on Guam were not adversely affected by financial crisis. If this is true, it contradicts statement made in DEIS and that potential for capturing indirect economic benefits is better.	GEDA
J-019-024			F	3-47	Fig 3.2.1	This map depicts GovGuam land ownership in the Andersen AFB area which we believe is incorrect. This map is used in other sections as well.	GEDA
J-019-025	7	9	F	3-47	3.3.3.2	Section on Human Resources must be revised to show that Guam ranks 126 out of how many cities? If DEIS is to continue to state that Guam lacks governance experience as compared to mainland local and state governments, it must provide data to show this, rather than simply implying that Guam has only 50 years of experience. Additionally, the DEIS must show how lack of experience affects Guam's alleged inability to handle federal funds, federal receivership and high level administrative fraud.	GEDA
	8	9	F	3-3	Middle	Statements need to be revised to reflect more recent experience that Guam was able to float over \$500M in bonds with a demand of 11 times that being offered. Guam's triple tax exempt status for investors increases attractiveness of Guam bonds regardless of the B+ rating. Additionally, DEIS admits that it has not determined cost of satisfying demands generated by proposed action on roads, ports, and other infrastructure. Quantification of costs must be conducted to allow cost benefit analysis of the proposed action.	GEDA
J-019-026	9	9	F	3-24	3.5.1.4	Regarding war reparations, it is our understanding that the US government absolved the Japanese from resolving Guam's war claims and in its place, committed itself to resolving war claims on behalf of the Japanese. The Guam War Claims Act passed by Congress in 1945 is testament to this commitment and recent action by the House of Representatives and the Senate (even though the new war claims act was not enacted in this Congress) reaffirms this commitment.	GEDA

Guam Economic Development Authority

J-019-023

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. Comments received from the public allow DoD to make changes to the EIS before the document is finalized. This information becomes part of the Final EIS and is evaluated when DoD issues a Record of Decision at the end of the NEPA process.

The source of Figure 2.1-1 is Public Use Microdata Sample (PUMS) data from the U.S. Census. A reference has been added, below the figure, to the FEIS. The highlighted area of the figure represents a period of time when there was a high level of construction activity on Guam. The data is presented as-gathered and provides no distinct conclusion, which is a conclusion in and of itself.

Certain topics such as cost of living and unemployment rates are difficult to quantify because they depend on a multitude of factors; projections may have been made for these topics however, the projections would have a low level of accuracy.

The SIAS, under NEPA specifications, presents two measures (Unconstrained scenario and constrained scenario) that aspire to present a maximal impact scenario; if beneficial economic impacts are realized at a higher level than stated in the SIAS, then that would be appropriate.

J-019-024

Thank you for your comment. The figure is edited in the Final EIS.

J-019-025

Thank you for your comment. Language in the Final EIS has been changed according to your recommendation.

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J-019-027						
Item	Page	Section	Table	Comments	Response	
10	9	F	4-34	4.3.6	The DEIS is deficient in its coverage of local business contract opportunities and constraints. The only aspect dealt with in the DEIS is Alaskan contractors and their race-based ability to obtain contracts. GEDA's scoping comments presented many other opportunities and constraints that it requested should be addressed in the DEIS which was not done. As the Navy has publicly released its NavFac Execution and Acquisition Plan which deals with contracting and since the plan provides details regarding contracting opportunities associated with the proposed action, the DEIS should evaluate the impacts on local business contract opportunities in line with the provisions of this plan. Additionally, as this plan includes DPRI as well as non-DPRI funding and other proposals such as the establishment of Joint Base Guam/Joint Region Marianas, the effects of the plan must be addressed in the Cumulative Impact section of the DEIS.	GEDA
11	2		16-63	Table 16.2 30	The application of the Hawaii Input-Output model to Guam is inappropriate and does not yield realistic estimates of economic impact resulting from the proposed action. The absence of readily available data for Guam is an insufficient reason to utilize the Hawaii model. As a recommendation the DOD and or other federal agencies must fund the development of a Guam Model in order accurately assess the full economic impacts resulting from the proposed actions.	GEDA
12	2		16-95		The DEIS does not contain any cost information including recurring and nonrecurring costs associated with the proposed actions. While the DEIS acknowledges that a Financial Impact Assessment will be done by GovGuam, costs associated with the proposed action must be included in the EIS in order for reviewers to make informed decisions.	GEDA
13	2		16-95		There is inadequate analysis of the benefits to accrue to Guam businesses. The proponent of the action has not "set-aside" contractual funding for local or even small businesses. The "expectation" that Guam businesses will benefit from various opportunities associated with the proposed action must be identified and quantified through proper study.	GEDA
14	2		16-97		Standard of living and local business opportunities have not been quantified in a fashion that allows the DEIS to classify these as beneficial impacts.	GEDA
15	2		16-99	Table 16.2 53	The proponent has indicated that the award of construction contracts to large off-island contractors is necessitated by the condensed time frame for construction in preparation for the proposed action. Relaxing the construction timeline to smooth out the adverse impacts of a large jump in population is an appropriate mitigation measure which will allow more of the work to be contracted to local business. An alternative apparently espoused by the proponent of splitting the construction work (allowing some of the work such as prefabrication to be performed outside of Guam) but not relaxing the time frame for construction will reduce economic benefits and is not as acceptable as relaxing the construction time frame.	GEDA

J-019-026

Thank you for your comment. Topics such as war reparations are important issues but are not part of the proposed action. Comments related to these issues were numerous and indicate underlying social and political dissatisfaction with a broader range of federal-territorial relations outside the scope of DoD legal authority. The various EIS public engagement forums provided an indirect avenue for informing local and federal policy-makers of issues that are important to a significant segment of the community.

J-019-027

Thank you for your comment. The EIS and the Socioeconomic Impact Assessment Study (SIAS, Appendix F of the EIS) have identified the probable impacts of the proposed action and alternatives based on the best available information. Existing data and information was gathered and supplemented with interviews with federal and Guam agencies. To provide the public and various governmental agencies with an opportunity to review and comment on the methodologies and assumptions used, the SIAS was included as Appendix F, Volume 9 of the DEIS. Comments provided on the DEIS will also be included to provide the decision-makers with the public views in support and/or opposition of the proposed action and alternatives.

As documented in the EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

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J-019-027 16	1		ES-35		DEIS indicates that a "suite of mitigation measures are under consideration to mitigate impacts to socioeconomics". A clear description of these mitigation measures and how they are expected to mitigate socioeconomic impacts must be provided.	GEDA
17	9	Appen F	4-28	Table 4.3-35	Gross value of military contracts by year must be updated to show more accurate impact on quality of human environment. The US Congress has already approved over \$700M and the Japanese government has already budgeted over \$300M for 2010 while DEIS assumes only \$524M. Total cost of military contracts from 2010 to 2016 is almost \$12B as reported in DEIS. The Navy has also indicated that DPRI and non-DPRI funding would be awarded. This, coupled with the cumulative impact of the Air Force, Joint Region and other initiatives, could increase impacts. If expenditures are more like \$15B, an additional 22,500 workers would be needed using the formula contained in the DEIS. If this occurs, the impacts on the quality of the human environment become even more significant.	GEDA
18	7		3-78		The socioeconomic growth in the civilian sector will require additional education, medical care, police and fire facilities. These are elements that are likely to be addressed in the CSS* (probably means FIA). *CSS* is not defined in the DEIS however it probably means Compatibility Sustainability Study or maybe Fiscal Impact Assessment which GovGuam's consultant is performing under OEA funding. The FEIS must include the results of these studies as they would identify mitigation measures that DoD would consider in making informed decisions.	GEDA
19	7		2-30		If Navy is committed to working with GovGuam and other federal agencies to secure funding for off-base impacts, include this commitment within the ROD.	GEDA
20	9	Appen F	4-29	Table 4.3-37	This table projects base operations expenditures from 2015-2020 at \$52.4M based upon USAspending.gov. for expenditures on Guam. A US DoD IG report dated March 12, 2007 (Report No. D-2007-069) provides a significantly greater annual base operations cost (even after deducting construction and personnel costs) and should be used as a basis for estimating annual costs. Alternatively, the IG report indicates that annual costs should be identified in the FY2009 Program Objective Memorandum. We submit that Guam historical costs should not be used as better information is available. Higher future operational costs would demonstrate an even greater positive benefit of the proposed actions which assists in arriving at a more informative cost benefit analysis. In addition, DoD's FY11 Budget Request which would form the basis of the FY11 National Defense Authorization Act or DoD's Future Years Defense Plan which is required by Congress, should be used in the FEIS, as the costs included in the Budget Request or the FYDP would be a more accurate depiction of actual costs.	GEDA
J-019-028 21	2		16-36		The narrative under Chamorro Land Trust Commission actually describes the Guam Ancestral Lands Commission. Also, the narrative under GALC actually describes the CLTC.	GEDA

J-019-028

Thank you for your comment. Edits have been made as appropriate in the FEIS.

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Comment ID	Page	Section	Comment	Response	
J-019-029 22	2	16-42	Under "Impacts", DEIS indicates a steady 31K population "as increases in base operational expenditures cease by 2019". Operational expenditures will not cease and it will be necessary to monitor actual population levels. As previously indicated by the Bureau of Statistics and Plans, a mid-Decennial Census should be supported by the military to ascertain changes in population and the extent to which DEIS projections have been achieved.	GEDA	
23	2	16-44	Table 16.2.5	The DEIS uses the Census as the basis for its assumptions on the demographic characteristics of the Marines that will be relocating to Guam. As the Japan-US agreement identifies the Marine units relocating to Guam, it would be more accurate to use the characteristics of these units, even if the actual unit service member does not relocate to Guam.	GEDA
J-019-030 24	2	8-20	The discussion regarding the non-DoD lands north and west of AAFB is not an accurate description of the history and issues behind the provision of access to the Castro and Artero properties. Access is part of the agreement, but access was court mandated ever since surrounding properties were acquired. The North and Central Guam Land Use Plan may propose that the area be designated Tourism/Resort however, pre-existing zoning already designates the Urnao area as Hotel/Resort Zone. The proposed action will restrict access even more. Implementing the proposed action will result in the taking of development rights. Unrestricted access should be considered as an appropriate mitigation action and included in the ROD.	GEDA	
J-019-031 25	2		The entire volume 2 evaluates the proposed action against the proposed North Central Land Use Plan which has not been adopted. All impacts of the proposed action should be evaluated against Guam's zoning law.	GEDA	
J-019-032 26	6	2-118	Table 2.5-3	Volume 4 specifies that the preferred alternative for Aircraft Carrier Berthing is Polaris Point. This volume discusses impacts and mitigation measures and refers to Volume 6 for off-base improvements. Volume 6 does not identify access roadway improvements along Polaris Point Road, leading from Route 1 to the preferred site. This road is owned by GovGuam and will be heavily utilized during the construction period. During the operational period, additional traffic will be experienced as visiting servicemen will utilize this road and supplies and other cargo may be delivered to the carrier over this roadway. Roadway improvements must be made to mitigate impacts of this proposed action and preferred alternative.	GEDA
J-019-033 27	7	2-30	The DEIS recognizes that traditional funding sources (taxes, fees, etc.) will not be able to be used to fund improvements required by the proposed actions. The "identification" of potential funding sources to assist Guam in implementing mitigation measures on non-DoD land is insufficient. The Navy must not only identify but also actively support that other federal funding is provided in such for as the other agencies themselves, OMB, the Interagency Working Group, and committees of Congress.	GEDA	

J-019-029

Thank you for your comment. It is not expected that by 2019 base operational expenditures will cease; rather they would cease to increase. As there would be no increases in expenditures associated with the proposed action, there would be no additional population associated to the proposed action. The FEIS has been amended to reflect your comment.

Please see Section 4.2.2 of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS) for information on Demographics as related to the proposed action. Guam data was not used to develop demographic impacts related to the military; data from Hawaii, where there are far more Marines and more diversity between military branches than in Guam, was used. Clarifying language has been added to the FEIS.

J-019-030

Thank you for your comment. None of the proposed actions on Andersen AFB would impact access to coastal private lands or the U.S. Wildlife facility. There will be unrestricted access along Route 3a. The access restrictions for private lands north of Andersen AFB will remain. Historical access restrictions are not included in the EIS.

J-019-031

Thank you for your comment. A zoning map is being developed by GovGuam agencies, but is not updated with every zone change and was not available for inclusion in the Final EIS. The official island zoning map is presented in the Draft EIS and was relied upon for geographic areas for which there was no community master plan. The North and Central Land Use Plan is not adopted by legislature and this is acknowledged in the EIS Volume 2, Section 8.1.1.2. It was an important resource when assessing the land use impacts because 1) there was an extensive public involvement component that captured the community land use

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Comment ID	Page	Section	Response	Agency	
J-019-034 28	7	2-32	Adaptive management and post-ROD monitoring must be implemented for the socio-economic resource area. As the benefits of the proposed actions appear to be less than their costs, the Navy in conjunction with GEDA and local and federal entities must establish a post-ROD monitoring plan which should determine the level of benefits being experienced by Guam and should the level of benefits be lower than agreed upon, the Navy would take appropriate action. For instance, if the award of construction dollars to small businesses is not achieving the national target of 23%, the Navy would allocate more contract dollars to small businesses or require that large companies allocate more of their award dollars to small business subcontractors.	GEDA	
J-019-035		2-34	Fig 2.3-1	Data sharing, public involvement and notification and collaboration with Government of Guam must be included in the Monitoring Plan flow chart.	GEDA
J-019-036 30	7	2-57		"Socio-economics is not a good candidate as a driver for adaptive management mitigation techniques" taken as a whole. However, if "socio-economics" is broken down into specific areas as delineated in Vol. 7, page 3-66, adaptive management techniques could be developed for labor force, labor force income, cost of living, housing, local government revenue, local business opportunities, tourism, gross island product and public services. These areas should be monitored and once the cost begins to exceed the level projected without the proposed actions, corrective action could be taken by the Navy in conjunction with GovGuam. The appropriate metrics, targets and mitigating actions need to be formulated in the FEIS.	GEDA
31	7	3-54	Table 3.3-36	"Economic" as a "Potential Impact Component" is too general a term and should be replaced with the more specific categories used in Vol. 7, page 3-66. The impacts and their significance are substantially different using a more detailed breakdown.	GEDA
32	7	3-59		The DEIS recognizes that there will be a loss of labor to higher-paying military jobs brought on by the proposed actions however it does not identify how this impact would be mitigated. At the same time, a less qualified workforce would necessarily be employed in jobs whose pay cannot compete with military civilian pay. The Navy should commit to identifying and helping obtain funding for workforce training and ensure that companies hired for military contracts employ and train entry level personnel.	GEDA
J-019-037 33	7	2-21	Table 2.2-1	The DEIS indicates that the mitigation measures identified in this table are examples. All of the mitigation measures identified in this table should be incorporated into the ROD, should be funded and implemented by the Navy. However, under "Land", buffers should be created on federal property rather than on government of Guam or private lands.	GEDA
J-019-038 34	7	2-28	Table 2.2-1	Under Socioeconomics and General Services within DoD Control, it is unclear what specific impact is intended to be mitigated by the examples presented. A more useful approach would be to list the socioeconomic impact, identify the mitigation measure, identify the specific entity responsible for implementation, establish timelines for accomplishment and ensure funding availability.	GEDA

planning objectives, 2) it is current, and 3) it represented best available information. Volume 2, Chapter 8 describes the planned land uses presented in the North and Central Land Use Plan and assesses whether the proposed action is consistent or compatible with the Plan.

J-019-032

Thank you for your comment. Long term traffic impacts along Polaris Point Road are expected to be minimal and busiest only occasionally when aircraft carriers are visiting Guam. The FEIS evaluated the traffic impacts that would be expected on an everyday basis, Polaris Point Road and it's intersection with Route 1 currently operate a levels much below capacity and no traffic impacts are expected.

J-019-033

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam.

J-019-034

Thank you for your comment. Your mitigation recommendation has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-019-035

Thank you for your comment. The flow chart is notional and focuses on

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Comment ID	Page	Section	Date	Comment	Response
J-019-039					
35	9	App F	24-Apr	The DEIS assumes GovGuam collects all tax revenues that it would be owed. With specific regard to gross receipts taxes from construction and operational contracts, the GovGuam does not receive information from the military on contracts that have been let. As GRT and other taxes must be paid by companies upon receipt of payments (rather than contract award), a system must be established by the Navy in conjunction with GovGuam that provides appropriate GovGuam agencies with the information they require to ensure that all local requirements are met.	GEDA
36	7		3-59	Housing appears to be an area where post-ROD monitoring would be useful in ensuring that the preferred actions do not result in adverse impact. It is suggested that the Navy in collaboration with GovGuam establish a monitoring program to ensure that an over-abundance of housing is not created.	GEDA
37	4		16-9	The discussion on local business contracts indicates that there will be more construction and operation contracts for the Marine Relocation than for Aircraft Carrier Berthing. Comparing Aircraft Carrier Berthing to Marine Relocation is an inappropriate comparison that does not provide decisionmakers with a firm basis to make decisions. The number, dollar amount and nature of construction and operation contracts should be presented and compared with and without the proposed action and not compared with a different proposed action. As in other volumes, there is a complete lack of discussion regarding construction and operation contracts. Contracts are direct benefits of the proposed action and must be discussed thoroughly to provide decisionmakers with appropriate information to make informed decisions on the effect of the proposed action on the human environment.	GEDA
38	4		16-10	The DEIS states "Long term operational effects on tourism would include force protection restrictions during carrier ingress and egress restricting diving and tourist operation. However, these economic impacts to tourism would be somewhat mitigated or compensated for by increased tourism from military personnel." The extent to which adverse economic impacts would be mitigated/compensated by increased military tourism is not identified but should be quantified to determine the accuracy of the DEIS statement. Also, it is questionable whether the Navy can mitigate "restrictions during carrier ingress and egress" with "increased tourism from military personnel."	GEDA
39	4		16-10	The DEIS states "tourism organizations and hoteliers were surveyed to collect data on this proposed action." It goes on to state that surveys resulted in the conclusion that carrier visits "always contributed positively." However, no data is presented from the surveys to support this conclusion.	GEDA

the general steps in the process. It is not intended to identify roles and responsibilities. The GovGuam agencies would have a role in the plan.

J-019-036

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. Comments received from the public allow DoD to make changes to the EIS before the document is finalized. This information becomes part of the Final EIS and is evaluated when DoD issues a Record of Decision at the end of the NEPA process.

J-019-037

Thank you for your comment.

J-019-038

Thank you for your comment. Expanded mitigation discussion is available in the FEIS.

J-019-039

Thank you for your comments.

With regard to collection of GRT taxes, your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

With regard to monitoring housing post-ROD, your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

With regard to contracts, the intent of the economic impact analysis in the DEIS is to project the expected benefits, to the Guam economy, that are associated with proposed action. Projected economic benefits to the

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J-019-040						
Comment ID	Page	Section	Table	Text	Response	
40	4			16-10	Industry representatives indicate that active duty personnel on temporary orders are exempt from hotel occupancy tax when their stay at the hotel is strictly related to their military duties. The DEIS indicates that such stays are infrequent and only occur if there is insufficient transient billeting on military installations, but when they occur, military personnel may displace tourists that pay the tax. The frequency and extent of impact must be documented. Our observation is that this occurrence may be frequent, especially given the Air Force deployment every six months of bomber, fighter and support personnel. With establishment of Joint Region Marianas, all such billeting would be controlled by the Navy and it appears that insufficient on-base billeting would be the norm rather than the exception.	GEDA
41	5			16-10	The section regarding "Local Business Contracts" again compares the proposed action against a different proposed action as opposed to providing the data. Data regarding contracts during the construction and operations periods for the Army AMDTF must be provided to allow for informed decisionmaking on the effects of the proposed action on the human environment.	GEDA
42	9	Appen F		4-13	The SAIS indicates "Current plans are for on-base housing to be provided for all military personnel and thus this population is not included in the housing analysis." The effect of the Navy's housing plan should be evaluated within the EIS. While the cost of new Navy housing would not pose a significant impact on the Navy because the Japanese Government is funding this requirement, the Navy's decision to house all its personnel on-base results in the need for more land and results in further leakage of benefits as investments are funneled off-island. The provision of off-base housing will mitigate many of the economic impacts identified in the DEIS.	GEDA
43	9	Appen F	Tab 4.3-37	4-29	The average annual wage of military personnel is almost \$29K. 11,182 active duty personnel will reside in Guam during the steady state meaning that a military payroll of over \$323M would be distributed annually in Guam. As only 12% of military payroll is spent in the local economy, mitigation measures that encourage military personnel to spend off-base would reduce adverse economic impacts.	GEDA
44	4			16-17	"Cost of living increases, particularly during the construction phase, would negatively affect households on fixed incomes, though other households would benefit from rising wages. The DEIS must quantify and project the number of fixed income households during the construction and operational phases to determine if the impact on this human population outweighs impacts on the rest of the population.	GEDA

Guam economy from the Navy action are presented Volume 4 Chapter 16. Contract values do not represent a direct economic impact to the Guam economy as much of the value of contracts is spent off-Guam and does not contribute to Guam's economy. In the SIAS analysis, adjustments to total contract values are made to reflect what would be spent on Guam and contribute to the economy. The expected magnitude of economic benefit, in dollar terms, is best represented through the GIP measure which is provided for each action individually and for all actions combined (the combined measure can be found in the SIAS).

Specific information on individual contracts is unknown as the proposed action has not yet achieved a ROD.

A quantified measure of impacts on Tourism is not presented in the EIS. Information on expected impacts on Tourism was gathered during interviews with industry experts. Please see Appendix D of the SIAS for notes from the interviews.

J-019-040

Thank you for your comment.

Industry experts noted that hotel occupancy, on Guam, runs well below 100% and that non-military tourists are rarely, if ever, displaced by members of the military. Industry experts claim that members of the military are "always welcome" as they tend to spend more than other guests. Please see Appendix D of the SIAS for notes from interviews with industry experts.

With regard to contracts, the intent of the economic impact analysis in

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Comment ID	Page	Section	Comment	Response
J-019-041				
45	2	16-39	This section discusses how the DEIS determines "significance" of economic impacts on the economy of Guam and the prosperity of its people . The DEIS assumes that the economy of Guam and the prosperity of its people are one in the same. It succeeds in analyzing the economy but fails to analyze prosperity of its people. Many of the economic benefits identified in the DEIS exceed the 2% threshold but may not add to prosperity of Guam's people as most jobs will not be for Guam's people and most large contracts will not be for Guam's contractors. OEA's Technical Bulletin 5 places emphasis on "community-specific needs and resources" and not on general economic conditions.	GEDA
46	2	16-99	Tab 16.2-53 Although the economic downturns after the construction boom peak is "not considered sufficient to change the overall impact assessment from beneficial to adverse, mitigation measures for the economic downturn must be included as possibility of an economic downturn is a severe adverse impact on the human environment as a result of the proposed action.	GEDA
47	2	2-21	Table 2.2-1 As stated in the DEIS the DOD does not have the statutory authority to undertake mitigation measures on non-DOD land. However, resources on non-DOD land will experience social and economic impacts resulting from the DOD's proposed action regardless of statutory authority. A recommendation would be that non-DOD controlled mitigation measures as seen in Table 2.2-1 , if determined to be the best fit option, should require shared effort by the DOD, GovGuam and federal agencies. Further, this effort should be included in the ROD and be memorialized in a Memorandum of Understanding (MOU) requiring such efforts by the DOD, federal and GovGuam agencies regarding non-DOD control lands that are impacted by DOD's proposed actions.	GEDA
48	9	2-3	As stated in the DEIS out-migration of in-migrant workers and their dependents is an issue. The unconstrained scenario assumes prompt out-migration of temporary population as military construction concludes. Indeed, this is a serious issue that should be addressed further by the DEIS. By assuming prompt out-migration, the study ignores the serious potential costs of a larger in-migrant population in Guam that will have serious adverse impacts on public resources during the buildup process and beyond. Recommendation would be to support the constrained scenario as a preferred alternative. The constrained scenario would have a far less impact on public/private resources (e.g. housing, utilities), lower costs for the DOD, raise workforce participation, increase the standard of living, and mitigate many of the social and cultural impacts associated with the proposed action.	GEDA
49	9	1-7	As stated in the DEIS the constrained scenario is the best-case scenario. Recommendation would be for the FEIS to support elements of the constrained scenario alternative that assumes absorption of currently unemployed Guam residents by the job market, less in-migrants, and fewer non-working dependents per in-migrant.	GEDA

the DEIS is to project the expected benefits, to the Guam economy, that are associated with proposed action. Projected economic benefits to the Guam economy from the Army action are presented Volume 5 Chapter 16. Contract values do not represent a direct economic impact to the Guam economy as much of the value of contracts is spent off-Guam and does not contribute to Guam's economy. In the SIAS analysis, adjustments to total contract values are made to reflect what would be spent on Guam and contribute to the economy. The expected magnitude of economic benefit, in dollar terms, is best represented through the GIP measure which is provided for each action individually and for all actions combined (the combined measure can be found in the SIAS).

Specific information on individual contracts is unknown as the proposed action has not yet achieved a ROD.

With regard to your recommendation on military spending off-base, your recommended mitigation measures has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

With regard to housing the military off-base, your recommended mitigation measures has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

The Standard of Living Section in the SIAS does not assess the capacity for every individual on Guam to maintain wage increases above the rate of inflation. The Section, instead, provides a general overview of the situation from a Guam-wide perspective.

J-019-041

Thank you for your comment. While not all jobs and all contracts will go to Guam people and contractors, economic analysis shows that the proposed action will benefit the, overall, prosperity of Guam. With the proposed action, there would be more jobs, more income and an overall

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J-019-042						
50	2		16-8		As stated in the DEIS military households receive a basic allowance for housing which provides them with more disposable income. This statement is problematic. Military personnel and their dependents receive "over-seas housing allowance" (OSHA hereafter) on Guam not "basic housing allowance" similar to that of the continental United States. OSHA does not allow for military personnel to benefit from negotiating rents. Any discounts received from negotiating rents is returned to the DOD. This "use it or lose it" policy has created subsidized inflation on the residential real estate markets. Non-military residential renters/homebuyers are unable to compete with such a large DOD subsidy the consequences of which are already causing economic impacts pre-buildup. Recommendation would be for the FEIS to acknowledge the OSHA policy as having an economic impact and for the DOD as a mitigating measure reevaluate the OSHA policy.	GEDA
51	9		2-2		As stated in the DEIS the capacity of Guam residents to take jobs was determined by 3 questions: How much the unemployment rate would decline, how many "discourage workers" would be pulled back into the labor market, and labor force participation rates of military spouses. The analysis omits an important population that is the post-graduate student population - the graduating students of the University of Guam, Guam Community College, and all public and DODEA high schools. The student population is not included in the unemployment rate and is not considered discouraged workers; to ignore this population would create lower estimates of Guam resident's employment capacity. It also ignores the under employed population - those taking part-time employment that will be able to take full-time employment given the opportunity. Recommendation would be to include this educated and skilled population as well as a proxy group representing the under employed in the analysis. Then recalculate the capacity of Guam residents ability to take jobs for use in the FEIS and ROD.	GEDA
52	2		16-20	Table 16.1 21	The DEIS illustrates a chart of Guam Educational Attainment since 2000. The University of Guam, Guam Community College, public and DODEA high schools have more current data. There have been 4 schools built since 2000 and additional specialized schools added to the colleges. The FEIS should reflect more current attainment levels if it is to accurately evaluate the ability of Guam residents to assume jobs. Recommend that the DEIS use more current educational attainment figures and incorporate these figures into the Guam residential job capacity. Then reevaluate the figures for the FEIS and ROD	GEDA
53	9	App F		ii	The statement that this scenario assumes "some mix of limitations" is insufficient to demonstrate the viability of the numbers associated with the scenario. DEIS should identify the blockages assumed in the scenario, or at least discuss how the scenario assumptions were derived (i.e. percentages of the Unconstrained Scenario or otherwise).	GEDA
54	9		v	Table ES-3	The summary does not include Section 30 revenues, which are expected to be directly impacted by the buildup	GEDA

better standard of living than there would be without the proposed action. The results of analysis, showing relative improvement in these beneficial factors constitutes improvement to prosperity.

With regard to the projected economic downturn, Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

With regard to implementing mitigations, Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

The unconstrained and constrained scenarios in the SIAS do not represent alternates to the proposed action. They are two varying projections of economic impacts which together make up a range of possible impacts from the proposed action.

Page 1-7 of the SIAS states that the constrained scenario is a minimum-impact approach. A minimum impact is not necessarily the best-case scenario as beneficial impacts would be lower than in the unconstrained scenario.

J-019-042

Thank you for your comments.

The DEIS anticipates that military housing would be built within the main cantonment area. It is anticipated that the majority of Marine families would rent units in the military housing and generally would not compete with Guam residents for available housing units. After the construction period, housing and rental prices could decline because the construction labor force (not including the H2B who will live in dormitory type quarters) would leave Guam. Civilian military workers may vie for Guam housing; however, residential housing needed for these long-term

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J-019-043				
Comment ID	Page	Section	Comment	Response
55	9	2	Sec. 2.1.1.1 When factoring in any declines in unemployment rates, the DEIS should consider the relationship between unemployment rates in Guam and actual employment. The unemployment rate is not necessarily an accurate indication of the unemployment/employment situation in Guam. For example, in September 2009, the unemployment rate increased by 1% to 9.3%, reflecting an increased number of unemployed persons. However, for that same time period, the number of employed persons increased by 4% according to the report. The unemployment figure also includes teenagers who are 16 years old through 24 years old, making up 40% of the September 2009 unemployed population. The DEIS should consider how many young persons between the ages of 18-24, who were not previously in the work force, could fill the new jobs.	GEDA
56	9	2	Sec. 2.2.1 The DEIS reports that the State of Hawaii model was used because Guam does not have an economic model and therefore the State of Hawaii model was comparable given that it is an island economy. This statement is insufficient to justify the use of the State of Hawaii model and the DEIS provides no rationale or substantiation that the State of Hawaii has a similar economy to Guam's. Outside of being an island (or series of islands) and having a vibrant tourism industry, the State of Hawaii is not at all similar to Guam in demographics and economy. Using the State of Hawaii model may artificially inflate the impact of the military buildup on Guam, as Hawaii possesses a much larger and more dynamic economy than Guam.	GEDA
57	9	2	Sec. 2.2.3 This entire section contradicts the usage of an economic model such as Hawaii's which inherently contains a much higher capture rate and multiplier effect.	GEDA
58	9	2	Sec. 2.3.3 The DEIS analysis is insufficient in that it does not consider a comprehensive quantification of infrastructure costs that will be required by GovGuam agencies. This, combined with the overestimation of the economic impact by using an economic model that clearly overstates the financial and economic projections, results in a very skewed analysis of the impacts of the proposed projects on Guam.	GEDA
59	9	3	Table 3.3.1.1 Table 3.3-1 compares Guam's % of Government workers in the labor force to the U.S. Why is the DEIS comparing an entire country to Guam? Instead the DEIS should be comparing jurisdictions that are similar in size and demographics. When compared to the Commonwealth of Puerto Rico, Guam's Government employment is quite manageable.	GEDA
60	9	3	Table 3.3.10 Table 3.3-10 does not include Section 30 revenues, which comprises approximately 8-10% of GovGuam annual revenues. Not including this important revenue source is highly negligent on the part of the DEIS.	GEDA

workers would likely be about 3,200 units (maximal) by 2020 (SIAS, Table ES-3, page v).

Discussion of graduating students/unemployment has been added to the Final EIS.

Information on educational attainment are from the U.S. Census Bureau; 2000 census data is the most recent available for Guam. If there are currently higher levels of educational attainment than are noted in the SIAS than it might be expected that there would be more more jobs for local people than are stated in the SIAS; however, educational attainment was not considered as a factor in estimating local employment, so updated data would not change estimates. There may be more jobs for local people than the SIAS presents, this would be in holding with the NEPA precept of presenting a maximal impact scenario in an EIS document.

Additional information showing the differences between the unconstrained and constrained scenarios has been added to the FEIS.

The distribution of Section 30 funds are not part of the proposed action and are not discussed in the EIS.

J-019-043

Thank you for your comments.

Discussion of unemployment can be found in Section 4.3.1.5 of the SIAS. The discussion is general and does not attempt to estimate changes in the unemployment rate.

The economic impact analysis did not use Hawaii data in the development of direct economic impacts. Direct economic impacts were developed by adjusting primary, project related, data to reflect the

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J-019-044					
Comment ID	Page	Section	Table	Description	Response
61	9	3	Sec. 3.3.3.2	The DEIS states that there are challenges related to human resources due to Guam's remoteness, size and lack of experience. It blames GovGuam's performance on human resources and lack of governance, while failing to describe circumstances under which Guam was subject for the last fifty years. Especially in the last 10 years, Guam has dealt with more than 3 super typhoons, an earthquake of extreme magnitude, the Asian economic crisis, mandated tax policies with no subsidized funding, and the global economic crisis to name a few. To make simple statement implying that GovGuam has mismanaged its Government without giving the full context is irresponsible on the part of the DEIS. In addition, it does not describe how it derived the conclusion that Guam does not have skilled technical or managerial workers based on its remote location and size.	GEDA
62	9	3	Sec. 3.3.3.2	As stated in the comment above to Volume 2: Chapter 16, the additional borrowing capacity of GovGuam does not exist. Any additional GovGuam borrowing anticipated by DOD would be added against the debt ceiling, with the exception of autonomous agencies such as Guam Power Authority, Guam Waterworks Authority, Guam International Airport Authority and Port Authority of Guam (to the extent that it does not rely on revenues of GovGuam).	GEDA
63	9	3	3-47 Table 3.3-10	The table does not specifically identify total personal income taxes of active/retired military and active/retired federal civilian personnel domiciled in Guam also known as "Section 30" revenues. The DEIS needs to include Section 30 as a separate line item in its evaluation and projections of "Revenue Sources for GovGuam". Section 30 as of 2009 was approximately 11% of total GovGuam revenues. The increased military population and the inability to accurately track and monitor this important source of GovGuam revenue constitutes an economic impact to Guam. An alternative mitigation measure would be to incorporate a formal joint effort by DOD and the Department of Revenue and Taxation (DRT) to ensure that the withholding taxes for all active duty military, Guam Guard and Reserves, active federal employees and retired military and federal employees, who are domiciled on Guam, are actively reported in a timely manner to facilitate the preparation of the annual Section 30 Warrant submitted to the U.S. Internal Revenue Service.	GEDA
64	9	3	3-47 Table 3.3-11	Section 30 Revenues needs to be independently and accurately reported as a separate line item in this table. DOD needs to actively engage with all pay centers, the Defense Finance & Accounting Service (DFAS), the Office of Personnel Management (OPM), and the Office of Insular Affairs at the Department of Interior (DOI) to ensure that withholding tax reporting requirements are met for all activities based on Guam. This is critical with the impending military buildup and increased presence of civil service support personnel.	GEDA

economy of Guam, using Guam source data and generally conservative assumptions. A range was provided in the presentation of indirect and total impacts; the high end of the range (unconstrained scenario) did use Hawaii multipliers while the low end of the range (constrained scenario) used multipliers that were adjusted downward from Hawaii levels to reflect the possibility that the Guam economy would produce lower multiplier effects than Hawaii. Conservative adjustments at the direct impact level and the use of downwardly adjusted multipliers at the indirect level provided for the development of a range of impacts in which it is expected that the true economic impacts of the project, on Guam, would fall.

Another study, funded by DoD's Office of Economic Adjustment is underway, this is the Fiscal Impact Assessment that identifies the needs of the government of Guam and where the money to fund the needs could come from.

The estimate of income taxes in Table 3.3.10 includes federal income tax payments returned to GovGuam.

J-019-044

Thank you for your comment.

The language in Section 3.3.3.2 has been changed to address your concern.

Another study, funded by DoD's Office of Economic Adjustment is underway, this is the Fiscal Impact Assessment that identifies the needs of the government of Guam and where the money to fund the needs could come from.

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J-019-045						
65	9		4-123	The analysis of agency personnel requirements in the DEIS does not but should include the Guam Department of Agriculture. This agency carries out important regulatory and permitting functions including but not limited to those associated with aquatics and wildlife conservation and enforcement, clearing and grading, and invasive species control and eradication.		GEDA

Please see Section 4.3.3 of the Socioeconomic Impact Assessment Study (Appendix F of the EIS) for information on total income tax, related to the proposed action, that would be revenue to GovGuam.

J-019-045

Thank you for your comment. The data used in the analysis were derived from surveys and interviews performed in conjunction with the DEIS, and serve as a point-in-time indication of staffing levels. It is acknowledged that it is not possible for this analysis to capture all requirements of GovGuam agencies. It is expected that the Fiscal Impact Assessment, conducted by GovGuam consultants and funded by the Department of Defense Office of Economic Adjustment, will be able to more fully capture recent public service fluctuations, and provide a more detailed indication of fiscal impacts to GovGuam agencies. It is also noted that there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action.



Governor
Felix P. Camacho

Guam Economic Development and Commerce Authority

Aturidád Inadilánton Ikunumihan yan Kumetsion Guahan



Lt. Governor
Michael W. Cruz M.D.

May 16, 2007

Joint Guam Program Office
258 Makalapa Drive, Suite 100
Pearl Harbor, Hawaii 96860-3134

Attention: EV2

Hafa Adai:

Federal Register Vol. 72 No. 44 dated March 7, 2007 indicates that written comments can be submitted, identifying specific issues or topics of environmental concern that should be addressed in the EIS/OEIS. The Economic Development Subcommittee of the Civilian Military Task Force has been reviewing various issues, opportunities and challenges associated with increasing military missions on Guam. It is comprised of members of the private and public sectors and is chaired by the Administrator of the Guam Economic Development and Commerce Authority. The subcommittee believes that the proposed action will stimulate the Guam economy by creating jobs, increased government revenue and increased economic activity. The subcommittee is concerned about the immediate benefits that will accrue to the Guam economy during the construction period and sustainability of these benefits over the long term. In addition, the Subcommittee is concerned about participation of local businesses in the growth that is expected to occur. The subcommittee provides the following comments and suggestions on topics that should be covered in the EIS/OEIS.

Expansion of the Guam Economy

While it is generally understood that the military expansion program will have positive benefits for the Guam economy, the extent of benefits and any potential impacts on jobs, revenue and additional economic activity have not been quantified.

1. The proposed action is expected to increase jobs, revenue and economic activity. The EIS/OEIS should forecast the financial impact of the proposed actions on the Guam economy. In particular, the EIS should project what the cost of living would be on Guam during the period of construction and operation associated with the proposed actions; the number and types of jobs to be created; and the revenues projected to be payable to the Government of Guam. It is expected that the proposed actions will create positive impacts which need to be quantified.

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However, increases may create adverse impacts as well, such as increases in the cost of housing and homelessness. The EIS must address mitigation measures for potential adverse impacts.

2. The military consistently indicates that military growth is good for the Guam economy since servicemen and women will spend money off-base. The EIS should project how much spending will occur off-base as well as on-base by the various industrial categories. This information will allow business to have market information required for business expansion and new business introduction.
3. The subcommittee is aware that the Navy has decided against locating a carrier strike force in Guam and opting instead to locate the CVN in San Diego. Although we understand that the costs for locating a CVN were determined to outweigh the benefits, we recommend that the EIS address the location of an Expeditionary Strike Group on Guam, given the presence of Marines and the need to transport them. An Expeditionary Strike Group consists of troop transports and support vessels such as The Bonhomme Richard Expeditionary Strike Group that visited Guam in April 2007.
4. The EIS/OEIS should describe whether the assignment of active duty military personnel to Guam will allow Guam to collect income tax as allowed under Section 30 of the Organic Act of Guam. Section 30 allows Guam to collect income tax revenue from active duty personnel stationed on Guam. Currently, as many personnel have been only temporarily assigned to Guam, Section 30 taxes are not paid into the Guam treasury, even though temporarily assigned active duty personnel utilize services on Guam. The EIS must identify mitigation measures to resolve this impact if the military plans to assign active duty personnel to Guam on a temporary basis.
5. Companies doing business with the military are required to comply with Guam "doing business" requirements e.g., business registration, payment of gross receipts taxes, and other requirements. Current military contracts contain a provision which identify these "doing business" requirements but the contracts also state: "Business registration with the Government of Guam is not considered in determining contractor responsiveness or responsibility." At the very least, the EIS should recommend that contractors must be registered with GovGuam upon contract award.

Opportunities for Local Businesses

Based upon a data base of military contract awards maintained by GEDCA, on the average from FY 2002-2007, local contractors obtained 45% of the funds awarded but won 71% of total contracts. Greater opportunity for local businesses to obtain a larger share of the contract amounts awarded is sought.

6. The proposed action will result in significant funding for construction projects. This amount of funding and the scope of projects have and will continue to attract

numerous off-island contractors. The EIS should evaluate impacts on local businesses and particularly on local small, disadvantaged and minority businesses.

7. The source of funds to implement the proposed action may not all come from DoD budgets. Non-appropriated funds are exempt from small business targets and if funding from the Japanese Government is considered non-appropriated, local small businesses will have difficulty obtaining a share of such funding. U. S. small business programs are not required to be followed by US contractors in Okinawa, nor can we expect Japanese companies who will use Japanese government funding to comply with small business programs. The EIS must evaluate methods to mitigate against these impacts on small business.
8. On the other hand, if funds to implement the proposed action are appropriated into the DoD budget, small business targets are nation-wide goals ie, if these goals have already been reached in other US locations, use of funding in Guam need not have small business goals. The EIS should evaluate the source of funds from the standpoint of local small business participation.
9. Alaskan Native corporations seem to have some kind of advantage in bidding for military contracts. If this is true, the EIS might evaluate the Alaska Native Corporation model for application to Guam businesses that have remained here during good times and bad similar to ensure greater participation in military contract awards.
10. Local businesses may have franchises to supply certain goods and services to Guam consumers but the military or its contractors can ignore franchises and deal directly with off-island business with the same franchise because Guam is an "overseas" area. The EIS should evaluate the designation of Guam as an overseas area with respect to franchises and ensure that local franchises are respected in the award of contracts.
11. Local wholesalers are at a disadvantage in competing with off-island wholesalers since shipping of goods is subsidized by the military. The EIS should evaluate subsidies provided to off-island suppliers of goods and identify mitigation measures that provide greater advantages to local businesses or at least levels the playing field.
12. General Bice consistently mentions public/private partnerships as the way to fund most improvements needed on or off bases. The public/private partnership model appears to involve private sector start-up funding with an agreement that requires a long term lease of the facility by the military. Assuming that most local businesses do not have or cannot obtain the level of financing required for large military projects, the EIS should discuss how local business/residents can benefit from public/private partnerships. In addition, the EIS must evaluate different models for public/private partnerships and the Government of Guam should be

involved in the planning for any public/private partnership to ensure that to the maximum extent practicable, local businesses are included in such arrangements.

13. The Japanese Government will funnel its financial commitment of over \$6 Billion through "Special Purpose Entities" which will allow the Japanese to directly benefit. This method of project financing will impact on local businesses and financial institutions. The EIS should discuss how SPEs can be made to provide opportunities for island businesses and residents.
14. The EIS should evaluate how military services that are not intrinsically governmental will be performed. If such services will be contracted to the private sector, similar to the Base Operating Support contract for Naval Base Guam, then scopes of work should be tailored to the capabilities of local companies. The EIS should also consider the application of a local business preference system similar to that afforded US companies that compete against foreign companies for U.S. work.
15. The EIS should provide estimates of the annual amount and nature of ship repair work so that impacts on this important industry can be evaluated. The EIS should baseline current ship repair capabilities and evaluate them against future needs for ship repair.

Other Economic Considerations

16. Most of Guam is considered rural for the purposes of U. S. Department of Agriculture Rural Development Programs. This allows very low to moderate income, first-time homeowners to take advantage of low interest rate programs for home purchases and construction. The 2000 US Census determined that the Village of Dededo is ineligible for USDA's housing programs. Increases in military personnel may result in Guam no longer being classified as rural and declared eligible for USDA programs. As a result of military growth, Tamuning, Yigo and other villages may become ineligible if village populations exceed the 20,000 population threshold for USDA's housing programs. The EIS should identify mitigation measures to off-set this impact.
17. USDA Rural Development's Business & Industry Guaranteed Loan Program provides a government guarantee to private credit to improve, develop, or finance business, industry, and employment and improve the economic and environmental climate in rural communities. This purpose is achieved by bolstering the existing private credit structure through the guarantee of quality loans which will provide lasting community benefits. The maximum loan that can be guaranteed by USDA is \$25 million. Currently, all of Guam is eligible for USDA's Business Programs since the population threshold is 50,000. However, village whose populations increase as a result of military growth may become ineligible for the Business Programs as well. Mitigation measures for this potential impact must be identified in the EIS.

18. The U. S. military owns a number of unused federal property particularly small, isolated parcels that are scattered throughout the island. Given their size and location, it is expected that these parcels of land will not be needed for military expansion purposes. The EIS should assess the need for land in Guam and should recommend release of those parcels not needed for expansion purposes to allow them to be developed so that they can contribute to the Guam economy and reduce federal costs of maintaining these properties.

19. The Guam Economic Development and Commerce Authority manages the former FAA housing area which is contiguous to NCTMS and the South Finegayan Housing area and the area across from the Andersen South Housing, now used for urban assault training. The EIS must evaluate impacts generated by military use of adjacent military properties on the potential for development and operation of these properties for non-military uses.

Thank you for the opportunity to provide comments.

Sincerely,



ANTHONY C. BLAZ
Chairman, Economic Development Subcommittee and
Administrator, Guam Economic Development and Commerce Authority



Felix P. Camacho
Governor
Kaleo S. Moylan
Lieutenant Governor

GOVERNMENT OF GUAM
(GUBETNOMENTON GUAHAN)
DEPARTMENT OF ADMINISTRATION
(DIPATTAMENTON ATMENESTRASION)
DIRECTOR'S OFFICE
(Ufisinan Direktor)

Post Office Box 884 • Hagatna, Guam 96932
• Tel (671) 475-1101/1250 • Fax: (671) 477-6788



Lourdes M. Perez
Director
Joseph C. Manibusan
Deputy Director

J-020-001

Thank you for your comment.

February 15, 2010

Joint Guam Program Office
c/o NAVFAC Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134
Attention: GPMP

Re: Official Comments- Draft Environmental Impact Statement

Buenas Yan Hafa Adai !

J-020-001

The Department of Administration (DOA) is pleased to submit its official comments on the Draft Environmental Impact Statement (DEIS) relative to the proposed military buildup on Guam, USA. We look forward to continued dialogue and communication with your office on these very important issues facing the island, its People, resources and its future.

Si Yu'os Ma'ase,


LOURDES M. PEREZ
for

DES
REVIEW COMMENTS SHEET
DEPARTMENT OF ADMINISTRATION

No.	Year	Dist.	Pr.	Comp. FTE's	Comments	Comments (last name)	Agency
Seven		1			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin
Seven		2			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin
Seven		3			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin
Seven		4			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin
Eight		1			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin
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Eight		4			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin
Eight		5			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin
Eight		6			No direct impact for the Dept. of Admin. Identified - DOA is a support agency for line agencies and impacts to the department may depend on how other agencies are affected by the EIS. DOA currently has the capacity to process the hiring of FTE's and payroll.	Kim Borja	Dept of Admin



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor



Lawrence P. Perez
Director
Andrew S. Leon Guerrero
Deputy Director

February 17, 2010

JGPO c/o NAVFAC Pacific
250 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134

Attention: GPMO

Subject: **Draft Environmental Impact Statement DEIS
Transmittal Letter of DPW's Comments**

Dear Sir:

Hafa Adai!

Transmitted herewith is the Department of Public Work's (with the exception of the Solid Waste Division as it is under the federal receivership) comments related to the DEIS. Due to the time constraints and due to the enormous volume in weight and subject matter materials, within the DEIS documentation, the deadline of February 17, 2010, was insufficient. As a result, DPW was unable to perform a complete and thorough review. Our comments were based upon a quick cursory review of the impact rather than a more comprehensive review and assessment of the issues discussed.

It is with deep regret that the time line given to us did not match the technical subject area that was covered within the DEIS documents. To our surprise, upon issuance of the nine volumes at more than eleven thousand pages, to read and analyze what is presented and how it was to be implemented, was a huge undertaking. Moreover, reading the materials, were difficult and trying to understand the proposed plan and actions anticipated by the military into our tiny island of Guam was a tremendous task.

We have attached our comments for your review. Our comments were prepared by the various DPW divisions. Each division commented according to how the DEIS, would be impacted within their division. However, due to time constraints, responses were submitted in various formats. At a minimum, each comment discusses a brief description of the impact, issues, mitigation and the recommended action.

J-021-001

J-021-002

DPW would like to discuss within this cover letter, a major impact that was not included in the DEIS. A major discussion within the DEIS documentation that was not adequately disclosed is the budgetary requirement needed for (GovGuam as a whole) DPW as it relates to this major infrastructure build up both directly and indirectly. For example, DPW is charged with the responsibility in providing to the general public six essential services namely: Public Safety, Public Health, Transportation, Highway Maintenance, Government Wide Support and Capital Improvement Projects. The deficiencies not provided for within the DEIS is the lack of the funding source to be provided by whom and how much. Moreover, a cost analysis was not provided as it relates to GovGuam as a whole. The DEIS provided a layout of what needs to be done but did not have a cost impact to determine the overall budgetary needs.

542 North Marine Corps Drive - Tamuning, Guam 96913 * Tel (671) 646-3131 * Fax (671) 649-6178

J-021-001

Thank you for your comment. The proposed actions are complex and have many components. In order to characterize the affected environment and potential impacts, sufficient detail needed to be included in the Draft EIS. The Draft EIS was broken down by Volumes for each major action, and the Executive Summary provides an overview of the proposed actions to facilitate readability. The Draft EIS was developed with the intent to balance readability with sufficient technical information.

The DoD carefully considered all requests to extend the length of the comment period beyond the 45-day minimum required by NEPA. In evaluating multiple options, DoD leadership determined that a 90-day comment period best balanced the need for sufficient time to review a complex document with the requirement to reach a timely decision regarding the proposed military buildup on Guam.

J-021-002

Thank you for your comment. The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency

J-021-002

As a result, of the DEIS lack of funding sources, DPW projected (using a conservative approach) our budgetary needs that will impact our operations both directly and indirectly. The estimated amount DPW projected is \$35 Million at a minimum. Inclusive of this \$35M amount, is the cost for DPW to operate under the DEIS conditions to include the following cost categories; fuel, utility cost for maintaining public streetlights throughout the whole island, the acquisition for additional school buses to transport the influx of new students from the public school system and other capital purchases (heavy equipment) to maintain the roads and supplies and materials to maintain and provide construction, professional and technical services the various public facilities including the public school facilities.

Furthermore, the DEIS discusses the various road projects related to the Guam Road Network GRN as referenced in Volume 6, Chapter 4. However, the funding for these GRN road projects is not guaranteed that there will be federal funds to finance the preferred roadway projects. In addition, there are many factors related to the project costs to include land acquisition for the expansion of roads. The total costs of these various projects if they were to be fully funded or partially funded by either FHWA or by the DAR road program were not adequately discussed. The only reference that discusses the funding source can be found on, Volume 1 of the Executive Summary, page ES-30, states the following:

"The project *may be* funded by FHWA through annual allocations for calendar years 2010 through 2016 and funding requested under the Defense Access Road Program, which provides the means for *DOD to pay a fair share* for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense related public highway requirement."

The above sentence does not make it an absolute that all the road projects will be federally funded. In addition, what is the contingency plan if Guam does not obtain any funding? Whereas, if it is federally funded, then the DEIS should state it clearly and to also disclose if the funding will be partially funded using a certain cost share percentage. This budgetary issue is a major concern for DPW. Currently, DPW is given a bare bone budget for our operations for the past and current year.

Your consideration in reviewing the attached comments and in providing your responses to each comment is greatly appreciated.

Dangkulo na si Yu'os Maase.

Respectfully submitted,



Andrew S. Leon Guerrero
Acting Director, Dept. of Public Works

Attachments:

Overall Budget Request Package
Division Budget Request Package

Cc: Bureau of Budget and Management and Research, BBMR
Bureau of Planning, BOP
Governor's Office, Guam Building Office

542 North Marine Corps Drive - Tamuning, Guam 96913 * Tel (671) 646-3131 * Fax (671) 649-6178

council which includes the USDOT to assist the Government of Guam in seeking funds for projects that are not eligible for the DAR program.

GOVERNMENT OF GUAM
DEPARTMENT OF PUBLIC WORKS
(Note: Solid Waste Management no included)

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 - Engineering (Horizontal) - Highways Division
 - Office of Highway Safety
 - Transportation Maintenance Division
 - **Solid Waste Management (not included)**



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor

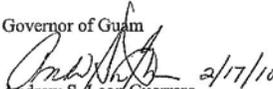


Lawrence P. Perez
Director
Andrew S. Leon Guerrero
Deputy Director

February 17, 2010

Memorandum

To: Governor of Guam

From:  2/17/10
Andrew S. Leon Guerrero
Acting Director, Dept. of Public Works

Subject: **DEIS Overall Budgetary Impact to DPW**

Hafa Adai!

J-021-003 Transmitted herewith is the Department of Public Works budget request for the Department related to the DEIS documentation as it relates to the upcoming military build-up proposed plan. This budgetary impact excludes the Solid Waste Management Division as the division is under the receivership of the federal government. Due to the DEIS, DPW will be requesting \$35 Million, in order to implement the DEIS the effects of the population growth and the mandates required from DPW to prepare for this major task assignment to the general public. The amount projected of \$35M, is a conservative figure. In addition, this amount represents a supplemental budget request in addition to our normal operational budget needs. Furthermore, this amount represents DPW's impact both direct and indirect, that is an unfunded mandate and is not addressed within the DEIS documents.

DPW is charged with the responsibility in providing to the general public six essential services namely: Public Safety, Public Health, Transportation, Highway Maintenance, Government Wide Support and Capital Improvement Projects. The deficiencies not provided for within the DEIS is the lack of the funding source to be provided by whom and how much. Moreover, a cost analysis was not provided as it relates to GovGuam as a whole. The DEIS provided a layout of what needs to be done but did not have a cost impact to determine the overall budgetary needs.

BUDGETARY IMPACT ON GENERAL OPERATIONS (DEIS VOLUMES 1, 2, 6 & 9)

General operational costs were estimated to include labor cost for bus operations, emergency first responders, transportation and highway maintenance workers as well as heavy equipment mechanics and the dire need to hire additional personnel for physical security of the premises. Moreover, other costs to include capital outlay such as the purchases of new school buses (to accommodate the influx of public school children) and the need to purchase other heavy equipment and vehicles for the repair and maintenance of the roads and public facilities to include schools, bus stops, debris and emergency clean up, etc. Other purchases include the need for supplies and equipment, maintenance, repair and replacement of parts, tires, batteries, fuel and oil. Lastly, utility costs for running the office and for public street lights throughout the whole island are part of the major cost factors estimated in this budget projection.

J-021-004 **WASTE MANAGEMENT (VOLUME 6)**
The Consent Decree requirements related to the closing and opening of the old and new landfill is currently

J-021-003

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-021-004

Thank you for your comment. DoD is restricted on its budget expenditures for their personnel and facilities. DoD would be a customer of the new landfill and would pay tipping fees. Guam needs to arrange the tipping fees such that they will sustain the landfill for all aspects, including operations, maintenance, closure, financing for future expansion or replacement, etc. The EIS contains an estimate of the volume of waste expected from DoD. Knowing the tipping fee, the landfill operator should be able to estimate the amount of revenue they would receive.

J-021-004

underway and is being addressed during this current period. With regards to the long term debt obligations, an increase in revenues from the Solid Waste Fund SWF remains inadequate. With the military being a large clientele, the DEIS did not discuss the payment fees other than the tipping fee will cost GovGuam much more due to the financing cost of interest and other charges. It is our understanding that the receiver will address this matter as well as their operational budgetary needs directly with the US District Court. For the purpose of the DEIS impact, it is critical that this matter is addressed as the DEIS only stated a very small discussion when this is a major and a direct impact to the island both quantitatively, as well as qualitatively related to land, air and surrounding environment.

J-021-005

ROADWAYS (VOLUME 6)

Another example of our impact includes DPW's GPA streetlight costs for utility services to the general public. If the population increases, and we have additional roads, we will need our streetlights to keep the public safe. We estimate this will reach double the amount currently tracking due to the increase in fuel prices as well as the cost for supplying the equipment and future maintenance.

One other concern worth mentioning is the increase in student population for the Department of Education. This is a direct impact to DPW's Bus Operations as we provide bus services to students to and from the various public schools on the island. Inclusive of DPW's projected budget, there will be a need to purchase fifty-three additional buses just to keep up with the demand of more than six thousand new school students. In addition to purchasing school buses, constructing school bus shelters, the demand for fuel for the buses to run, the need for additional school bus drivers and mechanics are part of the budgetary projections. These unfunded obligations were not included within the DEIS document.

Village streets and other secondary roads & pothole projects, infrastructure, school projects, school building and bus shelters and other capital projects funding are examples of how the DEIS can also be impacted upon the department. DPW projected these costs into our budget request given the best way we can (best guess), given the time constraints and complexity. The bottom line is that the DEIS did not adequately address the budgetary issues of the infrastructure build up requirements in aggregate. Neither the overall impact, nor the funding issues associated with the build up to accommodate the population boom was defined within the nine volumes of the DEIS.

The DEIS addressed the road projects in Volume 6 chapter 4. However, the amount required was not disclosed of additional as referenced in the DEIS Volume ES30, the amount "may be" obtained is not a guarantee. The total costs of these various projects if they were to be fully funded and by whom. The land issues related to the road projects were not adequately disclosed nor the method of how the land will be acquired. The only reference that discusses the funding source can be found on, Volume 1 of the Executive Summary, page ES-30, states the following:

"The project *may be* funded by FHWA through annual allocations for calendar years 2010 through 2016 and funding requested under the Defense Access Road Program, which provides the means for *DOD to pay a fair share* for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense related public highway requirement."

The above sentence does not make it absolutely clear (by explicitly stating funds will be, shall be or fully funded) how the road projects are to be federally funded. What is the contingency plan if Guam does not obtain any funding? Whereas, if it is federally funded, then the DEIS should state within the DEIS if the funding will be partially funded ("DOD to pay a fair share") using a certain cost share percentage. This

J-021-005

Thank you for your comment. The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to assist the Government of Guam in seeking funds for projects that are not eligible for the DAR program.

J-021-005 | budgetary issue is a major concern for DPW. Currently, DPW is given a bare bone budget for our operations for the past and current year and having a cost share will contribute to our existing budgetary crisis.

Dangkulo na si Yu's Maase.

Attachments:

Overall Budget Request Package
Division Budget Request Package

Cc: Bureau of Budget and Management and Research, BBMR
Bureau of Planning, BOP
Governor's Office, Guam Building Office

Government of Guam
Fiscal Year 2011 Military Buildup
Budget Digest
[PROPOSED]

Function: Infrastructure, Utilities and Transportation
Department/Agency: Department of Public Works
Program: DEPARTMENT SUMMARY
Fund:

AS400 Account Code	Appropriation Classification	A	B	C	D	E	F
		FY 2010 Expenditures & Encumbrances	FY 2010 Authorized Level	Governor's Request			
				FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments	\$0	\$0	\$0	\$0	3,884,524	3,884,524
112	Overtime/Special Pay	0	0	0	0	90,182	90,182
113	Benefits	0	0	0	0	2,050,678	2,050,678
TOTAL PERSONNEL SERVICES		\$0	\$0	\$0	\$0	6,025,384	6,025,384
OPERATIONS							
220	TRAVEL - On Island/Local Mileage Reimburse.	\$0	\$0	\$0	\$0	128,050	128,050
230	CONTRACTUAL SERVICES:	0	0	0	0	660,840	660,840
233	OFFICE SPACE RENTAL:	0	0	0	0	-	-
240	SUPPLIES & MATERIALS:	0	0	0	0	2,401,611	2,401,611
250	EQUIPMENT:	0	0	0	0	207,665	207,665
270	WORKERS COMPENSATION:	0	0	0	0	-	-
271	DRUG TESTING:	0	0	0	0	3,611	3,611
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	-	-
290	MISCELLANEOUS:	0	0	0	0	10,000,000	10,000,000
TOTAL OPERATIONS		\$0	\$0	\$0	\$0	13,401,776	13,401,776
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	-	-
362	Water/ Sewer	0	0	0	0	-	-
363	Telephone/ Toll	0	0	0	0	9,280	9,280
TOTAL UTILITIES		\$0	\$0	\$0	\$0	9,280	9,280
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	15,972,499	15,972,499
TOTAL APPROPRIATIONS		\$0	\$0	\$0	\$0	35,408,939	35,408,939
1/ Specify Fund Source							
TIME EQUIVALENCES (FTEs)							
UNCLASSIFIED		0	0	0	0	-	-
CLASSIFIED		0	0	0	0	179	179
TOTAL FTEs		0	0	0	0	179	179

Government of Guam
Fiscal Year 2011 Military Buildup
Budget Digest
(PROPOSED)

DEPARTMENT DIGEST SUMMARY

PERSONNEL SERVICES	ADM	BUS	BUS FUEL	TM	BM	CIP	HWY	TOTAL
Regular Salaries/Increments	705,609	812,326	0	506,086	399,115	947,618	513,770	3,884,524
Overtime/Special Pay	90,182	0	0	0	0	0	0	90,182
Benefits	387,214	452,817	0	262,905	221,849	451,371	274,522	2,050,678
TOTAL PERSONNEL SERVICES	1,183,005	1,265,143	0	768,991	620,964	1,398,989	788,292	6,025,384
OPERATIONS								
TRAVEL - Off Island/Local Mileage Reimburse.	0	0		0	0	128,050	0	128,050
CONTRACTUAL SERVICES:	18,218	50,000		187,000	42,850	82,500	280,272	660,840
OFFICE SPACE RENTAL:	0	0		0	0	0	0	0
SUPPLIES & MATERIALS:	50,000	800,000	800,000	194,000	412,420	75,191	70,000	2,401,611
EQUIPMENT:	19,884	0		0	60,000	83,797	43,984	207,665
WORKERS COMPENSATION:	0	0		0	0	0	0	0
DRUG TESTING:	1,108	0		822	751	0	930	3,611
SUB-RECIPIENT/SUBGRANT:	0	0		0	0	0	0	0
MISCELLANEOUS:	10,000,000	0		0	0	0	0	10,000,000
TOTAL OPERATIONS	10,089,210	850,000	800,000	381,822	516,021	369,538	395,186	13,401,777
UTILITIES								
Power	0	0		0	0	0	0	0
Water/ Sewer	0	0		0	0	0	0	0
Telephone/ Toll	0	0		0	9,280	0	0	9,280
TOTAL UTILITIES	0	0	0	0	9,280	0	0	9,280
CAPITAL OUTLAY	219,999	11,057,500	0	800,000	200,000	395,000	3,300,000	15,972,499
TOTAL APPROPRIATIONS	11,492,214	13,172,643	800,000	1,950,813	1,346,265	2,163,527	4,483,478	35,408,940
1/ Specify Fund Source			13,972,643					
FULL TIME EQUIVALENCIES (FTEs)								
UNCLASSIFIED								
CLASSIFIED	31	43	0	18	21	35	36	184
TOTAL FTEs								

Government of Guam
 Fiscal Year 2011 Military Buildup
 Budget Digest
 [PROPOSED]

Function: Infrastructure, Utilities and Transportation
 Department/Agency: Department of Public Works
 Program: DEPARTMENT SUMMARY
 Fund:

AS400 Account Code	Appropriation Classification	A	B	C	D	E	F
		FY 2010 Expenditures & Encumbrances	FY 2010 Authorized Level	Governor's Request			
				FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments	\$0	\$0	\$0	\$0	3,884,524	3,884,524
112	Overtime/Special Pay	0	0	0	0	98,182	98,182
113	Benefits	0	0	0	0	2,050,678	2,050,678
TOTAL PERSONNEL SERVICES		\$0	\$0	\$0	\$0	6,025,384	6,025,384
OPERATIONS							
220	TRAVEL - Out of Island Airfare Reimburse.	\$0	\$0	\$0	\$0	128,050	128,050
230	CONTRACTUAL SERVICES:	0	0	0	0	660,840	660,840
233	OFFICE SPACE RENTAL:	0	0	0	0	-	-
240	SUPPLIES & MATERIALS:	0	0	0	0	2,401,611	2,401,611
250	EQUIPMENT:	0	0	0	0	207,665	207,665
270	WORKERS COMPENSATION:	0	0	0	0	-	-
271	DRUG TESTING:	0	0	0	0	3,611	3,611
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	-	-
290	MISCELLANEOUS:	0	0	0	0	10,000,000	10,000,000
TOTAL OPERATIONS		\$0	\$0	\$0	\$0	13,401,776	13,401,776
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	-	-
362	Water/ Sewer	0	0	0	0	-	-
363	Telephone/ Toll	0	0	0	0	9,280	9,280
TOTAL UTILITIES		\$0	\$0	\$0	\$0	9,280	9,280
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	15,972,499	15,972,499
TOTAL APPROPRIATIONS		\$0	\$0	\$0	\$0	35,408,939	35,408,939
1/ Specify Fund Source							
TIME EQUIVALENCIES (FTEs)							
UNCLASSIFIED		0	0	0	0	-	-
CLASSIFIED		0	0	0	0	179	179
TOTAL FTEs		0	0	0	0	179	179

Government of Guam
 Fiscal Year 2011 Military Buildup
 Budget Digest
 [PROPOSED]

DEPARTMENT DIGEST SUMMARY

PERSONNEL SERVICES	ADM	BUS	BUS FUEL	TM	BM	CIP	HWY	TOTAL
Regular Salaries/Increments	705,609	812,326	0	506,086	399,115	947,618	513,770	3,884,524
Overtime/Special Pay	90,182	0	0	0	0	0	0	90,182
Benefits	387,214	452,817	0	262,905	221,849	451,371	274,522	2,050,678
TOTAL PERSONNEL SERVICES	1,183,005	1,265,143	0	768,991	620,964	1,398,989	788,292	6,025,384
OPERATIONS								
TRAVEL - Off Island Local Mileage Reimbur.	0	0		0	0	128,050	0	128,050
CONTRACTUAL SERVICES:	18,218	50,000		187,000	42,850	82,500	280,272	660,840
OFFICE SPACE RENTAL:	0	0		0	0	0	0	0
SUPPLIES & MATERIALS:	50,000	800,000	800,000	194,000	412,420	75,191	70,000	2,401,611
EQUIPMENT:	19,884	0		0	60,000	83,797	43,984	207,665
WORKERS COMPENSATION:	0	0		0	0	0	0	0
DRUG TESTING:	1,108	0		822	751	0	930	3,611
SUB-RECIPIENT/SUBGRANT:	0	0		0	0	0	0	0
MISCELLANEOUS:	10,000,000	0		0	0	0	0	10,000,000
TOTAL OPERATIONS	10,089,210	850,000	800,000	381,822	516,021	369,538	395,186	13,401,777
UTILITIES								
Power	0	0		0	0	0	0	0
Water/ Sewer	0	0		0	0	0	0	0
Telephone/ Toll	0	0		0	9,280	0	0	9,280
TOTAL UTILITIES	0	0	0	0	9,280	0	0	9,280
CAPITAL OUTLAY	219,999	11,057,500	0	800,000	200,000	395,000	3,300,000	15,972,499
TOTAL APPROPRIATIONS	11,492,214	13,172,643	800,000	1,950,813	1,346,265	2,163,527	4,483,478	35,488,940
1/ Specify Fund Source			13,972,643					
FULL TIME EQUIVALENCIES (FTEs)								
UNCLASSIFIED								
CLASSIFIED	31	43	0	18	21	35	36	184
TOTAL FTEs								

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Department Budget Digest Summary
[PROPOSED]

[BBMR BD-1]

Function: Infrastructure, Utilities and Transportation
Department/Agency: Department of Public Works
Program: DEPARTMENT SUMMARY
Fund:

AS400 Account Code	Appropriation Classification	A	B	C	D	E	F
		FY 2010 Expenditures & Encumbrances	FY 2010 Authorized Level	FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments	\$0	\$0	\$0	\$0	3,884,524	3,884,524
112	Overtime/Special Pay	0	0	0	0	90,182	90,182
113	Benefits	0	0	0	0	2,050,678	2,050,678
TOTAL PERSONNEL SERVICES		\$0	\$0	\$0	\$0	6,025,384	6,025,384
OPERATIONS							
220	TRAVEL- Out of State/Local Mileage Reimburse.	\$0	\$0	\$0	\$0	128,050	128,050
230	CONTRACTUAL SERVICES:	0	0	0	0	660,840	660,840
233	OFFICE SPACE RENTAL:	0	0	0	0	-	-
240	SUPPLIES & MATERIALS:	0	0	0	0	2,401,611	2,401,611
250	EQUIPMENT:	0	0	0	0	207,665	207,665
270	WORKERS COMPENSATION:	0	0	0	0	-	-
271	DRUG TESTING:	0	0	0	0	3,611	3,611
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	-	-
290	MISCELLANEOUS:	0	0	0	0	10,000,000	10,000,000
TOTAL OPERATIONS		\$0	\$0	\$0	\$0	13,401,776	13,401,776
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	-	-
362	Water/ Sewer	0	0	0	0	-	-
363	Telephone/ Toll	0	0	0	0	9,280	9,280
TOTAL UTILITIES		\$0	\$0	\$0	\$0	9,280	9,280
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	15,972,499	15,972,499
TOTAL APPROPRIATIONS		\$0	\$0	\$0	\$0	35,408,939	35,408,939
1/ Specify Fund Source							
TIME EQUIVALENCIES (FTEs)							
UNCLASSIFIED		0	0	0	0	-	-
CLASSIFIED		0	0	0	0	179	179
TOTAL FTEs		0	0	0	0	179	179

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Department Budget Digest Summary
[PROPOSED]

[BBMR BD-1]

DIVISION CONSOLIDATION BUDGET SUMMARY

	ADM	BUS	BUS FUEL	TM	BM	CIP	HWY	TOTAL
PERSONNEL SERVICES								
Regular Salaries/Increments	705,609	812,326	0	506,086	399,115	947,618	513,770	3,884,524
Overtime/Special Pay	90,182	0	0	0	0	0	0	90,182
Benefits	287,214	452,817	0	262,505	221,849	451,371	274,522	2,050,678
TOTAL PERSONNEL SERVICES	1,183,005	1,265,143	0	768,991	620,964	1,398,989	788,292	6,025,384
OPERATIONS								
TRAVEL-Off Island/Local Mileage Reimburse.	0	0		0	0	128,050	0	128,050
CONTRACTUAL SERVICES:	18,218	50,000		187,000	42,850	82,500	280,272	660,840
OFFICE SPACE RENTAL:	0	0		0	0	0	0	0
SUPPLIES & MATERIALS:	50,000	800,000	800,000	194,000	412,420	75,191	70,000	2,401,611
EQUIPMENT:	19,884	0		0	60,000	83,797	43,984	207,665
WORKERS COMPENSATION:	0	0		0	0	0	0	0
DRUG TESTING:	1,108	0		822	751	0	930	3,611
SUB-RECIPIENT/SUBGRANT:	0	0		0	0	0	0	0
MISCELLANEOUS:	10,000,000	0		0	0	0	0	10,000,000
TOTAL OPERATIONS	10,689,210	850,000	800,000	381,822	516,021	369,538	395,186	13,401,777
UTILITIES								
Power	0	0		0	0	0	0	0
Water/ Sewer	0	0		0	0	0	0	0
Telephone/ Toll	0	0		0	9,280	0	0	9,280
TOTAL UTILITIES	0	0	0	0	9,280	0	0	9,280
CAPITAL OUTLAY	219,999	11,057,500	0	800,000	200,000	395,000	3,300,000	15,972,499
TOTAL APPROPRIATIONS	11,492,214	13,172,643	800,000	1,950,813	1,246,265	2,163,527	4,483,478	35,408,940
1/ Specify Fund Source			13,972,643					
FULL TIME EQUIVALENCIES (FTEs)								
UNCLASSIFIED								
CLASSIFIED	31	43	0	23	21	35	26	179
TOTAL FTEs								

Department/Agency: DEPARTMENT OF PUBLIC WORKS
 CNMF Subcommittee: _____
 Program/Function: INFRASTRUCTURE, UTILITIES and TRANSPORTATION
 Potential Federal Funding Source: SUMMARY

Personnel				Operational Requirements		Contracted Positions		Factual Operations		Travel		Grand
Position Title	PTEs	Salary	Benefits	Item	Cost	Positions	Salary	Item	Cost	Cost	Cost	Total
Administration Division	2	35,270	20,335	-Connect air-time services (16)	8,218					0	0	63,823
	1	19,974	10,844	-Connect Maint (16)	10,000							40,818
	1	16,656	9,885	ID Supplies (1 lot)	20,000							46,541
	24	639,283	366,482	Safety Supplies/Matrl (1 lot)	25,000							970,768
	3	84,697	39,668	Uniforms (62 set - guards)	5,000							129,375
				Computers (6)	11,994							11,994
				Digital Camera (3)	1,250							1,250
				ID Machine (1)	6,000							6,000
				I-Connect Radios (16)	640							640
				Street Lights	10,000,000							10,000,000
				Drug Testing	1,108							1,108
				3-SUV (compact size)	48,000							48,000
				3-SUV (mid-size)	75,000							75,000
				1-Pickup Truck	14,599							14,599
				1-Cargo Van	27,000							27,000
				1 Lot - Surveillance Cameras	55,000							55,000
Bus Operations Division	2	35,270	20,335	First Aid/CFR Certification Training(30)	600							56,203
	1	26,520	12,736	Rebuild of Starter (School Buses)(50)	12,500							51,756
	1	18,723	10,482	Rebuild of Alternator (School Buses)(82)	34,900							66,105
	1	26,520	12,736	Parts and Materials for School Buses	785,000							794,156
	5	106,945	56,264	Office Supplies and Materials	25,000							188,209
	1	26,520	12,736	Parts and Materials for Light Official Vehicles	20,000							59,256
	30	529,050	305,023	School Buses (S3)	7,420,000							8,254,079
	2	42,778	22,505	Substation for Agut (France & Paving)	190,000							235,083
				Bus Shelters (abandoned) (197)	3,447,500							3,447,500
				PUSL COST	800,000							800,000
Transportation Maint Division	2	35,270	20,335	Contractual repair for vehicles & equipment	100,000							135,605
	1	26,520	12,736	I-Connect Air Time	7,000							46,256
	1	33,811	14,844	Waste oil/hazardous material disposal	5,000							53,655
	3	39,522	22,532	Fleet Management Software	75,000							117,554
	7	149,723	78,771	Parts and Materials for Light Vehicles	50,000							278,494
	1	26,520	12,736	Parts and Materials for Heavy Equipment	80,000							119,256
	1	19,974	10,844	Batteries for vehicles/equipment	10,000							40,818
	1	18,723	10,482	Fuel	20,000							49,205
	5	106,945	56,265	Misc. Shop Tools	30,000							193,210
	1	38,676	13,340	Misc. Office Supplies	4,000							46,038
				Drug Testing	822							822
				Fuel Service Truck	300,000							300,000
				Fuel Tanker Truck	500,000							500,000

Department/Agency: DEPARTMENT OF PUBLIC WORKS
 CMTF Subcommittee: _____
 Program/Function: INFRASTRUCTURE, UTILITIES and TRANSPORTATION
 Potential Federal Funding Source: SUMMARY

Personnel				Operational Requirements		Contracted Positions		Factual Operations		Travel		Grand
Position Title	FTEs	Salary	Benefits	Item	Cost	Positions	Salary	Item	Cost	Cost	Total	
Building Const & Facilities Maint Division	1	16,656	9,883	Refrigeration Contractual Services	3,000						29,541	
	1	17,635	10,168	Sewage Pumping & Related Contractual Svcs.	3,000						30,803	
	5	79,200	48,244	Printing Services (Work Orders)	800						128,244	
	3	64,167	33,759	Annual Physical Examination	3,000						100,926	
	2	39,948	21,692	Office Equipment Repairs	1,000						62,640	
	2	39,948	21,692	Recent Control Contractual Services	7,500						69,140	
	1	21,389	11,253	Termite Treatment/Pest Control	10,000						42,642	
	2	37,446	20,964	Fabrication of Keys	500						58,960	
	1	21,389	11,253	Hand Radios Contractual Services	6,000						38,642	
	1	21,389	11,253	Keys Contractual Services	9,000						49,642	
	2	39,948	21,688	Carpentry Operational Supplies & Materials	110,000						171,636	
				Electrical Operational Supplies & Materials	20,000						26,000	
				Refrigeration Operational Supplies & Materials	23,000						23,000	
				Plumbing Operational Supplies & Materials	23,000						23,000	
				Painting/Paint Operational Supplies & Materials	15,000						15,000	
				Custodial Operational Supplies & Materials	5,000						5,000	
				Office/Computer Operational Supplies & Materials	5,000						5,000	
				Safety Supplies & Materials	5,000						5,000	
				Auto Parts & Tires	6,420						6,420	
				Building Inventory	200,000						200,000	
				Carpentry Operational Tools & Equipment	10,000						10,000	
				Electrical Operational Tools & Equipment	10,000						10,000	
				Refrigeration Operational Tools & Equipment	10,000						10,000	
				Plumbing Operational Tools & Equipment	10,000						10,000	
				Painting/Paint Operational Tools & Equipment	5,000						5,000	
				Custodial Operational Tools & Equipment	5,000						5,000	
				Office Operational Tools & Equipment	10,000						10,000	
				Drug Testing	751						751	
				Telecommunication (Phone System)	9,280						9,280	
				Carpentry Capital Equipment	50,000						50,000	
				Electrical Capital Equipment	30,000						30,000	
				Refrigeration Capital Equipment	50,000						50,000	
				Plumbing Capital Equipment	50,000						50,000	
				Custodial Capital Equipment	20,000						20,000	
				Hazardous Priority Improvement Projects	0						0	
Highways Division	2	45,884	22,889	20-Connect air-fare	10,272						79,041	
	2	35,270	19,934	20-Connect Maint	10,000						65,206	
	2	53,640	24,873	Office Equip Maint	10,000						87,913	
	4	74,892	41,081	Vehicle Maint & Repair	50,000						165,973	

Department/Agency: DEPARTMENT OF PUBLIC WORKS
 CMTF Submitter: _____
 Program/Function: INFRASTRUCTURE, UTILITIES and TRANSPORTATION
 Potential Federal Funding Source: SUMMARY

Personnel				Operational Requirements		Contracted Positions		Factual Operations		Travel	Grand
Position Title	FTEs	Salary	Benefits	Item	Cost	Positions	Salary	Item	Cost	Cost	Total
	6	128,334	66,066	Equipment Rentals	200,000						394,400
	10	176,350	99,681	Office Supplies	10,000						286,031
				Safety Supplies	50,000						50,000
				Uniforms	10,000						10,000
				Computers (12)	23,988						23,988
				Laser Printer (4)	19,996						19,996
				Drug Testing	930						930
				OS Deper w/Printer (2)	1,700,000						1,700,000
				Dump Trucks, 14cy (8)	1,600,000						1,600,000
Capital Improvement Projects Division	1	26,520	12,734	Advertising	2,000					128,050	169,304
	4	91,768	46,916	Airline Charges	5,000						143,574
	2	45,884	23,463	Computer Programming / Maintenance	20,000						89,287
	4	166,680	50,944	Computer Repair / Services	3,000						169,624
	2	39,948	21,687	Fax Machines Repair / Service	5,000						66,635
	1	22,642	11,202	Carpet Radio Lease / Repair / Service	10,500						45,144
	8	229,424	106,878	Maintenance of Air Conditioning Units	1,000						337,302
	8	248,512	112,397	Maintenance of Vehicles	10,000						370,909
	1	36,850	18,722	Map/Documents Reproduction Services	3,000						55,572
	1	26,678	13,360	Membership Fees	2,000						44,038
	1	31,064	14,059	Office Equipment Maintenance / Repair	12,000						57,114
	2	39,948	21,687	Postage Services	800						62,135
				Printer Repair / Services	1,000						1,000
				Printing Services	7,500						7,500
				Equipment Parts	10,000						10,000
				Fuel and Lubricants	8,000						8,000
				Office Materials and Supplies	20,031						20,031
				Operational Supplies	16,000						16,000
				Refillable 5 Gallon Bottle Water	5,160						5,160
				Safety Gears and Devices	7,000						7,000
				Safety Shoes	2,000						2,000
				Tires	2,000						2,000
				Vehicle and Equipment Parts	5,000						5,000
				Building Code Books	20,000						20,000
				Color Ink Jet Printer	10,000						10,000
				Color Ink Laser Jet Printer	3,600						3,600
				Computers	39,197						39,197
				Filing Cabinets	3,000						3,000
				Lap Top Computer	4,000						4,000
				LaserJet Printer (Networking)	4,000						4,000

Department/Agency: DEPARTMENT OF PUBLIC WORKS
 CMTF Subcommittee: _____
 Program/Function: INFRASTRUCTURE, UTILITIES and TRANSPORTATION
 Potential Federal Funding Source: SUMMARY

Personnel				Operational Requirements		Contracted Positions		Factual Operations		Travel	Grand
Position Title	FTEs	Salary	Benefits	Item	Cost	Positions	Salary	Item	Cost	Cost	Total
				ADR Sedan	18,000						18,000
				Equipment Parts over \$5,000	5,000						5,000
				Office Equipment Parts over \$5,000	15,000						15,000
				Pickup Truck	108,000						108,000
				Purchase of Office Equipment over \$5,000	10,000						10,000
				Purchase of Vehicles	125,000						125,000
				SUV Vehicle	104,000						104,000
				Vehicle Parts over \$5,000	10,000						10,000
TOTAL	179	3,974,705	2,050,678		29,255,506		0		0	128,050	35,488,939

Department/Agency: DEPARTMENT OF PUBLIC WORKS
 OMTF Subcommittees: _____
 Program/Function: INFRASTRUCTURE, UTILITIES and TRANSPORTATION
 Potential Federal Funding Source: MILITARY BUILDUP

Bus Operations Division

Position Title	Personal			Operational Requirements		Contracted Positions		Contractual Operations		Travel	Grand Total
	FTE	Salary	Benefits	Item	Cost	Positions	Cost	Item	Cost	Cost	All Costs
Administrative Aide	2	\$ 36,270	\$ 20,336								\$ 56,606
Administrative Officer	1	\$ 28,520	\$ 12,736								\$ 41,256
Secretary I (Typist)	1	\$ 18,723	\$ 10,462								\$ 29,185
Animal S/O Superintendent	1	\$ 23,520	\$ 12,736								\$ 36,256
Auto Mechanic II	5	\$ 108,948	\$ 56,264								\$ 165,212
Auto Mechanic Supervisor	1	\$ 20,520	\$ 12,736								\$ 33,256
School Bus Driver	30	\$ 628,050	\$ 305,023								\$ 933,073
School Bus Driver Supervisor	2	\$ 42,778	\$ 22,505								\$ 65,283
				Fleet Asst/CPR Certification Training(30)	\$ 600						\$ 600
				Rebuild of Starter (School Buses)(50)	\$ 12,500						\$ 12,500
				Rebuild of Alternator (School Buses)(82)	\$ 36,900						\$ 36,900
				Parts and Materials for School Buses	\$ 756,000						\$ 756,000
				Office Supplies and Materials	\$ 25,000						\$ 25,000
				Parts and Materials for Light Official Vehicles	\$ 20,000						\$ 20,000
				School Buses (53)	\$ 7,420,000						\$ 7,420,000
				Substation for Agut (Fence & Paving)	\$ 190,000						\$ 190,000
				Bus Shelters (aluminum) (197)	\$ 3,447,500						\$ 3,447,500
											\$ -
				FUEL COST	\$ 800,000						\$ 800,000
											\$ -
											\$ -
											\$ -
											\$ -
											\$ -
											\$ -
Total	43	\$ 812,326	\$ 452,817		\$ 12,707,500		\$ -		\$ -	\$ -	\$ 13,972,643
		\$ 1,265,143									

A	B	C	D	E	F	G	H	I	J	K	L
1	Department/Agency: DEPARTMENT OF PUBLIC WORKS										
2	CMTF Subcommittee: ---										
3	Program Function: INFRASTRUCTURE, UTILITIES and TRANSPORTATION										
4	Potential Federal Funding Source: MILITARY BUILDUP										
5	Transportation Maint Division										
6	Personnel										
7	Position Title	FTEs	Salary	Benefits	Operational Requirements	Contracted Positions	Contracted Operations	Travel	Grand Total		
8	Administrative Aide	2	\$ 35,270	\$ 20,530	Item	Cost	Cost	Cost	All Costs		
9	Administrative Officer	1	\$ 20,520	\$ 12,736					\$ 33,256		
10	Assistant Superintending	1	\$ 33,311	\$ 14,844					\$ 48,155		
11	Automotive Mechanic I	3	\$ 59,322	\$ 32,533					\$ 91,855		
12	Automotive Mechanic II	7	\$ 149,723	\$ 78,771					\$ 228,494		
13	Automotive Mechanic Supervisor	1	\$ 28,520	\$ 12,736					\$ 41,256		
14	Clerk Secretary Typist	1	\$ 19,974	\$ 10,844					\$ 30,818		
15	Equipment Operator I	1	\$ 18,723	\$ 10,482					\$ 29,205		
16	Heavy Equipment Mechanic II	3	\$ 106,845	\$ 56,285					\$ 163,130		
17	Transportation Supervisor	1	\$ 28,678	\$ 13,380					\$ 42,058		
18					Contractual repair for vehicles & equipment	\$ 100,000			\$ 100,000		
19					I-Connect Air Time	\$ 7,000			\$ 7,000		
20					Waste oil/hazardous material disposal	\$ 5,000			\$ 5,000		
21					Fleet Management Software	\$ 75,000			\$ 75,000		
22					Parts and Materials for Light Vehicles	\$ 50,000			\$ 50,000		
23					Parts and Materials for Heavy Equipment	\$ 80,000			\$ 80,000		
24					Estimates for vehicles/equipment	\$ 10,000			\$ 10,000		
25					Fuel	\$ 20,000			\$ 20,000		
26					Misc. Shop Tools	\$ 30,000			\$ 30,000		
27					Misc. Office Supplies	\$ 4,000			\$ 4,000		
28					Drug Testing	\$ 822			\$ 822		
29					Fuel Service Truck	\$ 300,000			\$ 300,000		
30					Fuel Tanker Truck	\$ 600,000			\$ 600,000		
31									\$ -		
32									\$ -		
33	Total	23	\$ 508,386	\$ 262,903		\$ 1,181,822		\$ -	\$ -	\$ -	\$ 1,850,613
34			\$ 768,991								
35						\$ 1,850,613					

Department/Agency:
 CMTI Subcommittee:
 Program/Function:
 Source:

DEPARTMENT OF PUBLIC WORKS
 INFRASTRUCTURE UTILITIES AND TRANSPORTATION
 MILITARY BUILDING

Bureau of Budget and Management Research
 Civilian/Military Task Force Budget

BBMR FORM CMTF-1

Capital Improvement Projects Division

Position Title	Personnel			Operational Requirements		Contracted Positions		Contractual Operations		Travel Cost	Grand Total All Costs
	FTEs	Salary	Benefits	Item	Cost	Positions	Cost	Item	Cost		
Administrative Officer	1	\$ 26,850	\$ 12,736								\$ 39,586
Building Inspector II	4	\$ 91,708	\$ 49,808								\$ 141,516
Construction Inspector II	2	\$ 45,884	\$ 23,463								\$ 69,347
Construction Inspector III	4	\$ 106,050	\$ 50,644								\$ 156,694
Customer Service Representative	2	\$ 39,448	\$ 21,687								\$ 61,135
Customer Service Supervisor	1	\$ 22,042	\$ 11,702								\$ 33,744
Engineer II	6	\$ 229,424	\$ 105,878								\$ 335,302
Engineer III	9	\$ 248,512	\$ 112,267								\$ 360,779
Engineer Supervisor	1	\$ 96,880	\$ 48,722								\$ 145,602
Planner III	1	\$ 28,678	\$ 13,200								\$ 41,878
Planner IV	1	\$ 21,654	\$ 14,050								\$ 35,704
Word Processing Secretary II	2	\$ 39,648	\$ 21,687								\$ 61,335
				Advertisement	\$ 2,000						\$ 2,000
				Attire Charge	\$ 5,000						\$ 5,000
				Computer Programming / Maintenance	\$ 20,000						\$ 20,000
				Computer Repair / Services	\$ 3,000						\$ 3,000
				Fax Machines Repair / Service	\$ 5,000						\$ 5,000
				Internet Radio Lease / Repair / Service	\$ 10,500						\$ 10,500
				Maintenance of Air Conditioning Units	\$ 1,000						\$ 1,000
				Maintenance of Vehicles	\$ 10,000						\$ 10,000
				Map/Documents Reproduction Services	\$ 3,000						\$ 3,000
				Membership Fees	\$ 2,000						\$ 2,000
				Office Equipment Maintenance / Repair	\$ 12,000						\$ 12,000
				Postage Services	\$ 500						\$ 500
				Printer Repair / Services	\$ 1,000						\$ 1,000
				Printing Services	\$ 7,500						\$ 7,500
				Equipment Parts	\$ 10,000						\$ 10,000
				Fuel and Lubricant	\$ 8,000						\$ 8,000
				Office Materials and Supplies	\$ 20,000						\$ 20,000
				Operational Supplies	\$ 18,000						\$ 18,000
				Refillable & Carbon Bottle Water	\$ 5,160						\$ 5,160
				Safety Goggles and Devices	\$ 2,000						\$ 2,000
				Safety Shoes	\$ 2,000						\$ 2,000
				Tires	\$ 2,000						\$ 2,000
				Vehicle and Equipment Parts	\$ 5,000						\$ 5,000
				Building Code Books	\$ 20,000						\$ 20,000
				Color Ink Jet Printer	\$ 10,000						\$ 10,000
				Color Ink Laser Printer	\$ 3,650						\$ 3,650
				Coopertons	\$ 38,197						\$ 38,197
				Filing Cabinets	\$ 3,000						\$ 3,000
				Lenovo Computer	\$ 4,000						\$ 4,000
				LaserJet Printer (Networking)	\$ 4,000						\$ 4,000
				APR Station	\$ 18,000						\$ 18,000
				Engineered Parts over \$5,000	\$ 5,000						\$ 5,000
				Office Equipment Parts over \$5,000	\$ 15,000						\$ 15,000
				Pickup Truck	\$ 108,000						\$ 108,000
				Purchase of Office Equipment over \$5,000	\$ 15,000						\$ 15,000
				Purchase of Vehicles	\$ 120,000						\$ 120,000
				SUV Vehicle	\$ 104,000						\$ 104,000
				Vehicle Parts over \$5,000	\$ 15,000						\$ 15,000
									\$ 128,050		\$ 128,050
Total	35	\$ 947,819	\$ 481,371		\$ 636,488		\$ -		\$ -	\$ 128,050	\$ 2,163,827

A	B	C	D	E	F	G	H	I	J	K	L	
1	Department/Agency:	DEPARTMENT OF PUBLIC WORKS										
2	CMTF Subcommittee:	INFRASTRUCTURE UTILITIES and TRANSPORTATION										
3	Program/Function:	Military Building										
4	Potential Funding Source:	Building Const & Facilities Maint Division										
5	Source:	MILITARY BLDGUP										
6		Personnel			Operational Requirements		Contracted Positions		Contracted Operations		Total	Grand Total
7	Position Title	PTES	Salary	Benefits	Cost	Positions	Cost	Per	Cost	Cost	Cost	All Costs
8	Clerk II	1	\$ 10,626	\$ 9,823								\$ 20,449
9	Secretary (Typist)	1	\$ 17,653	\$ 16,168								\$ 33,821
10	Maintenance Custodian	8	\$ 70,200	\$ 64,544								\$ 134,744
11	Carpenter II	3	\$ 64,767	\$ 59,759								\$ 119,518
12	Carpenter I	2	\$ 39,548	\$ 36,452								\$ 76,000
13	Electrician I	2	\$ 39,548	\$ 36,452								\$ 76,000
14	Painter/Lead	1	\$ 21,389	\$ 19,853								\$ 39,642
15	Painter II	2	\$ 37,449	\$ 34,854								\$ 72,303
16	Plumber II	1	\$ 21,389	\$ 19,853								\$ 39,642
17	Refrigeration Mechanic II	1	\$ 21,389	\$ 19,853								\$ 39,642
18	Refrigeration Mechanic I	2	\$ 39,548	\$ 36,452								\$ 76,000
19												\$ 3,000
20												\$ 3,000
21												\$ 800
22												\$ 3,000
23												\$ 1,000
24												\$ 7,500
25												\$ 10,000
26												\$ 500
27												\$ 6,000
28												\$ 6,000
29												\$ 110,000
30												\$ 23,000
31												\$ 23,000
32												\$ 23,000
33												\$ 15,000
34												\$ 5,000
35												\$ 5,000
36												\$ 5,000
37												\$ 6,420
38												\$ 202,000
39												\$ 10,000
40												\$ 10,000
41												\$ 10,000
42												\$ 10,000
43												\$ 5,000
44												\$ 5,000
45												\$ 10,000
46												\$ 700
47												\$ 8,280
48												\$ 50,000
49												\$ 30,000
50												\$ 50,000
51												\$ 50,000
52												\$ 20,000
53												\$ -
54	Total	21	\$ 389,115	\$ 321,849			\$ 725,311		\$ -	\$ -	\$ -	\$ 1,348,260
55												

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Division Budget Digest
(PROPOSED)

(BBMR 00-1)

Function: Infrastructure, Utilities and Transportation
Department/Agency: Department of Public Works
Program: ADMINISTRATION DIVISION
Fund:

AS400 Account Code	Appropriation Classification	A	B	Governor's Request			
		FY 2010 Expenditures & Encumbrances	FY 2010 Authorized Level	FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments	\$0	\$0	\$0	\$0	\$705,609	\$705,609
112	Overtime/Special Pay	0	0	0	0	90,182	90,182
113	Benefits	0	0	0	0	387,214	387,214
TOTAL PERSONNEL SERVICES		\$0	\$0	\$0	\$0	\$1,183,004	\$1,183,004
OPERATIONS							
220	TRAVEL - Out-of-State/Local Mileage Reimburse.	\$0	\$0	\$0	\$0	\$0	\$0
230	CONTRACTUAL SERVICES:	0	0	0	0	18,218	18,218
233	OFFICE SPACE RENTAL:	0	0	0	0	0	0
240	SUPPLIES & MATERIALS:	0	0	0	0	50,000	50,000
250	EQUIPMENT:	0	0	0	0	19,884	19,884
270	WORKERS COMPENSATION:	0	0	0	0	0	0
271	DRUG TESTING:	0	0	0	0	1,108	1,108
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	0	0
290	MISCELLANEOUS:	0	0	0	0	10,000,000	10,000,000
TOTAL OPERATIONS		\$0	\$0	\$0	\$0	\$10,089,210	\$10,089,210
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	\$0	\$0
362	Water/ Sewer	0	0	0	0	0	0
363	Telephone/ Toll	0	0	0	0	0	0
TOTAL UTILITIES		\$0	\$0	\$0	\$0	\$0	\$0
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	\$219,999	\$219,999
TOTAL APPROPRIATIONS		\$0	\$0	\$0	\$0	\$11,492,213	\$11,492,213
1/ Specify Fund Source							
FULL TIME EQUIVALENCIES (FTEs)							
UNCLASSIFIED		0	0	0	0	0	0
CLASSIFIED		0	0	0	0	31	31
TOTAL FTEs		0	0	0	0	31	31

ADMINISTRATION DIVISION
 FISCAL YEAR 2011 MILITARY BUILDUP
 [PROPOSED]

FY2011 MILITARY BUILDUP

BBMR96A

Schedule B- Contractual

ADMINISTRATION DIVISION Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
I-connect Radio Air-Time Services	16	42.80	8,218	1	
I-connect Radio Maintenance	16		10,000		X
Total Contractual			18,218		

Schedule C - Supplies & Materials

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
ID Materials and Supplies		20,000	20,000		
Safety Supplies/Materials (vests, shoes, etc.)			25,000		
Uniforms (Pants/Shirts)	62	\$ 18	5,000		
Total Supplies & Materials			50,000		

Schedule D - Equipment

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Desktop Computers	6	1999	\$ 11,994		
Digital Camera	5	250	\$ 1,250		
ID Machine	1	6000	\$ 6,000		
I-Connect Radios	16	40	\$ 640		
Total Equipment			\$ 19,884		

Schedule E - Miscellaneous

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Streetlights *			\$ 10,000,000		
Total Miscellaneous			\$ 10,000,000		

* Guess estimated cost depending on fuel cost.

Schedule F - Capital Outlay

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Vehicles (SUV/Small size)	3	16,000	48,000		
Vehicles (SUV/Medium size)	3	25,000	75,000		
Pickup Truck	1	14,999	14,999		
Cargo Van	1	27,000	27,000		
Surveillance Cameras (lot)	1	55,000	55,000		
Total Capital Outlay			\$ 219,999		

FUNCTIONAL AREA: Infrastructure, Utilities and Transportation
 DEPARTMENT/AGENCY: Public Works
 PROGRAM: 1000 Administration
 FUND:

Position No.	Position Title	Vacancy	Step by Department							Step by Parameter											Total Benefits (A-B+C)	GR										
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)												
			Grade	Step	Min	Max	Step	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max							
ADMINISTRATIVE SERVICES																																
1	Administrative Aide	VACANT	11-01	13.015	0	0	0	17,543	4,667	431	0	354	134	4,024	384	18,143	22,811															
2	Administrative Aide	VACANT	11-01	13.015	0	0	17,543	4,667	431	0	354	134	4,024	384	18,143	22,811																
	Administrative Aide	SUB Total	11-01	13.015	0	0	35,086	9,334	862	0	708	268	8,048	768	36,286	45,622																
1	Administrative Assistant	VACANT	11-01	19.074	0	0	19,974	5,485	451	0	390	174	4,576	384	20,844	26,114																
	Administrative Assistant	SUB Total	11-01	19.074	0	0	19,974	5,485	451	0	390	174	4,576	384	20,844	26,114																
1	Chief IB	VACANT	11-01	16.056	0	0	16,656	4,576	431	0	342	174	4,078	384	17,480	22,541																
	Chief IB	SUB Total	11-01	16.056	0	0	16,656	4,576	431	0	342	174	4,078	384	17,480	22,541																
SECURITY																																
1	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
2	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
3	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
4	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
5	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
6	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
7	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
8	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
9	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
10	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
11	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
12	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
13	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
14	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
15	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
16	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
17	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
18	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
19	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
20	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
21	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
22	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
23	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
24	Guard	VACANT	11-04-01	23.318	0	0	33,812	8,767	731	0	562	274	4,734	384	39,253	50,967																
	GUARDS	SUB Total	11-04-01	23.318	0	0	79,643	20,467	1,631	0	1,272	637	9,741	768	79,643	102,611																
SECURITY																																
1	Guard Supervisor	VACANT	11-04-01	25.089	0	0	39,073	9,766	811	0	629	314	4,976	384	44,254	57,425																
2	Guard Supervisor	VACANT	11-04-01	25.089	0	0	39,073	9,766	811	0	629	314	4,976	384	44,254	57,425																
3	Guard Supervisor	VACANT	11-04-01	25.089	0	0	39,073	9,766	811	0	629	314	4,976	384	44,254	57,425																
	GUARD SUPERVISORS	SUB Total	11-04-01	25.089	0	0	117,220	29,300	2,433	0	1,887	942	14,928	1,152	133,328	172,275																

Overview of Guam
Fiscal Year 2011
Agency Staffing Patterns
(continued)

(BMIN 40-1)

FUNCTIONAL AREA: Infrastructure, Utilities and Transportation
DEPARTMENT/AGENCY: Public Works
PROGRAM: 1005 Administration

FUNDS:

No.	Open by Department										Open by Employment									
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	
	Position Number	Position Title	Salary Grade	Grade Step	Salary	Outside Salary	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max

No.	Position Number	Position Title	Name of Appointment	Salary Pay	Night Differential		Hazard Pay		Non-Roadway Pay		Home Pay		KMT Pay		16-19 (20-41) Extra
					Rate	%	Amount	%	Rate	%	Rate	%	Rate	%	
ADMINISTRATIVE SERVICES															
1	0	Administrator Asst	VACANT	0	0	0	0	0	0	0	0	0	0	0	0
2	0	Administrative Asst	VACANT	0	0	0	0	0	0	0	0	0	0	0	0
			SLP-Term	0	0	0	0	0	0	0	0	0	0	0	0
1	0	Administrator Assistant	VACANT	0	0	0	0	0	0	0	0	0	0	0	0
			SLP-Term	0	0	0	0	0	0	0	0	0	0	0	0
1	0	Chief, III	VACANT	0	0	0	0	0	0	0	0	0	0	0	0
			SLP-Term	0	0	0	0	0	0	0	0	0	0	0	0
CONCRETE															
7	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
8	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
9	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
10	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
11	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
12	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
13	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
14	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
15	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
16	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
17	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
18	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
19	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
20	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
21	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
22	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
23	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
24	0	Operator	VACANT	987	2,332	0	0	0	0	0	0	0	0	3,318	
			SLP-Term	33,077	33,094	0	0	0	0	0	0	0	0	39,941	

FEB-14-2010

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JIGIS REPORT SECURITY MODEL
ADM-TP

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Division Budget Digest

[BBMR DD-1]

Function: Infrastructure, Utilities and Transportation
Department/Agency: Department of Public Works
Program: Bus Operations Division

AS400 Account Code	Appropriation Classification	A	B	Governor's Request			F
		FY 2009 Expenditures & Encumbrances	FY 2010 Authorized Level	FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments/Special Pay	\$0	\$0	\$0	\$0	812,326	812,326
112	Overtime	\$0	\$0	\$0	\$0	-	-
113	Benefits	\$0	\$0	\$0	\$0	452,817	452,817
114	Medical / Dental / Life	\$0	\$0	\$0	\$0	-	-
	TOTAL PERSONNEL SERVICES	\$0	\$0	\$0	\$0	1,265,143	1,265,143
OPERATIONS							
220	TRAVEL- Off-Island/Local Mileage Reimburs.	\$0	\$0	\$0	\$0	-	-
230	CONTRACTUAL SERVICES:	\$0	\$0	\$0	\$0	50,000	50,000
233	OFFICE SPACE RENTAL:	\$0	\$0	\$0	\$0	-	-
240	SUPPLIES & MATERIALS:	\$0	\$0	\$0	\$0	800,000	800,000
250	EQUIPMENT:	\$0	\$0	\$0	\$0	-	-
270	WORKERS COMPENSATION	\$0	\$0	\$0	\$0	-	-
271	DRUG TESTING	\$0	\$0	\$0	\$0	-	-
280	SUB-RECIPIENT/SUBGRANT:	\$0	\$0	\$0	\$0	-	-
290	MISCELLANEOUS:	\$0	\$0	\$0	\$0	-	-
	TOTAL OPERATIONS	\$0	\$0	\$0	\$0	850,000	850,000
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	-	-
362	Water/ Sewer	\$0	\$0	\$0	\$0	-	-
363	Telephone/ Toll	\$0	\$0	\$0	\$0	-	-
	TOTAL UTILITIES	\$0	\$0	\$0	\$0	-	-
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	11,057,500	11,057,500
	TOTAL APPROPRIATIONS	\$0	\$0	\$0	\$0	13,172,643	13,172,643
1/ Specify Fund Source							
FULL TIME EQUIVALENCIES (FTEs)							
	UNCLASSIFIED	0	0	0	0	-	-
	CLASSIFIED	0	0	0	0	43	43
	TOTAL FTEs	0	0	0	0	43	43

Schedule B- Contractual

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
First Aid/CFR Certification Training(30)	30	20	\$ 600.00	XX	
Rebuild of Starter (School Buses)(50)	50	250	\$ 12,500.00	XX	
Rebuild of Alternator (School Buses)(82)	82	450	\$ 36,900.00	XX	
			\$ -		
			\$ -		
Total Contractual			\$ 50,000.00		

Schedule C - Supplies & Materials

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Parts and Materials for School Buses			\$ 755,000.00	XX	
Office Supplies and Materials			\$ 25,000.00	XX	
Parts and Materials for Light Official Vehicles			\$ 20,000.00	XX	
			\$ -		
			\$ -		
Total Supplies & Materials			\$ 800,000.00		

Schedule D - Equipment

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
N/A			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
Total Equipment			\$ -		

Schedule E - Miscellaneous

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
N/A			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
Total Miscellaneous			\$ -		

Schedule F - Capital Outlay

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
School Buses (53)	53	140,000	\$ 7,420,000.00	XX	
Substation for Agat (Fence & Paving)	1	190,000	\$ 190,000.00	XX	
Bus Shelters (aluminum) (197)	197	17,560	\$ 3,447,500.00	XX	
			\$ -		
			\$ -		
Total Capital Outlay			\$ 11,057,500.00		

\$ 11,507,500

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Division Budget Digest

IBBMR BD-11

Function: Infrastructure, Utilities and Transportation
Department/Agency: Department of Public Works
Program: Bus Operations Fuel

AS400 Account Code	Appropriation Classification	A	B	C		E		F
		FY 2009 Expenditures & Encumbrances	FY 2010 Authorized Level	FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)	
PERSONNEL SERVICES								
111	Regular Salaries/Increments/Special Pay	\$0	\$0	\$0	\$0	\$0	\$0	\$0
112	Overtime	0	0	0	0	0	0	0
113	Benefits	0	0	0	0	0	0	0
114	Insurance Benefits (Medical / Dental / Life)	0	0	0	0	0	0	0
	TOTAL PERSONNEL SERVICES	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPERATIONS								
220	TRAVEL- Off-Island/Local Mileage Reimburs.	\$0	\$0	\$0	\$0	\$0	\$0	\$0
230	CONTRACTUAL SERVICES:	0	0	0	0	0	0	0
233	OFFICE SPACE RENTAL:	0	0	0	0	0	0	0
240	SUPPLIES & MATERIALS:			0	0	800,000	800,000	800,000
250	EQUIPMENT:	0	0	0	0	0	0	0
270	WORKERS COMPENSATION	0	0	0	0	0	0	0
271	DRUG TESTING	0	0	0	0	0	0	0
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	0	0	0
290	MISCELLANEOUS:	0	0	0	0	0	0	0
	TOTAL OPERATIONS	\$0	\$0	\$0	\$0	\$800,000	\$800,000	\$800,000
UTILITIES								
361	Power	\$0	\$0	\$0	\$0	\$0	\$0	\$0
362	Water/ Sewer	0	0	0	0	0	0	0
363	Telephone/ Toll	0	0	0	0	0	0	0
	TOTAL UTILITIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL APPROPRIATIONS	\$0	\$0	\$0	\$0	\$800,000	\$800,000	\$800,000
1/ Specify Fund Source								
FULL TIME EQUIVALENCIES (FTEs)								
	UNCLASSIFIED	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CLASSIFIED	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL FTEs	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Schedule B- Contractual

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
N/A			\$ -		
			\$ -		
			\$ -		
			\$ -		
Total Contractual			\$ -		

Schedule C - Supplies & Materials

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Fuel Cost			\$ 800,000.00		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
Total Supplies & Materials			\$ 800,000.00		

Schedule D - Equipment

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
N/A			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
Total Equipment			\$ -		

Schedule E - Miscellaneous

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
N/A			\$ -		
			\$ -		
			\$ -		
			\$ -		
Total Miscellaneous			\$ -		

Schedule F - Capital Outlay

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
N/A			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		

Total Capital Outlay

| \$ - |

Department of Guam
Fiscal Year 2015 Budget
Agency Staffing Profile
PROPOSED MILITARY BUILDING

FUNCTIONAL AREA: Administration, Information and Technology
FUNCTION: Department of Public Works
PROGRAM: BUILDING AND CONSTRUCTION
FUND: OPERATIONAL BUDGET (110000001000)
PAGE: 1096

Staff by Department													Base by Department					
No.	Position Number	Position Title	Name of Department	Grade/Step	Salary	Overtime	Special	Date	Contract	Benefits					Medical (FICA)	Total Available (E.O. 11615)	D + R1 (E.O. 11616)	
										TR (P2-P1) (1-21.6%)	Retirement (1-14.6%)	Retiree (100) (14.6-21.6%)	Social Security (14.6-21.6%)	Medical (FICA) (1-14.6%)				
1	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
2	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
3	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
4	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
5	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
6	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
7	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
8	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
9	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
10	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
11	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
12	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
13	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
14	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
15	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
16	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
17	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
18	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
19	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
20	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
21	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
22	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
23	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
24	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
25	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
26	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
27	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
28	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
29	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0
30	Administrative Aide	Year	1-11	17,015	0	0	0	0	0	2,015	4,030	4,030	0	0	0	0	0	0

FUNCTIONAL AREA: Information Systems Management
 AGENCY: Department of Public Works
 PROGRAM: BLDG OPERATIONS/MAINTENANCE
 FUND: GENERAL FUND 510411504000-11133
 Rate: 10%

Department of Guam
 Fiscal Year 2011 Budget
 Agency Operations
 PROPOSED MILITARY BUDGET

Total by Department										Total by Department									
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	
No.	Position	Position Title	Rate of Increase	Qual. Req.	Salary	Overtime	Special P.	Benefit	Travel	Allowance	5013-010 Subtotal	5013-010 Allowance	5013-010 (10%)	5013-010 (10%)	5013-010 (10%)	5013-010 (10%)	5013-010 (10%)	5013-010 (10%)	
21	Subject Bus Driver	Driver	7.00	11,833	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
22	Subject Bus Driver	Driver	7.00	12,052	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
23	Subject Bus Driver	Driver	7.00	12,271	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
24	Subject Bus Driver	Driver	7.00	12,490	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
25	Subject Bus Driver	Driver	7.00	12,709	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
26	Subject Bus Driver	Driver	7.00	12,928	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
27	Subject Bus Driver	Driver	7.00	13,147	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
28	Subject Bus Driver	Driver	7.00	13,366	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
29	Subject Bus Driver	Driver	7.00	13,585	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
30	Subject Bus Driver	Driver	7.00	13,804	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
31	Subject Bus Driver	Driver	7.00	14,023	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
32	Subject Bus Driver	Driver	7.00	14,242	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
33	Subject Bus Driver	Driver	7.00	14,461	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
34	Subject Bus Driver	Driver	7.00	14,680	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
35	Subject Bus Driver	Driver	7.00	14,899	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
36	Subject Bus Driver	Driver	7.00	15,118	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
37	Subject Bus Driver	Driver	7.00	15,337	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
38	Subject Bus Driver	Driver	7.00	15,556	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
39	Subject Bus Driver	Driver	7.00	15,775	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
40	Subject Bus Driver	Driver	7.00	15,994	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
41	Subject Bus Driver	Driver	7.00	16,213	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
42	Subject Bus Driver	Driver	7.00	16,432	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
43	Subject Bus Driver	Driver	7.00	16,651	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
44	Subject Bus Driver	Driver	7.00	16,870	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
45	Subject Bus Driver	Driver	7.00	17,089	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
46	Subject Bus Driver	Driver	7.00	17,308	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
47	Subject Bus Driver	Driver	7.00	17,527	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
48	Subject Bus Driver	Driver	7.00	17,746	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
49	Subject Bus Driver	Driver	7.00	17,965	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
50	Subject Bus Driver	Driver	7.00	18,184	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
51	Subject Bus Driver	Driver	7.00	18,403	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
52	Subject Bus Driver	Driver	7.00	18,622	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
53	Subject Bus Driver	Driver	7.00	18,841	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
54	Subject Bus Driver	Driver	7.00	19,060	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
55	Subject Bus Driver	Driver	7.00	19,279	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
56	Subject Bus Driver	Driver	7.00	19,498	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
57	Subject Bus Driver	Driver	7.00	19,717	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
58	Subject Bus Driver	Driver	7.00	19,936	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
59	Subject Bus Driver	Driver	7.00	20,155	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
60	Subject Bus Driver	Driver	7.00	20,374	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
61	Subject Bus Driver	Driver	7.00	20,593	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
62	Subject Bus Driver	Driver	7.00	20,812	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
63	Subject Bus Driver	Driver	7.00	21,031	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
64	Subject Bus Driver	Driver	7.00	21,250	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
65	Subject Bus Driver	Driver	7.00	21,469	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
66	Subject Bus Driver	Driver	7.00	21,688	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
67	Subject Bus Driver	Driver	7.00	21,907	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
68	Subject Bus Driver	Driver	7.00	22,126	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
69	Subject Bus Driver	Driver	7.00	22,345	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
70	Subject Bus Driver	Driver	7.00	22,564	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
71	Subject Bus Driver	Driver	7.00	22,783	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
72	Subject Bus Driver	Driver	7.00	23,002	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
73	Subject Bus Driver	Driver	7.00	23,221	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
74	Subject Bus Driver	Driver	7.00	23,440	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
75	Subject Bus Driver	Driver	7.00	23,659	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
76	Subject Bus Driver	Driver	7.00	23,878	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
77	Subject Bus Driver	Driver	7.00	24,097	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
78	Subject Bus Driver	Driver	7.00	24,316	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
79	Subject Bus Driver	Driver	7.00	24,535	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
80	Subject Bus Driver	Driver	7.00	24,754	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
81	Subject Bus Driver	Driver	7.00	24,973	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
82	Subject Bus Driver	Driver	7.00	25,192	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
83	Subject Bus Driver	Driver	7.00	25,411	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
84	Subject Bus Driver	Driver	7.00	25,630	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
85	Subject Bus Driver	Driver	7.00	25,849	0	0	0	0	1,100	4,150	400	0	200	175	4,775	390	38,187	3,863	
86	Subject Bus Driver	Driver	7.00	26,068	0														

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Division Budget Digest

[BBMR BD-1]

Function: Transportation Maintenance Division
Department/Agency: Department of Public Works
Program: Transportation Maintenance Division

AS400 Account Code	Appropriation Classification	A	B	Governor's Request			F
		FY 2009 Expenditures & Encumbrances	FY 2010 Authorized Level	C	D	E	FY 2011 Total Req. (C+D+E)
				FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	
PERSONNEL SERVICES							
111	Regular Salaries/Increments/Special Pay	\$0	\$0	\$0	\$0	\$506,086	\$506,086
112	Overtime	0	0	0	0	0	0
113	Benefits	0	0	0	0	262,905	262,905
114	Insurance Benefits (Medical / Dental / Life)	0	0	0	0	0	0
	TOTAL PERSONNEL SERVICES	\$0	\$0	\$0	\$0	\$768,991	\$768,991
OPERATIONS							
220	TRAVEL- Off-Island/Local Mileage Reimburs.	\$0	\$0	\$0	\$0	\$0	\$0
230	CONTRACTUAL SERVICES:	0	0	0	0	187,000	187,000
233	OFFICE SPACE RENTAL:	0	0	0	0	0	0
240	SUPPLIES & MATERIALS:	0	0	0	0	194,000	194,000
250	EQUIPMENT:	0	0	0	0	0	0
270	WORKERS COMPENSATION	0	0	0	0	0	0
271	DRUG TESTING	0	0	0	0	822	822
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	0	0
290	MISCELLANEOUS:	0	0	0	0	0	0
	TOTAL OPERATIONS	\$0	\$0	\$0	\$0	\$381,822	\$381,822
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	\$0	\$0
362	Water/ Sewer	0	0	0	0	0	0
363	Telephone/ Toll	0	0	0	0	0	0
	TOTAL UTILITIES	\$0	\$0	\$0	\$0	\$0	\$0
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	\$800,000	\$800,000
	TOTAL APPROPRIATIONS	\$0	\$0	\$0	\$0	\$1,950,813	\$1,950,813
1/ Specify Fund Source							
FULL TIME EQUIVALENCIES (FTEs)							
	UNCLASSIFIED	0.00	0.00	0.00	0.00	0.00	0.00
	CLASSIFIED	0.00	0.00	0.00	0.00	23.00	23.00
	TOTAL FTEs	0.00	0.00	0.00	0.00	23.00	23.00

Schedule B - Contractual

Item	Quantity	Unit Price	Total Price	Funded in FY 2009?	
				Yes	No
Contractual repair for vehicles & equipment			\$ 100,000.00	X	
I-Connect Air Time			\$ 7,000.00	X	
Waste oil/hazardous material disposal			\$ 5,000.00		X
Fleet Management Software			\$ 75,000.00		X
Total Contractual			\$ 187,000.00		

Schedule C - Supplies & Materials

Item	Quantity	Unit Price	Total Price	Funded in FY 2009?	
				Yes	No
Parts and Materials for Light Vehicles			\$ 50,000.00	X	
Parts and Materials for Heavy Equipment			\$ 80,000.00	X	
Batteries for vehicles/equipment			\$ 10,000.00		X
Fuel			\$ 20,000.00	X	
Misc. Shop Tools			\$ 30,000.00		X
Misc. Office Supplies			\$ 4,000.00		X
Total Supplies & Materials			\$ 194,000.00		

Schedule D - Equipment

Item	Quantity	Unit Price	Total Price	Funded in FY 2009?	
				Yes	No
			\$ -		
			\$ -		
			\$ -		
			\$ -		
Total Equipment			\$ -		

Schedule E - Miscellaneous

Item	Quantity	Unit Price	Total Price	Funded in FY 2009?	
				Yes	No
Drug Testing	23	35.75	\$ 822.25		
			\$ -		
			\$ -		
			\$ -		
Total Miscellaneous			\$ 822.25		

Schedule F - Capital Outlay

Item	Quantity	Unit Price	Total Price	Funded in FY 2009?	
				Yes	No
Fuel Service Truck	1		\$ 300,000.00		X
Fuel Tanker Truck	1		\$ 500,000.00		X
			\$ -		
			\$ -		
Total Capital Outlay			\$ 800,000.00		

\$ 1,181,822.25
 MILITARY BUDGET
 TM Capital

FUNCTIONAL AREA: Infrastructure, Utilities and Transportation
DEPARTMENT/AGENCY: Public Works
PROGRAM: 400-Transportation/Maintenance
FUNDS: BILIRANSY BUDJET

Input by Department											Input by Department									
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)		
Position Number	Position Title	Normal	Grant	Other	Special	Special	Special	Special	Sub	Sub	Sub	Sub	Sub	Sub	Sub	Sub	Total Budget	(F - R) TOTAL		
									13-0104-01	13-0104-01	13-0104-01	13-0104-01	13-0104-01	13-0104-01	13-0104-01					
1	Administrative Aide	VACANT	0.00	147,415	0	0	0	0	147,415	147,415	5,100	50	3,275	1,718	0	156,508	156,508			
2	Administrative Aide	VACANT	0.00	17,202	0	0	0	0	17,202	17,202	588	0	252	124	0	18,166	18,166			
3	Administrative Aide	VACANT	0.00	26,752	0	0	0	0	26,752	26,752	884	0	565	282	0	28,283	28,283			
4	Administrative Aide	VACANT	0.00	19,811	0	0	0	0	19,811	19,811	659	0	409	204	0	20,883	20,883			
5	Assistant Mechanic I	VACANT	11.51	149,974	0	0	0	0	149,974	149,974	4,933	0	3,081	1,540	0	157,928	157,928			
6	Assistant Mechanic I	VACANT	11.51	130,971	0	0	0	0	130,971	130,971	4,300	0	2,687	1,343	0	138,261	138,261			
7	Assistant Mechanic II	VACANT	11.00	125,071	0	0	0	0	125,071	125,071	4,033	0	2,520	1,260	0	131,624	131,624			
8	Assistant Mechanic II	VACANT	11.00	110,909	0	0	0	0	110,909	110,909	3,611	0	2,257	1,128	0	116,787	116,787			
9	Assistant Mechanic II	VACANT	11.00	107,909	0	0	0	0	107,909	107,909	3,500	0	2,187	1,093	0	113,589	113,589			
10	Assistant Mechanic II	VACANT	11.00	97,909	0	0	0	0	97,909	97,909	3,166	0	1,979	989	0	102,054	102,054			
11	Assistant Mechanic II	VACANT	11.00	93,909	0	0	0	0	93,909	93,909	3,033	0	1,891	945	0	98,839	98,839			
12	Assistant Mechanic II	VACANT	11.00	89,909	0	0	0	0	89,909	89,909	2,900	0	1,803	901	0	94,613	94,613			
13	Assistant Mechanic II	VACANT	11.00	85,909	0	0	0	0	85,909	85,909	2,766	0	1,715	857	0	90,391	90,391			
14	Assistant Mechanic II	VACANT	11.00	81,909	0	0	0	0	81,909	81,909	2,633	0	1,627	813	0	86,165	86,165			
15	Assistant Mechanic Supervisor	VACANT	13.50	26,522	0	0	0	0	26,522	26,522	877	0	548	274	0	28,147	28,147			
16	Electrician	VACANT	11.00	11,974	0	0	0	0	11,974	11,974	392	0	245	122	0	12,611	12,611			
17	Electrician	VACANT	11.00	14,974	0	0	0	0	14,974	14,974	488	0	305	152	0	15,769	15,769			
18	Electrician	VACANT	11.00	21,974	0	0	0	0	21,974	21,974	703	0	440	220	0	22,917	22,917			
19	Electrician	VACANT	11.00	24,974	0	0	0	0	24,974	24,974	799	0	498	249	0	25,871	25,871			
20	Electrician	VACANT	11.00	27,974	0	0	0	0	27,974	27,974	895	0	557	278	0	28,825	28,825			
21	Electrician	VACANT	11.00	30,974	0	0	0	0	30,974	30,974	991	0	616	308	0	31,583	31,583			
22	Electrician	VACANT	11.00	33,974	0	0	0	0	33,974	33,974	1,087	0	675	337	0	34,337	34,337			
23	Electrician	VACANT	11.00	36,974	0	0	0	0	36,974	36,974	1,183	0	734	367	0	37,091	37,091			
24	Electrician	VACANT	11.00	39,974	0	0	0	0	39,974	39,974	1,279	0	793	396	0	40,045	40,045			
25	Electrician	VACANT	11.00	42,974	0	0	0	0	42,974	42,974	1,375	0	852	425	0	42,799	42,799			
26	Electrician	VACANT	11.00	45,974	0	0	0	0	45,974	45,974	1,471	0	911	454	0	45,553	45,553			
27	Electrician	VACANT	11.00	48,974	0	0	0	0	48,974	48,974	1,567	0	970	487	0	48,307	48,307			
28	Electrician	VACANT	11.00	51,974	0	0	0	0	51,974	51,974	1,663	0	1,029	514	0	51,061	51,061			
29	Electrician	VACANT	11.00	54,974	0	0	0	0	54,974	54,974	1,759	0	1,088	542	0	53,815	53,815			
30	Electrician	VACANT	11.00	57,974	0	0	0	0	57,974	57,974	1,855	0	1,147	575	0	56,569	56,569			
31	Electrician	VACANT	11.00	60,974	0	0	0	0	60,974	60,974	1,951	0	1,206	602	0	59,323	59,323			
32	Electrician	VACANT	11.00	63,974	0	0	0	0	63,974	63,974	2,047	0	1,265	630	0	62,077	62,077			
33	Electrician	VACANT	11.00	66,974	0	0	0	0	66,974	66,974	2,143	0	1,324	658	0	64,831	64,831			
34	Electrician	VACANT	11.00	69,974	0	0	0	0	69,974	69,974	2,239	0	1,383	686	0	67,585	67,585			
35	Electrician	VACANT	11.00	72,974	0	0	0	0	72,974	72,974	2,335	0	1,442	714	0	70,339	70,339			
36	Electrician	VACANT	11.00	75,974	0	0	0	0	75,974	75,974	2,431	0	1,501	742	0	73,093	73,093			
37	Electrician	VACANT	11.00	78,974	0	0	0	0	78,974	78,974	2,527	0	1,560	770	0	75,847	75,847			
38	Electrician	VACANT	11.00	81,974	0	0	0	0	81,974	81,974	2,623	0	1,619	798	0	78,601	78,601			
39	Electrician	VACANT	11.00	84,974	0	0	0	0	84,974	84,974	2,719	0	1,678	826	0	81,355	81,355			
40	Electrician	VACANT	11.00	87,974	0	0	0	0	87,974	87,974	2,815	0	1,737	854	0	84,109	84,109			
41	Electrician	VACANT	11.00	90,974	0	0	0	0	90,974	90,974	2,911	0	1,796	882	0	86,863	86,863			
42	Electrician	VACANT	11.00	93,974	0	0	0	0	93,974	93,974	3,007	0	1,855	910	0	89,617	89,617			
43	Electrician	VACANT	11.00	96,974	0	0	0	0	96,974	96,974	3,103	0	1,914	938	0	92,371	92,371			
44	Electrician	VACANT	11.00	99,974	0	0	0	0	99,974	99,974	3,200	0	1,973	966	0	95,125	95,125			
45	Electrician	VACANT	11.00	102,974	0	0	0	0	102,974	102,974	3,296	0	2,032	994	0	97,879	97,879			
46	Electrician	VACANT	11.00	105,974	0	0	0	0	105,974	105,974	3,392	0	2,091	1,022	0	100,633	100,633			
47	Electrician	VACANT	11.00	108,974	0	0	0	0	108,974	108,974	3,488	0	2,150	1,050	0	103,387	103,387			
48	Electrician	VACANT	11.00	111,974	0	0	0	0	111,974	111,974	3,584	0	2,209	1,078	0	106,141	106,141			
49	Electrician	VACANT	11.00	114,974	0	0	0	0	114,974	114,974	3,680	0	2,268	1,106	0	108,895	108,895			
50	Electrician	VACANT	11.00	117,974	0	0	0	0	117,974	117,974	3,776	0	2,327	1,134	0	111,649	111,649			
51	Electrician	VACANT	11.00	120,974	0	0	0	0	120,974	120,974	3,872	0	2,386	1,162	0	114,403	114,403			
52	Electrician	VACANT	11.00	123,974	0	0	0	0	123,974	123,974	3,968	0	2,445	1,190	0	117,157	117,157			
53	Electrician	VACANT	11.00	126,974	0	0	0	0	126,974	126,974	4,064	0	2,504	1,218	0	119,911	119,911			
54	Electrician	VACANT	11.00	129,974	0	0	0	0	129,974	129,974	4,160	0	2,563	1,246	0	122,665	122,665			
55	Electrician	VACANT	11.00	132,974	0	0	0	0	132,974	132,974	4,256	0	2,622	1,274	0	125,419	125,419			
56	Electrician	VACANT	11.00	135,974	0	0	0	0	135,974	135,974	4,352	0	2,681	1,302	0	128,173	128,173			
57	Electrician	VACANT	11.00	138,974	0	0	0	0	138,974	138,974	4,448	0	2,740	1,330	0	130,927	130,927			
58	Electrician	VACANT	11.00	141,974	0	0	0	0	141,974	141,974	4,544	0	2,799	1,358	0	133,681	133,681			
59	Electrician	VACANT	11.00	144,974	0	0	0	0	144,974	144,974	4,640	0	2,858	1,386	0	136,435	136,435			
60	Electrician	VACANT	11.00	147,974	0	0	0	0	147,974	147,974	4,736	0	2,917	1,414	0	139,189	139,189			
61	Electrician	VACANT	11.00	150,974	0	0	0	0	150,974	150,974	4,832	0	2,976	1,442	0	141,943	141,943			
62	Electrician	VACANT	11.00	153,974	0	0	0	0	153,974	153,974	4,928	0	3,035	1,470	0	144,697	144,697			
63	Electrician	VACANT	11.00	156,974	0	0	0	0	156,974	156,974	5,024	0	3,094	1,498	0	147,451	147,451			
64	Electrician	VACANT	11.00	159,974	0	0	0	0	159,974	159,974	5,120	0	3,153	1,526	0	150,205	150,205			
65	Electrician	VACANT	11.00	162,974	0	0	0	0	162,974	162,974	5,216	0	3,212	1,554	0	152,959	152,959			
66	Electrician	VACANT	11.00	165,974	0	0	0	0	165,974	165,974	5,312	0	3,271							

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Division Budget Digest

[BBMR BD-1]

Function: Infrastructure, Utilities and Transportation
Department/Agency: Department of Public Works
Program: Building Construction & Facilities Maintenance Division

AS400 Account Code	Appropriation Classification	A	B	Governor's Request			F
		FY 2010 Expenditures & Encumbrances	FY 2010 Authorized Level	FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments/Special Pay	-	-	-	-	399,115	399,115
112	Overtime	-	-	-	-	-	-
113	Benefits	-	-	-	-	221,849	221,849
TOTAL PERSONNEL SERVICES		-	-	-	-	620,964	620,964
OPERATIONS							
220	TRAVEL- Off-Island/Local Mileage Reimburs.	-	-	-	-	-	-
230	CONTRACTUAL SERVICES:	-	-	-	-	42,850	42,850
233	OFFICE SPACE RENTAL:	-	-	-	-	-	-
240	SUPPLIES & MATERIALS:	-	-	-	-	412,420	412,420
250	EQUIPMENT:	-	-	-	-	60,000	60,000
270	WORKERS COMPENSATION	-	-	-	-	-	-
271	DRUG TESTING	-	-	-	-	751	751
280	SUB-RECIPIENT/SUBGRANT:	-	-	-	-	-	-
290	MISCELLANEOUS:	-	-	-	-	-	-
TOTAL OPERATIONS		-	-	-	-	516,021	516,021
UTILITIES							
361	Power	-	-	-	-	-	-
362	Water/ Sewer	-	-	-	-	-	-
363	Telephone/ Toll	-	-	-	-	9,280	9,280
TOTAL UTILITIES		-	-	-	-	9,280	9,280
450	CAPITAL OUTLAY	-	-	-	-	200,000	200,000
TOTAL APPROPRIATIONS		-	-	-	-	1,346,265	1,346,265
1/ Specify Fund Source							
FULL TIME EQUIVALENCIES (FTEs)							
UNCLASSIFIED		-	-	-	-	-	-
CLASSIFIED		-	-	-	-	21	21
TOTAL FTEs		-	-	-	-	21	21

Schedule B- Contractual - 230

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Refrigeration Contractual Services		3,000	\$ 3,000.00		x
Sewage Pumping & Related Contractual Svcs.		3,000	\$ 3,000.00		x
Printing Services (Work Orders)		800	\$ 800.00		x
Annual Physical Examination		3,000	\$ 3,000.00		x
Office Equipment Repairs		1,000	\$ 1,000.00		x
Rodent Control Contractual Services		7,500	\$ 7,500.00		x
Termite Treatment/Pest Control		10,000	\$ 10,000.00		x
Fabrication of Keys		550	\$ 550.00		x
Hand Radios Contractual Services		6,000	\$ 6,000.00		x
Xerox Contractual Services		8,000	\$ 8,000.00		x
Total Contractual			\$ 42,850.00		x

Schedule C - Supplies & Materials - 240

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Carpentry Operational Supplies & Materials		110,000	\$ 110,000.00		x
Electrical Operational Supplies & Materials		20,000	\$ 20,000.00		x
Refrigeration Operational Supplies & Materials		23,000	\$ 23,000.00		x
Plumbing Operational Supplies & Materials		23,000	\$ 23,000.00		x
Finishing/Paint Operational Supplies & Materials		15,000	\$ 15,000.00		x
Custodial Operational Supplies & Materials		5,000	\$ 5,000.00		x
Office/Computer Operational Supplies & Mat'ls		5,000	\$ 5,000.00		x
Safety Supplies & Materials		5,000	\$ 5,000.00		x
Auto Parts & Tires		6,420	\$ 6,420.00		x
Building Inventory		200,000	\$ 200,000.00		x
Total Supplies & Materials			\$ 412,420.00		

Schedule D - Equipment - 250

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Carpentry Operational Tools & Equipment			10,000.00		x
Electrical Operational Tools & Equipment			10,000.00		x
Refrigeration Operational Tools & Equipment			10,000.00		x
Plumbing Operational Tools & Equipment			10,000.00		x
Finishing/Paint Operational Tools & Equipment			5,000.00		x
Custodial Operational Tools & Equipment			5,000.00		x
Office Operation Tools & Equipment			10,000.00		x
Total Equipment			60,000.00		

Schedule E - Drug Testing - 271

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Drug Testing	21	35.75	750.75		x
Total Drug Testing			\$ 750.75		

Schedule F - Utilities - 363

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Telecommunication (Phone System)		9,280	\$ 9,280.00		x
Total Miscellaneous			\$ 9,280.00		

Schedule G - Capital Outlay - 450*

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Carpentry Capital Equipment	2	30,000 + 20,000	50,000.00		x
Electrical Capital Equipment	1	30,000	30,000.00		x
Refrigeration Capital Equipment	2	30,000 + 20,000	50,000.00		x
Plumbing Capital Equipment	2	30,000 + 20,000	50,000.00		x
Custodial Capital Equipment	1	20,000	20,000.00		x
Hazardous Priority Improvement Projects			-		x
Total Capital Outlay			\$ 200,000.00		

*450 - Utility Vehicles @ \$30,000.00 each x 4 = \$120,000.00

*450 - P/Up Trucks @ \$20,000.00 each x 4 = \$80,000.00

Government of Guam
Fiscal Year 2011
Agency Staffing Pattern
(PROPOSED)

(ITEMS 59-1)

FUNCTIONAL AREA: Infrastructure, Utilities and Transportation
PROGRAM/AGENCY: Public Works
PROGRAM: 490 Building Construction & Facilities Maintenance
FUNF: MILITARY BUDGET

No.	Position Title	Position Type	Name of Position	Grade	Rate	Combin.	Asgmt	Term	Scale Percentages												
									101	102	103	104	105	106	107	108	109	110			
Infrastructure Support																					
1	4011	Public Wrk	VACANT	SO1	30,655	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	20,241	0	0	
			Sub-Total		30,655	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	20,241	0	0	
1	4047	Inventory Management	VACANT	SO1	19,035	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	15,168	0	0	
			Sub-Total		19,035	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	15,168	0	0	
Construction Maintenance																					
1	4020	MAINTENANCE SUPERVISOR	VACANT	SO1	15,809	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	10,499	0	0	
1	4104	MAINTENANCE SUPERVISOR	VACANT	SO1	15,809	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	10,499	0	0	
1	4106	MAINTENANCE SUPERVISOR	VACANT	SO1	15,809	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	10,499	0	0	
1	4108	MAINTENANCE SUPERVISOR	VACANT	SO1	15,809	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	10,499	0	0	
			Sub-Total		59,236	0	SO	0	39,999	15,696	1,613	0	968	696	18,680	1,562	11,361	41,846	0	0	
Security																					
1	4077	Security II	VACANT	SO1	21,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	14,253	0	0	
1	4109	Security	VACANT	SO1	21,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	14,253	0	0	
1	4102	Security II	VACANT	SO1	21,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	14,253	0	0	
			Sub-Total		64,927	0	SO	0	30,000	12,222	1,213	0	728	522	13,710	1,164	8,907	32,759	0	0	
1	4105	Security I	VACANT	SO1	19,076	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	11,668	0	0	
1	4106	Security I	VACANT	SO1	19,076	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	11,668	0	0	
			Sub-Total		38,152	0	SO	0	20,000	8,148	806	0	484	348	9,340	772	5,634	23,336	0	0	
Miscellaneous																					
1	4101	Inspector	VACANT	SO1	18,432	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	12,644	0	0	
1	4103	Inspector	VACANT	SO1	18,432	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	12,644	0	0	
			Sub-Total		36,864	0	SO	0	20,000	8,148	806	0	484	348	9,340	772	5,634	25,288	0	0	
Police																					
1	4108	Police Leader	VACANT (Group 1) (New)	SO1	31,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	17,253	0	0	
			Sub-Total		31,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	17,253	0	0	
1	4110	Police	VACANT	SO1	18,523	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	12,644	0	0	
1	4112	Police	VACANT	SO1	18,523	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	12,644	0	0	
			Sub-Total		37,046	0	SO	0	20,000	8,148	806	0	484	348	9,340	772	5,634	25,288	0	0	
Security																					
1	4100	Security II	VACANT	SO1	21,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	14,253	0	0	
			Sub-Total		21,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	14,253	0	0	
Maintenance																					
1	4104	Maintenance Supervisor II	VACANT	SO1	21,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	14,253	0	0	
			Sub-Total		21,309	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	14,253	0	0	
1	4101	Maintenance Supervisor	VACANT (Thomas) (Thomas)	SO1	18,523	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	12,644	0	0	
1	4103	Maintenance Supervisor	VACANT	SO1	18,523	0	SO	0	10,000	4,074	403	0	242	174	4,670	388	2,817	12,644	0	0	
			Sub-Total		37,046	0	SO	0	20,000	8,148	806	0	484	348	9,340	772	5,634	25,288	0	0	
TOTAL PROPOSED REQUIRES																					
									399,143	218,093	8,891	4	5,781	3,004	65,680	4,318	33,849	424,864			

1) PP 2009 proposed for same position. For L&E treatment at 10% per annum, subject to change at FY 2011.

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Division Budget Digest
(Proposed)

[BBMR BD-1]

Function: Infrastructure, Utilities, and Transportation
Department/Agency: Public Works/Division of Engineering - Vertical (CIP'S)
Program:

AS400 Account Code	Appropriation Classification	A	B	Governor's Request			
		FY 2009 Expenditures & Encumbrances	FY 2010 Authorized Level	C	D	E	F
				FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund I/	FY 2011 Total Req (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments/Special Pay	\$0	\$0	\$0	\$0	\$947,618	\$947,618
112	Overtime	0	0	0	0	0	0
113	Benefits	0	0	0	0	451,371	451,371
	TOTAL PERSONNEL SERVICES	\$0	\$0	\$0	\$0	\$1,398,989	\$1,398,989
OPERATIONS							
220	TRAVEL- Off-Island/Local Mileage Reimburs.	\$0	\$0	\$0	\$0	\$128,050	\$128,050
230	CONTRACTUAL SERVICES:	0	0	0	0	82,500	82,500
233	OFFICE SPACE RENTAL:	0	0	0	0	0	0
240	SUPPLIES & MATERIALS:	0	0	0	0	75,191	75,191
260	EQUIPMENT:	0	0	0	0	83,797	83,797
270	WORKERS COMPENSATION	0	0	0	0		0
271	DRUG TESTING	0	0	0	0		0
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	0	0
290	MISCELLANEOUS:	0	0	0	0	0	0
	TOTAL OPERATIONS	\$0	\$0	\$0	\$0	\$369,538	\$369,538
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	\$0	\$0
362	Water/ Sewer	0	0	0	0	0	0
363	Telephone/ Toll	0	0	0	0	0	0
	TOTAL UTILITIES	\$0	\$0	\$0	\$0	\$0	\$0
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	\$395,000	\$395,000
	TOTAL APPROPRIATIONS	\$0	\$0	\$0	\$0	\$2,163,527	\$2,163,527
I/ Specify Fund Source							
FULL TIME EQUIVALENCIES (FTEs)							
	UNCLASSIFIED	0.00	0.00	0.00	0.00	0.00	0.00
	CLASSIFIED	0.00	0.00	0.00	0.00	35.00	35.00
	TOTAL FTEs	0.00	0.00	0.00	0.00	35.00	35.00

FISCAL YEAR 2011-MILITARY BUILDUP
PROPOSED

Schedule B- Contractual

Item	Quantity	Unit	Total	Funded in FY 2010	
		Price	Price	Yes	No
Advertisement			\$ 2,000.00		
Airtime Charges			\$ 5,000.00		
Computer Programming / Maintenance			\$ 20,000.00		
Computer Repair / Services			\$ 3,000.00		
Fax Machines Repair / Service			\$ 5,000.00		
I-Connect Radio Lease / Repair / Service			\$ 10,500.00		
Maintenance of Air Conditioning Units			\$ 1,000.00		
Maintenance of Vehicles			\$ 10,000.00		
Map/Documents Reproduction Services			\$ 3,000.00		
Membership Fees			\$ 2,000.00		
Office Equipment Maintenance / Repair			\$ 12,000.00		
Postage Services			\$ 500.00		
Printer Repair / Services			\$ 1,000.00		
Printing Services			\$ 7,500.00		
Total Contractual			\$ 82,500.00		

Schedule C - Supplies & Materials

Item	Quantity	Unit	Total	Funded in FY 2010	
		Price	Price	Yes	No
Equipment Parts			\$ 10,000.00		
Fuel and Lubricant			\$ 8,000.00		
Office Materials and Supplies			\$ 20,031.00		
Operational Supplies			\$ 16,000.00		
Refillable 5 Gallon Bottle Water			\$ 5,160.00		
Safety Gears and Devices			\$ 7,000.00		
Safety Shoes			\$ 2,000.00		
Tires			\$ 2,000.00		
Vehicle and Equipment Parts			\$ 5,000.00		
Total Supplies & Materials			\$ 75,191.00		

Schedule D - Equipment

Item	Quantity	Unit	Total	Funded in FY 2010	
		Price	Price	Yes	No
Building Code Books			\$ 20,000.00		
Color Ink Jet Printer			\$ 10,000.00		
Color Ink Laser Jet Printer			\$ 3,600.00		
Computers			\$ 39,197.00		
Filing Cabinets			\$ 3,000.00		
Lap Top Computer			\$ 4,000.00		
LaserJet Printer (Networking)			\$ 4,000.00		
Total Equipment			\$ 83,797.00		

Schedule E - Miscellaneous

Item	Quantity	Unit	Total	Funded in FY 2010	
		Price	Price	Yes	No
			\$ -		
			\$ -		
			\$ -		
Total Miscellaneous			\$ -		

Schedule F - Capital Outlay

Item	Quantity	Unit	Total	Funded in FY 2010	
		Price	Price	Yes	No
4DR Sedan			\$ 18,000.00		
Equipment Parts over \$5,000			\$ 5,000.00		
Office Equipment Parts over \$5,000			\$ 15,000.00		
Pickup Truck			\$ 108,000.00		
Purchase of Office Equipment over \$5,000			\$ 10,000.00		
Purchase of Vehicles			\$ 125,000.00		
SUV Vehicle			\$ 104,000.00		
Vehicle Parts over \$5,000			\$ 10,000.00		
Total Capital Outlay			\$ 395,000.00		

GRAND TOTAL CAPITAL OUTLAY \$ 636,488

GOVERNMENT OF GUAM
FISCAL YEAR 2011-MILITARY BUILDUP
(PROPOSED)

[BBMR TA-1]

Schedule A - Off-Island Travel

Department/Agency: Public Works
Division: Engineering - Vertical (Capital Improvement Projects)

Program: Building Permits & Inspection Section				
Purpose / Justification for Travel				
Off-island travel is necessary to acquire knowledge in the latest technology in construction management and 2006 Edition of the International Building Code in all areas of engineering discipline.				
Travel Date: <u>To be announced</u>		No. of Travelers: <u>4</u>		
Position Title of Traveler(s)	Air Fare	Per diem 2/	Registration	Total Cost
Building Permit & Inspection Administrator	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
Chief Building Inspector	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
Building Inspector II	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
Construction Inspector II	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
SUB-TOTAL				\$ 19,700.00

Program: Construction Quality Control Section				
Purpose / Justification for Travel				
Off-island travel is necessary to acquire knowledge in the latest technology in construction management and 2006 Edition of the International Building Code in all areas of engineering discipline.				
Travel Date: <u>To be announced</u>		No. of Travelers: <u>5</u>		
Position Title of Traveler(s)	Air Fare	Per diem 2/	Registration	Total Cost
Engineer Supervisor	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
Engineer III (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
Engineer II (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
Construction Inspector II (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
SUB-TOTAL				\$ 34,475.00

Program: Contract Administration/Technical				
Purpose / Justification for Travel				
Off-island travel is necessary to acquire knowledge in the latest technology in construction management and 2006 Edition of the International Building Code in all areas of engineering discipline.				
Travel Date: <u>To be announced</u>		No. of Travelers: <u>5</u>		
Position Title of Traveler(s)	Air Fare	Per diem 2/	Registration	Total Cost
Engineer Supervisor	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
Engineer III (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
Engineer II (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
SUB-TOTAL				\$ 24,625.00

Program: Design & Analysis				
Purpose / Justification for Travel				
Off-island travel is necessary to acquire knowledge in the latest technology in construction management and 2006 Edition of the International Building Code in all areas of engineering discipline.				
Travel Date: <u>To be announced</u>		No. of Travelers: <u>5</u>		
Position Title of Traveler(s)	Air Fare	Per diem 2/	Registration	Total Cost
Engineer Supervisor	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
Engineer III (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
Engineer II (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
SUB-TOTAL				\$ 24,625.00

Program: Project Coordination & Quality Control Section				
Purpose / Justification for Travel				
Off-island travel is necessary to acquire knowledge in the latest technology in construction management and 2006 Edition of the International Building Code in all areas of engineering discipline.				
Travel Date: <u>To be announced</u>		No. of Travelers: <u>5</u>		
Position Title of Traveler(s)	Air Fare	Per diem 2/	Registration	Total Cost
Engineer Supervisor	\$ 3,000.00	\$ 925.00	\$ 1,000.00	\$ 4,925.00
Engineer III (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
Engineer II (2)	\$ 6,000.00	\$ 1,850.00	\$ 2,000.00	\$ 9,850.00
SUB-TOTAL				\$ 24,625.00

GRAND TOTAL				\$ 128,050.00
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1/ Provide justification for multiple travelers attending the same conference / training / etc.
2/ Rates must be consistent with Title 5 GCA, Div.2, Ch.23, §23104 and federal Joint Travel Regulations

Government of Guam
 Fiscal Year 2011 - BILLYAN BILLYAN
 AGENCY STAFFING PATTERNS
 (PROPOSED)

(BIBARR-1)

FUNCTIONAL AREA: Infrastructure, Utilities, and Transportation
 ORGANIZATION/AGENCY: Public Works
 PROGRAM: Engineering - Vertical (CP's Office of Chief Engineer)
 FUND: Military Build-up

Plan by Department													Plan by Department									
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)				
Position No.	Position Title	Name of incumbent	Grade	Salary	Overtime	Travel	Auto	Incumbent	(C)-(D)	Retirement (P * 27.00%)	Retiree (SD)	Social Security (6.20% * J)	Medicare (1.45% * H)	Life	Medical (Premium)	Dental (Premium)	Total Benefits (K thru Q)	(J+R)				
1	COE Administrative Officer	VACANT	LS	26,100	0	0	0	0	26,100	7,082	433	0	395	374	4,078	386	13,718	14,113				
1	BP Building Inspector II	VACANT	LS	22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
2	BP Building Inspector II	VACANT	LS	22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
3	BP Building Inspector II	VACANT	LS	22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
4	BP Building Inspector II	VACANT	LS	22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
	BP Building Inspector II	SUB-TOTAL		91,768	0	0	0	0	91,768	25,283	1,732	0	1,581	1,506	16,804	1,544	46,806	48,574				
1	COE Construction Inspector II	VACANT	LS	22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
2	COE Construction Inspector II	VACANT	LS	22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
	COE Construction Inspector II	SUB-TOTAL		45,884	0	0	0	0	45,884	13,000	866	0	786	748	8,156	772	20,529	21,395				
1	BP Construction Inspector III	VACANT	LS	25,530	0	0	0	0	25,530	7,282	433	0	395	374	4,078	386	13,718	14,113				
2	BP Construction Inspector III	VACANT	LS	25,530	0	0	0	0	25,530	7,282	433	0	395	374	4,078	386	13,718	14,113				
3	COE Construction Inspector III	VACANT	LS	25,530	0	0	0	0	25,530	7,282	433	0	395	374	4,078	386	13,718	14,113				
4	COE Construction Inspector III	VACANT	LS	25,530	0	0	0	0	25,530	7,282	433	0	395	374	4,078	386	13,718	14,113				
	COE Construction Inspector III	SUB-TOTAL		102,090	0	0	0	0	102,090	29,330	1,732	0	1,581	1,506	16,804	1,544	50,844	52,584				
1	BP Customer Service Representative	VACANT	HS	19,974	0	0	0	0	19,974	5,483	433	0	390	374	4,078	386	10,843	11,233				
2	BP Customer Service Representative	VACANT	HS	19,974	0	0	0	0	19,974	5,483	433	0	390	374	4,078	386	10,843	11,233				
	BP Customer Service Representative	SUB-TOTAL		39,948	0	0	0	0	39,948	10,966	866	0	780	748	8,156	772	21,687	22,466				
1	BP Customer Service Representative	VACANT	HS	22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
	BP Customer Service Representative	SUB-TOTAL		22,942	0	0	0	0	22,942	6,500	433	0	393	374	4,078	386	11,703	12,136				
1	CAT Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
2	CAT Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
3	COE Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
4	COE Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
5	CBA Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
6	CBA Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
7	POC Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
8	IVOC Engineer II	VACANT	MS	28,878	0	0	0	0	28,878	7,875	433	0	416	374	4,078	386	13,520	13,936				
	Engineer II	SUB-TOTAL		229,656	0	0	0	0	229,656	66,500	1,732	0	1,702	1,506	16,668	1,544	102,878	104,622				
1	CAT Engineer III	VACANT	MS	31,051	0	0	0	0	31,051	8,930	483	0	450	374	4,078	386	15,221	15,671				

FEB-18-2010

CP: 38 of 43

JOB REPORT/UTILITY REPORT
 CP: 58

Government of Guam
Fiscal Year 2011 - MILITARY BUDGET
AGENCY STAFFING PATTERNS
(TRANSPOSED)

IBMR SF-11

FUNCTIONAL AREA: Infrastructure, Utilities, and Transportation
DEPARTMENT/AGENCY: Public Works
PROGRAM: Engineering - Vertical (CPL's Office of Chief Engineer)
FUND: Military Budget

Input by Department													Input by Department												
No.	Position Number	Position Title	Name of incumbent	Grade	Salary	Overtime	Special*	Date	Amt	Benefits										TOTAL					
										(F+G+I)	Retirement (J * 27.45%)	Retiree (K) (24.66% * 2010)	Social Security (L 2.26% * E)	Medicare (M) (1.45% * E)	Life (N)	Medical (O) (Premium)	Dental (P) (Premium)	Total Benefits (Q thru S)	(J + R)						
3	CAT	Engineer III	VACANT	HS-1	31,064	0	0	0	0	31,064	8,147	333	0	450	174	4,075	366	24,850	25,114						
4	COE	Engineer III	VACANT	HS-1	31,064	0	0	0	0	31,064	8,147	433	0	450	174	4,075	366	24,850	25,114						
5	COE	Engineer III	VACANT	HS-1	31,064	0	0	0	0	31,064	8,147	433	0	450	174	4,075	366	24,850	25,114						
6	COE	Engineer III	VACANT	HS-1	31,064	0	0	0	0	31,064	8,147	433	0	450	174	4,075	366	24,850	25,114						
7	FEOD	Engineer III	VACANT	HS-1	31,064	0	0	0	0	31,064	8,147	433	0	450	174	4,075	366	24,850	25,114						
8	FEOD	Engineer III	VACANT	HS-1	31,064	0	0	0	0	31,064	8,147	433	0	450	174	4,075	366	24,850	25,114						
9	FEOD	Engineer III	SUB-TOTAL		248,512	0	0	0	0	248,512	66,243	3,464	0	3,403	1,392	32,808	3,088	112,497	350,603						
1	COE	Engineer Supervisor	VACANT	P-3	35,850	0	0	0	0	35,850	10,114	433	0	534	174	4,075	366	35,724	33,073						
2	COE	Engineer Supervisor	SUB-TOTAL		35,850	0	0	0	0	35,850	10,114	433	0	534	174	4,075	366	35,724	33,073						
1	PLN	Planner III	VACANT	MS-3	28,678	0	0	0	0	28,678	7,475	433	0	416	174	4,075	366	23,465	22,018						
2	PLN	Planner III	SUB-TOTAL		28,678	0	0	0	0	28,678	7,475	433	0	416	174	4,075	366	23,465	22,018						
1	PLN	Planner IV	VACANT	HS-1	31,064	0	0	0	0	31,064	8,147	433	0	450	174	4,075	366	24,850	25,114						
2	PLN	Planner IV	SUB-TOTAL		31,064	0	0	0	0	31,064	8,147	433	0	450	174	4,075	366	24,850	25,114						
1	CAT	Vertical Procurement Secretary II	VACANT	HS-1	15,974	0	0	0	0	15,974	3,488	450	0	260	174	4,075	366	15,443	16,817						
2	PLN	Vertical Procurement Secretary II	VACANT	HS-1	19,974	0	0	0	0	19,974	5,294	475	0	260	174	4,075	366	19,843	20,617						
3	PLN	Vertical Procurement Secretary II	SUB-TOTAL		35,948	0	0	0	0	35,948	8,782	925	0	520	348	8,150	732	35,287	37,434						
10	TOTAL PERSONNEL REQUEST			GRAND TOTAL	517,818	0	0	0	0	517,818	148,216	35,155	0	437,98	1,770	142,660	13,158	451,372	1,358,899						

* Night Differential / Hazardous / Worker's Compensation / etc.
1/2 FY 2010 amount; Gov/Guan contribution for Life Insurance is \$24 per annum; Subject to change in FY 2011

Government of Guam
DEPARTMENT OF PUBLIC WORKS
Fiscal Year 2011 Military Buildup
Division Budget Digest
[PROPOSED]

[BBMR DD-1]

Function: Infrastructure, Utilities and Transportation
Department/Agency: Department of Public Works
Program: DIVISION OF HIGHWAYS
Fund:

AS400 Account Code	Appropriation Classification	A	B	Governor's Request			
		FY 2010 Expenditures & Encumbrances	FY 2010 Authorized Level	FY 2011 General Fund	FY 2011 Federal Match Fund(s)	FY 2011 Other Fund 1/	FY 2011 Total Req. (C+D+E)
PERSONNEL SERVICES							
111	Regular Salaries/Increments	\$0	\$0	\$0	\$0	\$513,770	\$513,770
112	Overtime/Special Pay	0	0	0	0	0	0
113	Benefits	0	0	0	0	274,522	274,522
TOTAL PERSONNEL SERVICES		\$0	\$0	\$0	\$0	\$788,292	\$788,292
OPERATIONS							
220	TRAVEL- Out of Island Local Mileage Reimburse.	\$0	\$0	\$0	\$0	\$0	\$0
230	CONTRACTUAL SERVICES:	0	0	0	0	280,272	280,272
233	OFFICE SPACE RENTAL:	0	0	0	0	0	0
240	SUPPLIES & MATERIALS:	0	0	0	0	70,000	70,000
250	EQUIPMENT:	0	0	0	0	43,984	43,984
270	WORKERS COMPENSATION:	0	0	0	0	0	0
271	DRUG TESTING:	0	0	0	0	930	930
280	SUB-RECIPIENT/SUBGRANT:	0	0	0	0	0	0
290	MISCELLANEOUS:	0	0	0	0	0	0
TOTAL OPERATIONS		\$0	\$0	\$0	\$0	\$395,186	\$395,186
UTILITIES							
361	Power	\$0	\$0	\$0	\$0	\$0	\$0
362	Water/ Sewer	0	0	0	0	0	0
363	Telephone/ Toll	0	0	0	0	0	0
TOTAL UTILITIES		\$0	\$0	\$0	\$0	\$0	\$0
450	CAPITAL OUTLAY	\$0	\$0	\$0	\$0	\$3,300,000	\$3,300,000
TOTAL APPROPRIATIONS		\$0	\$0	\$0	\$0	\$4,483,477	\$4,483,477
1/ Specify Fund Source							
FULL TIME EQUIVALENCIES (FTEs)							
UNCLASSIFIED		0	0	0	0	0	0
CLASSIFIED		0	0	0	0	26	26
TOTAL FTEs		0	0	0	0	26	26

**DIVISION OF HIGHWAYS
FISCAL YEAR 2011 MILITARY BUILDUP
[PROPOSED]**

BBMR96A

Schedule B- Contractual

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
I-connect Radio Air-Time Services	20	42.80	10,272		
I-connect Radio Maintenance	20		10,000		
Office Equipment Maintenance			10,000		
Vehicle Maintenance & Repair			50,000		
Equipment Rentals			200,000		
Total Contractual			280,272		

Schedule C - Supplies & Materials

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
General Office Materials and Supplies			10,000		
Safety Supplies/Materials (hard hats, vests, shoes, uniforms [Pants/Shirts])			50,000		
			10,000		
Total Supplies & Materials			70,000		

Schedule D - Equipment

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Desktop Computers	12	1999	\$ 23,988		
LaserJet Printer (Networking)	4	4999	19,996		
Total Equipment			\$ 43,984		

Schedule E - Miscellaneous

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
Drug Testing	26	35.75	\$ 930		
Total Miscellaneous			\$ 930		

Schedule F - Capital Outlay

Item	Quantity	Unit Price	Total Price	Funded in FY 2010?	
				Yes	No
D8 Dozer w/Ripper	2	850,000	1,700,000		
Dump Trucks, 14 CY	8	200,000	1,600,000		
Total Capital Outlay			\$ 3,300,000		

GOVERNMENT OF GUAM
FISCAL YEAR 2011 - MILITARY BUILDUP
AGENCY STAFFING PATTERN
(PROPOSED)

FUNCTIONAL AREA: Infrastructure, Utilities and Transportation
AGENCY: Department of Public Works
PROGRAM: Division of Highways
FUND: Military Building
RATIO: 10%

No.	Position Number	Position Title	Name of Branch/Post	Grade & Step	Salary	Overtime	Sprint	Incentive	Salary Breakdown										Total Benefits	TOTAL
									(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)		
									REGULAR											
									(J)(F)(G)(H)	(K)(I)(J)	(L)(K)(L)	(M)(K)(M)	(N)(K)(N)	(O)(K)(O)	(P)(K)(P)	(Q)(K)(Q)	(R)(K)(R)	(S)(K)(S)		
									Base	Allowance	Cost of Living	Medical	Life	Medical	Dental	Total	Benefits	TOTAL		
1		Administrative Assistant	VACANT	J-01	22,942	0	0	0	22,942	6,641	433	0	322	174	4,076	386	11,642	34,584		
2		Administrative Assistant	VACANT	J-01	22,942	0	0	0	22,942	6,641	433	0	322	174	4,076	386	11,642	34,584		
2		Administrative Assistant	Sub-Total		45,884	0	0	0	45,884	13,283	866	0	644	348	8,152	772	23,284	69,168		
1		Administrative Aide	VACANT	F-01	17,635	0	0	0	17,635	4,641	433	0	259	174	4,076	386	9,969	27,603		
2		Administrative Aide	VACANT	F-01	17,635	0	0	0	17,635	4,641	433	0	259	174	4,076	386	9,969	27,603		
2		Administrative Aide	Sub-Total		35,270	0	0	0	35,270	9,282	866	0	518	348	8,152	772	19,954	55,206		
1		Engineer I	VACANT	L-01	26,520	0	0	0	26,520	6,983	433	0	383	174	4,076	386	12,436	38,956		
2		Engineer I	VACANT	L-01	26,520	0	0	0	26,520	6,983	433	0	383	174	4,076	386	12,436	38,956		
2		Engineer I	Sub-Total		53,040	0	0	0	53,040	13,966	866	0	766	348	8,152	772	24,872	77,912		
1		Lead Agent I	VACANT	G-01	18,723	0	0	0	18,723	4,976	433	0	271	174	4,076	386	10,279	28,999		
2		Lead Agent I	VACANT	G-01	18,723	0	0	0	18,723	4,976	433	0	271	174	4,076	386	10,279	28,999		
3		Lead Agent I	VACANT	G-01	18,723	0	0	0	18,723	4,976	433	0	271	174	4,076	386	10,279	28,999		
4		Lead Agent I	VACANT	G-01	18,723	0	0	0	18,723	4,976	433	0	271	174	4,076	386	10,279	28,999		
4		Lead Agent I	Sub-Total		74,892	0	0	0	74,892	19,719	1,732	0	1,084	696	16,376	1,536	41,881	115,973		
1		Construction Inspector I	VACANT	I-01	21,389	0	0	0	21,389	5,632	433	0	310	174	4,076	386	11,011	32,400		
2		Construction Inspector I	VACANT	I-01	21,389	0	0	0	21,389	5,632	433	0	310	174	4,076	386	11,011	32,400		
3		Construction Inspector I	VACANT	I-01	21,389	0	0	0	21,389	5,632	433	0	310	174	4,076	386	11,011	32,400		
4		Construction Inspector I	VACANT	I-01	21,389	0	0	0	21,389	5,632	433	0	310	174	4,076	386	11,011	32,400		
4		Construction Inspector I	VACANT	I-01	21,389	0	0	0	21,389	5,632	433	0	310	174	4,076	386	11,011	32,400		
4		Construction Inspector I	Sub-Total		85,556	0	0	0	85,556	22,528	1,732	0	1,240	696	16,376	1,536	44,666	134,400		

GOVERNMENT OF GUAM
FISCAL YEAR 2011 - MILITARY BUILDUP
AGENCY STAFFING PATTERN
(PROPOSED)

FUNCTIONAL AREA: Infrastructure, Utilities and Transportation
AGENCY: Department of Public Works
PROGRAM: Division of Highways
FUNDS: Military Buildup
RAYID: 100%

No.	(A) Position Number	(B) Position Title	(C) Name of incumbent	(D) Grade & Step	(E) Salary	(F) Overload	(G) Spouse*	(H) Incentive		(I) Total	(J) Benefits										(R) Total Deaths Leave V	(S) TOTAL F&R
								(J) Base	(K) Hazardous (213.13%)		(L) Kerlin (20) (214.64%)	(M) Specialty (2.26%)	(N) Medical (1.43%)	(O) Life (Provision)	(P) Medical (Provision)	(Q) Dental (Provision)	(R) Total Deaths Leave V	(S) TOTAL F&R				
																			(J) Deduction	(K) Assess		
1	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
2	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
3	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
4	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
5	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
6	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
7	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
8	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
9	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
10	Equipment Operator I	VACANT	F-01	17,635	0	0	0	17,635	4,643	433	0	256	174	4,070	360	9,968	27,603					
10	Equipment Operator I	Sub-Total			176,350	0	0		176,350	46,433						99,680	276,030					
20	TOTAL PERSONNEL REQUEST	GRAND TOTAL			813,778	0	0		813,778	135,274						374,822	788,282					

*Spouse Differential / Hazardous / Worker's Compensation



Government of Guam

Department of Public Works

Comments from Divisions

by DEIS Volume



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

VOLUME 1, VOLUME 9



The Honorable
Felix P. Camacho
Governor
The Honorable
Michael W. Cruz, M.D.
Deputy Governor

DEIS Report #1

DEIS REPORT - DPW
ADMIN - VOL 1 & 9
JAN-5-2010



Lawrence P. Perez
Director
Andrew S. Leon Gorfier
Deputy Director

Memorandum

January 5, 2010

**To: Director
Deputy Director
All Division Managers**

From: Controller
[Signature] 1/5/10

Subject: Draft Environmental Impact Statements (DEIS)

Buenas yan Hafa Adai!

Transmitted herewith for your review and action are DPW's response to the DEIS related to the Executive Summary, Readers' Guide, Volume 1 and 9. The attached responses were received from the following Division:

- Administration
- Building Construction & Facilities Maintenance
- Transportation Maintenance
- Office of Highway Safety

Should there be any questions regarding this memorandum, please feel free to contact me at 646-3154 or the Fiscal office at 646- 3231.

Un Dangkulo na Si Yu'os Maase.

Attachments

DPW Deadlines DEIS

Source: Director's email

SUBJECT	DEADLINE	TASKS
Impacts Comments	December 31, 2009	Summary, Vol. 1 & Vol. 9 & Reader's Guide
Impacts Comments	9-Jan-10	Vol. 2, Vol. 3
Impacts Comments	15-Jan-10	Vol. 4, Vol. 5
Impacts Comments	22-Jan-10	Vol. 6, Vol. 7
Impacts Comments	29-Jan-10	Vol. 8
Impacts Comments	5-Feb-10	Submit all Impacts comments
Impacts Comments	12-Feb-10	DPW will have electronically - submitted of all comment to the DEIS to the JGPO;

PUBLIC HEARINGS

January 7th, 5-7 PM Open House & / 7-9PM Formal Hearing @ Southern High
January 9th, 1-3 PM Open House & / 3-5 PM Formal Hearing @ UOG Fieldhouse
January 11th, 5-7 PM Open House & / 7-9 PM Formal Hearing @ Yigo Gymnasium
January 12th, 5-7 PM Open House & / 7-9 PM Formal Hearing @ Dededo, Okkodo High

Legislature Hearing

Senator Ada 1/28/10 Briefing & Presentation

Briefing to Gov 1/13/10 Briefing

Dec 21, 2009 EMAIL to all Managers:

Division Managers, et.al.,

Now that you've had ample time to briefly peruse through the subject DEIS (www.guambuildupeis.us), the following shall be your respective next steps ...

You are to provide reviews-impacts-comments on the DEIS with the following priority & perspective ...

1st & Absolute - On how it impacts your DPW Divisional fiduciary,

2nd & Preferred - On how it impacts the GovGuam, and

3rd & Optional - On how it impacts you as a Citizen;

✓ By NLT the COB of 12/31/09, you are to submit your reviews-impacts-comments on the following ...

http://www.guambuildupeis.us/documents_store/summary/DEIS Nov09.pdf,

http://www.guambuildupeis.us/documents_store/summary/DEIS Nov09.pdf,

http://www.guambuildupeis.us/documents_store Nov09.pdf,

http://www.guambuildupeis.us/documents_store Nov09.pdf

For further exposure to & a better understanding of the DEIS, you are to attend any one of the following Public Hearings ...

✓ January 7th, 5-7pm Open House &/ 7-9pm Formal Hearing @ Southern High;

January 9th, 1-3pm Open House &/ 3-5pm Formal Hearing @ UOG Fieldhouse;

January 11th, 5-7pm Open House &/ 7-9pm Formal Hearing @ Yigo Gymnasium;

January 12th, 5-7pm Open House &/ 7-9pm Formal Hearing @ Okkodo High;

By NLT the COB of 01/08/10, you are to submit your reviews-impacts-comments on the following ...

http://www.guambuildupeis.us/documents_store/volume_2/DEIS_Vol_2-USMC_Guam_Nov09.pdf,

http://www.guambuildupeis.us/documents_store/volume_3/DEIS_Vol_3-USMC_Tinian_Nov09.pdf;

By NLT the COB of 01/15/10, you are to submit your reviews-impacts-comments on the following ...

http://www.guambuildupeis.us/documents_store/volume_4/DEIS_Vol_4-Aircraft_Carrier_Nov09.pdf,

http://www.guambuildupeis.us/documents_store/volume_5/DEIS_Vol_5-AMDTF_Nov09.pdf;

By NLT the COB of 01/22/10, you are to submit your reviews-impacts-comments on the following ...

http://www.guambuildupeis.us/documents_store/volume_6/DEIS_Vol_6-Related_Nov09.pdf,

http://www.guambuildupeis.us/documents_store/volume_7/DEIS_Vol_7-Mitandim_Nov09.pdf;

By NLT the COB of 01/29/10, you are to submit your reviews-impacts-comments on the following ...

http://www.guambuildupeis.us/documents_store/volume_8/DEIS_Vol_8-Addl_NEPA_Nov09.pdf,

the Appendices A through L of Volume No. 9 (<http://www.guambuildupeis.us/documents>);

By NLT the COB of 02/05/10, you are to submit ALL of your reviews-impacts-comments on ALL of the above-mentioned to the DPW's primary, Point-of-Contact & Controller, Mrs. Arleen Pierce;

By NLT the COB of 02/12/10, the DPW will have electronically-submitted any & all of your comments of the DEIS to the JGPO; and

Please know that not all Volumes of the DEIS will generate impacts-comments from your reading, however it is imperative that you respectively state it as such (i.e., "No Adverse Impact").

I trust that you understand the magnitude of this Guam Buildup, that you recognize the importance of commenting on this DEIS document, and that you will take this tasking very seriously as representatives of our Island, our Government & our People ... Anything short would be irresponsible, negligent and insubordinate.

Thank you,

Lawrence 'Larry' P. Perez

P.O. Box 11913, Tamuning, Guam 96931

671.649.3791 (Work)

671.482.7373 (Cell)

DPW- Division of Administration DEIS – Overall Impact Statement

J-021-006

Impact on the mandates of DPW due to the military buildup to begin from Year 2010 to 2014 (move of 8,000 marines, dependents and logistic support) will be costs of operations, planning, implementation, coordination maintenance and continuity of all DPW's shared responsibilities on the construction and planning activities relative to the military buildup. There will be a significant impact within the department's mission due to the public's demands as the population increases due to the military move. Moreover, our operating costs and funding levels will also increase as it is highly correlated to the increase in productivity levels.

Below are the highlights in a nutshell:

- **Island –wide Infrastructure:**

- Highway:

- Roadway/Highways/Village Streets (primary/secondary/arterial roads)

- Infrastructure:

- Bridges/Ponding Basins/Land Acquisition/Condemnations/Sidewalks/Bus Shelters

- Capital Improvement Projects:

- Professional/Technical/Engineer/Architects/Construction/Inspection support for Government infrastructure projects

- **Public safety:**

- Roads/Highways Safety (signs/markings/signal/traffic signs/street lights/guardrails/roadways clearing and maintenance)

- Construction/Building Safety (building permits/inspection/building safety code/flooding hazard mitigation assistance)

- **Public Health:**

- Solid Waste Management (residential/commercial trash/white goods/tires/metallic/others/emergency debris cleanup) - Environmental concerns

J-021-006

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

- **Transportation:**

Public transportation (island-wide bussing of pupils/students/other emergency community and mass transit for public services)

- **Government – Wide Support:**

Public Support (building/infrastructures/recreation facilities/emergency community assistance and maintenance)

Resources, administration, maintenance support services, repairs, construction services and custodial work for government buildings and facilities

- **DPW Operating Costs and Revenue Enhancement:**

Personnel/Operating Costs (increase in number of personnel, increase in Equipment & Capital-Outlay, and increase in Contractual Services for expert Consultants and/or outsourcing)

- **Budgetary Funding Sources:**

Budget increase to meet direct project cost. DPW funding sources consist of the following fund type:

- General Funds-from Legislature's General Fund appropriation
- Guam Highway Funds-from liquid fuel taxes
- DPW Building & Design Fund-from building fees
- Abandoned Vehicle Streetlights Fund-Motor Vehicle license fees
- Solid Waste Fund-Tipping Fees
- Federal Grants In Aide FGIA (FHWA, OHS, USDOJ) – Federal Grants Award
- Workers Compensation – from General Fund appropriation

DPW
DEIS – Overall Review Notes
12/31/09

J-021-007

1. How much is FHWA & Us DOD going to fund our Projects?

A.) How much will our construction cost?

B.) Will the cash be received instantly or will it be in the form of drawdown? If drawdowns are used, will it be in electronic EFT form so that cash will be transferred quickly to Govguam?

C.) Do we have the necessary grant awards in place?

2. Does the 2030 Highway master plan include the Military build up, as part of its original (population growth) assumptions?

3. Need technical advice & review by specialist.

- GBB for Solid Waste
- Parsons for Roadway Projects
- NEPA for all Environmental concerns
- Legal assistance
- Other professionals

J-021-007

Thank you for your comment.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to assist the Government of Guam in seeking funds for projects that are not eligible for the DAR program.

The drawdown of funds for DAR projects will be the same as a regular federal-aid highway project.

The projects identified in the FEIS were included in the 2030 GTP.

J-021-008

4. Breakdown of the 58 Roadway projects

- Costs per Projects
- Project name
- Scope
- Funding source
- Maps

J-021-009

5. Volume Nine Appendices: does not include a cost Analysis

J-021-008

Thank you for your comment. The DOD and FHWA will continue to work with the DPW as the project details are developed.

J-021-009

Thank you for your comment. A cost analysis is not part of the EIS.

DEIS - DPW Highlights & Issues

Volume # / Section	Page	Description	Issues/Review notes
Volume 1 Land,Roadways, and Submerged Land use	ES-34	<p>Construction (Guam only) SI-M</p> <p>Roadways construction on D14Guam would have a significant adverse impact on Roadways use during construction. Mitigation would include a Traffic MAnagement Plan implemented by the Federal Highway Administration that would identify measures to reduce impacts during the construction period.</p> <p>Operation SI-M (Guam) Federal acquisition of land for main cantonment, firing ranges, and roadway improvement on Guam. Mitigation would include long-term leases of the property instead of purchase.</p> <p>SI (Tinian) Agricultural/grazing permits within the Tinian Lease Back Area would be terminated, causing significant impact on consistency with the Farmland Protection Policy Act of 1981. The permits are subject to termination at military discretion.</p> <p>Individual projects have been identified from recent transportation and traffic studies on the island of Guam. These consist of 43 Guam Road Network (GRN) (off base) projects and 15 intersection improvement projects at military access points (MAP's) (i.e., gates). The 43 GRN (off-base) projects are composed of six types of roadway improvements:</p> <ul style="list-style-type: none"> - Intersection improvement Projects - Bridge replacement projects (involving five Bridges) - Pavement strengthening (combined with roadways widening at some locations) - Roadway relocation (Route 15) 	1
Volume 1 3.6.5 Roadway Projects	(3-26)		2 3 4

Volume # / Section	Page	Description	Issues & Review notes
<p>Volum 1 (3.6.4) Solid Waste</p>	<p>(3.6.4)</p>	<ul style="list-style-type: none"> - Roadway Widening - Construction of new road (Finegayan Connection) <p>The 58 projects cover four geographic regions on Guam: North, Central, Apra Harbor, and South. Details as to the project specific characteristics of all the projects are contained in Volume 6. Not all 58 projects would be implemented since only a specific combination of roadway projects support each cantonment alternative.</p> <ul style="list-style-type: none"> - Main Cantonment Alternative 1: There are 49 GRN projects that would be required for Alternative 1. These project include 29 pavement strengthening, 8 road way widening, 14 intersection improvement (include 8 MAP's), 5 bridges replacement, 1 road relocation and 1 new road. - Main Cantonment Alternative 2 (Preferred): A different combination of 49 GRN projects would be required for Alternative 2. These projects include 29 pavement strengthening, 8 roadway widening, 14 intersection improvement (include 8 MAP's), 5 bridge replacements, 1 road relocation, and 1 new road. - Main Cantonment Alternative 3: There are 51 GRN projects would be required for Alternative 3. These projects include 29 pavement strengthening, 10 roadway widening, 17 intersection improvements (include 11 MAP's), 5 bridge replacements and 1 road relocation. - Main Cantonment Alternative 8: A different combination of 51 GRN projects would be required for Alternative 8. These projects include 28 pavement strengthening, 8 roadway widening, 15 intersection improvement (include 9 MAP's), 5 bridge replacements, 1 road relocation and 1 new road. <p>The preferred Alternative for solid waste would be continued use of Navy Landfill at Apra Harbor until Landfill is opened, which is scheduled for July 2011.</p>	<p>3</p>

DEIS REPORT - DPW
ADMIN - VOL 1 8 8
JAN-2010

Admin. Review

DEIS REPORT - DPW
ADMIN - VOL 1 & 9
JAN-5-2010
1/4/10

J-021-010

- What impact is expected with the military build-ups?
- How is it going to benefit the island?
- Are the roads going to minimize and utilize by military only?
- What routes are the military going to use for transportation for there machine and artilleries?
- How do we know if the money given by the US is going to be use for the structure needed?
- Is the governor and senators going to play a role is this build-up?

J-021-011

1. Route 15 after passing Andersen South to Yigo highway site before the Yigo drag strip need to be paved for parking lots and streetlights for safety measures.
2. Route 17 cross island road also a hiking site to Sigua and Tarzan Falls same projects needed as route 15.

J-021-010

Thank you for your comment. The DEIS analyzes a number of disciplinary subjects identifying the potential impacts of the proposed action. In many cases, the impacts are less than significant; however, many of the "benefits" attributable to the proposed action are based on jobs and money (from construction and operational expenditure) that will flow into the economy. That specific information can be found in the Socioeconomic Impact Assessment Study (SIAS) that is Appendix F of Volume 9 in the EIS as well as the socioeconomic chapters of volumes 2 through 7. Jobs analysis was based on the number of dollars estimated to enter the Guam economy as a result of the proposed action. Overall, at the 2014 peak of construction and beginning of operations, the civilian labor force demand with the proposed action is 75% higher than it otherwise would have been without the project. By 2020, the difference declines to 12%. Analysis took into account historical information of people arriving on Guam from other areas (such as the Philippines and Freely Associated States of Micronesia) in search of jobs, to determine the number of new jobs generated by the proposed action that would go to Guam residents. Overall, analysis indicated that at the 2014 construction peak, Guam residents are expected to capture approximately 2,566 jobs and offisland workers would take 15,157 jobs. By 2020, the number of these jobs filled by Guam residents would decrease to 2,211 jobs, and offisland worker jobs would decrease to 3,935 jobs. It should be noted that the jobs that Guam residents would fill are based on the available supply of qualified workers. That is, it is anticipated that the new jobs would capture the amount of qualified workers on Guam for those positions. Economic benefits would also occur through the circulation of construction and operational dollars spent on Guam and the multiplier affect (recirculation of money) in the Guam economy. The economic benefit also consists of revenue to the government of Guam in form of taxes, user fees, and permits and approvals. Another area where benefit is seen is that the local businesses would be able to sell their goods and services during both

**ENVIRONMENTAL IMPACT STATEMENT
GUAM & CNMI MILITARY RELOCATION**

**BUILDING CONSTRUCTION & FACILITY DIVISION (BCFM)
DEPARTMENT OF PUBLIC WORKS (DPW)**

To determine the impact of the influx of military buildup, we must realistically see a clear picture of our existing conditions and needs, then, we can proceed to accurately assess and evaluate the actual impact of increase personnel and activities here in our island. The following assessment reviews are provided:

1) PURPOSE & NEEDS

A. PURPOSE:

BCFM's is committed to provide quality, cost-effective maintenance, repairs, modifications, and upgrades to "non-autonomous agencies" of the Government of Guam, prioritizing the Governor's Office- Adelup Complex, Government House, Civil Defense, Data Processing-Department of Administration, and Department of Public Works. Our primary mission is to ensure existing buildings and its facilities and equipment are in a safe, operable, and hazard-free environment to using agency in meeting their services to the public. We encourage continual functionality, efficiency and sustainability of the government buildings in its daily operation providing responsive maintenance and repairs in maximize longevity and usage with special emphasis to building codes, regulations and safety requirements

B. NEEDS:

- GOVGUAM BUILDING LISTING:** the latest official assessment of our Government of Guam Building Inventory was conducted by Professional Engineers back in 1983. The upgrading of this pertinent document has been deterred by the lack of engineers and specialized skilled personnel. Only last year, we were able to secure an engineer who has finally started on this special project to upgrade the inventory.

This inventory is VITAL in securing the true conditions of the building and facilities to determine the hazardness and the maintenance repair cost needed funding request. This division has been sadly left unfunded legislatively of manpower support from 180 in 1983 down to a mere 18 workers inclusive the leaders and supervisors to present.

the construction and operational periods. Volume 6 of the DEIS describes the existing utilities and infrastructures on Guam as well as the proposed actions that would provide the capacity needed for the additional population. Each utility is covered and for each one, the preferred actions (to achieve adequate capacity) are identified. In some cases, additional capacity with better treatment (i.e., wastewater) is being proposed. Roadways essential for the buildup would be improved, widened, and some bridges replaced by funds provided under the Defense Access Road (DAR) program. The details of the proposed actions are contained in Chapters 2 of Volumes 2 through 6. Volume 6 addresses use and improvements to roadways. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

J-021-011

Thank you for your comment. Safety and operational improvements such as these will be considered in the design of improvements along Route 15. Improvements to Route 17 are outside the scope of the DEIS.

2. **FUNDING:** BCFM is currently operating on an On-Call basis because of limited appropriated funds and shortage of manpower. Each year the vacancies from exited employees were never given legislative funding to replace the personnel. The work demands continue to increase but the labor resources are depleted. Thus, personnel are inequitably tasked beyond their performance standards. The quality of work is provided but the workload demands continue to rise and cannot be met at this rate. The rippling effect of this scenario is that we currently do not provide preventive maintenance and it opens way to unsafe conditions which ultimately are more costly because the conditions worsen from of the delay of the project.

B. PROJECT ALTERNATIVES:

DEFERRED MAINTENANCE: Deferred maintenance is the practice of postponing maintenance activities such as repairs on both real property (i.e. infrastructure) and personal property (i.e. machinery) in order to save costs, meet budget funding levels, or realign available budget monies. The failure to perform needed repairs could lead to asset deterioration and ultimately asset impairment. Generally, a policy of continued deferred maintenance may result in higher costs, asset failure, and in some cases, health and safety implications.

The accounting standard-setter for the U.S. Government (www.FASAB.gov) in its Statement of Federal Financial Accounting Standard 6, defines deferred maintenance in this way, "*Deferred maintenance*" is maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period. For purposes of this standard, maintenance is described as the act of keeping fixed assets in acceptable condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve the asset so that it continues to provide acceptable services and achieves its expected life. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended.

The management of maintenance activities has been a long-neglected field. It has become increasingly evident that maintenance can no longer be ignored; it must be engineered properly. Legislative body and authority are struggling with the ailing money resource and are short sighted as seen for the past decades; they consider maintenance a "low priority" and immediately cut cost as their first solution. What is not fully realized is that the results are showing up in our schools, government buildings, and in drastic increase in hazardous situations... but more importantly, the mentality of waiting for an emergency to occur and declaring a "STATE OF EMERGENCY" to generate the funds immediately is

**MORE COSTLY AS OPPOSED TO FUNDING FOR EFFECTIVE PREVENTIVE
MAINTNENACE!**

- A. *BCFM has a backlog of short and long term capital improvement projects at the cost of @2 Million that were accessed and yet to be addressed. These ailing projects that are deteriorating rapidly costing our government more.*
- B. *ANNUAL EMERGENCY MAINTENANCE REPAIRS FOR DEPARTMENT OF EDUCATION (DOE) BACKLOG! Also known as the DOE School Readiness Program. The Governor appointed a School Recovery Task Force to ensure that all schools were in readiness condition safe and operable for the opening of the school year. BCFM Division is annually tasked to spear-head the department's involvement providing specialized skilled work to address various emergency safety repairs as cited by PHSS Environmental Division. Our assistant yearly to DOE continue to cause backlog in our operations. Again, the issue on the lack of resources are to be ascertained.*

IMPACT SUMMARY

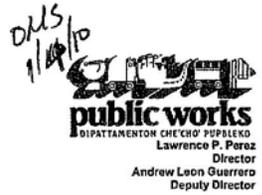
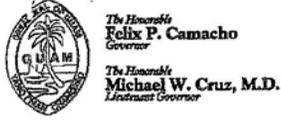
J-021-012

THE MAJOR IMPACT to the proposed military influx IS FUNDING& SAFETY! In preparation to accommodate the demands of the relocation, funding should be provided to bring to PAR the already identified hazardous projects that are still lingering to date. Continue neglect is not an option but to immediate execute SAFETY BEFORE the mass transition of the estimated THOUSANDS of bodies that is expected to come. The influx will rapidly increase the wear and tear of government buildings and facilities that are to provide services to them.

Further details and assessments of the "draft" DEIS will be forthcoming!

J-021-012

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.



J-021-013

Thank you for your comment.

OFFICE OF HIGHWAY SAFETY
REVIEW & COMMENTS
Draft Environmental Impact Statement (DEIS)
First Report

I. Executive Summary - Overall

➤ Impacts

J-021-013

- a. Increase of educational public service announcements, walking billboards to the military families, especially to the families who will be living off-base on Guam's highway safety laws, i.e. seatbelt law, DUI, texting law
- b. Increase of NHTSA funding to cover the need for additional overtime enforcement activities with our Highway Safety Partners – Guam Police Department Highway Patrol and GIAA Airport Police.
- c. Network with military personnel in engaging outreach highway safety activities at the schools and day care centers.
- d. The construction and building of pedestrian and bicycle sidewalks will enforce and justify the increase of funding to promote and educate safety awareness to the community that is indicated on the 2030 Highway Master Plan.

II. Volume I – Overview "No Adverse Impact"

III. Volume 9 "No Adverse Impact"



Arleen Pierce <arleen.pierce@dpw.guam.gov>

JGPO's DEIS ... Reviews, Comments, Public Hearings & Submissions

Julie Manglona <julie.manglona@dpw.guam.gov> Wed, Dec 30, 2009 at 4:44 PM
To: Arleen Pierce <arleen.pierce@dpw.guam.gov>, Lawrence Perez <lawrence.perez@dpw.guam.gov>
Cc: Franklin Taitano <franklin.taitano@dpw.guam.gov>, Julie Manglona <julie.manglona@dpw.guam.gov>

Hi Arlene,

We won't be able to complete our reports concerning the forwarded below. We are awaiting on GDOE's compilation on estimated total number of students for the upcoming military build-up. The Superintendent of GDOE is off-island at this time and she won't be back until Monday, January 04, 2010. If possible, we can submit our reports by Tuesday, January 05, 2010.

Thanks :) AND HAPPY NEW YEAR TO YOU AND YOURS.

JULIE MANGLONA

[Quoted text hidden]

--

Julie N. Manglona
Division of Bus Operations
646-3166
649-4587 (Fax)



Arleen Pierce <arleen.pierce@dpw.guam.gov>

JGPO's DEIS ... Reviews, Comments, Public Hearings & Submissions

Paul Cepeda <paul.cepeda@dpw.guam.gov>
To: Arleen Pierce <arleen.pierce@dpw.guam.gov>

Wed, Dec 30, 2009 at 3:49 PM

Arlene,

I have read part of the DEIS and at this point I have no comments.

Paul

[Quoted text hidden]



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

VOLUME 2, VOLUME 3



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor



Lawrence P. Perez
Director
Andrew S. Leon Gorier
Deputy Director

January 12, 2010

Memorandum

To: Director
Deputy Director
All Division Managers

From: 
Arleen U. Pierce, Controller

Subject: Draft Environmental Impact Statement (DEIS)
(Report number 2)

Buenas yan Hafa Adai!

Transmitted herewith for your review and action are DPW's response to the DEIS related to the Executive Summary, Readers' Guide, Volume 2 and 3. The attached responses were received from the following divisions:

- Administration
- Building Construction & Facilities Maintenance
- Transportation Maintenance
- Office of Highway Safety

Should there be any questions regarding this memorandum, please feel free to contact me at 646-3154 or the Fiscal office at 646-3231.

Un Dangkulo na Si Yu'os Maase.

Attachments

DPW
Division of Administration
DEIS – Overall Review Notes
1/8/10

- J-021-014 | **1. LAND**
Land acquisitions from private owners will be affected if the military wishes to develop more projects that require more land. Acquisition, land exchange or long term lease of land would be ideal rather than eminent domain without some form of compensation.
- J-021-015 | **2. ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS & NOISE**
Environmental concerns must be noted related to air, land and sea. The air we breathe, the plants livestock and fish, we eat. Coral will also affect from the major dredging for a new wharf. The environmental will all be contaminated from the ammunition projects and wharf activities. The noise related to construction and the ammunition will also affect the public.
- J-021-016 | **3. TRAFFIC**
Traffic will be affected through out the island not especially in the northern end (Andy South). Traffic will also include various construction vehicles including heavy military jeeps and other motor carrier. Road projects have been addressed within the DEIS.
- J-021-017 | **4. SOLID WASTE MANAGEMENT**
Waste Management will need to be reconfigured into the existing landfill plans to accommodate the huge influx of military and their dependents population. This will require a more specialized expert to review for reasonableness and adequacy.
- J-021-018 | **5. UTILITIES, WATER, WASTEWATER, POWER & OTHER INFRASTRUCTURE**
Customer demands for water and power will be tremendously increase due to the influx of the user population. DEIS has addressed some of the concern.
- J-021-019 | **6. PUBLIC SAFETY**
The Crime rates will increase due to the military population. The type of crimes include rape, theft, riots, human trafficking and dividing the influence of drugs and or alcohol will also be a huge factor for accidents. The increase in public safety to include border patrols around our harbor for illegal immigrants or drug smuggling will also be needed.

J-021-014

Thank you for your comment. While the government is authorized to acquire property through its powers of eminent domain (5th Amendment to the U.S. Constitution); the Department of the Navy plans to acquire real estate on Guam by direct purchase based on owner negotiations. Other options include long-term lease or easement agreements.

The Department of Defense (DoD) acknowledges that the issue of land acquisition is a complex and sensitive one. The DoD will negotiate with each property owner as required by the applicable federal laws and regulations. Negotiations with landowners have not yet begun because a final decision on whether or not land will need to be acquired will not be made until the Record of Decision. Part of the land acquisition process is determining suitable replacement space for affected landowners and compensation for improvements. If and when negotiations with landowners begin, detailed acquisition procedures would be developed and implemented. While the government is authorized to acquire property through its powers of eminent domain it has been the consistent peacetime policy of the Department of the Navy to acquire real estate by direct purchase based on owner negotiations. Negotiations, conflicts, compensation, and other issues may arise; these are covered by the acquisition processes and, if required, by the courts.

J-021-015

The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, nuclear materials, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g.,

J-021-020

7. HOSPITALS & CLINICS

Hospital beds and health care & public health professionals will be in demand due to the influx of the outside labor of immigrants (construction related work force) population.

8. SCHOOLS

Increase in the student population will be affected. This will include all grade levels including higher education (college level).

9. LABOR FORCE

Increase in the job market in both the private and public sectors. GovGuam will need to hire more staff in the areas of health care, law enforcement and first responders, teachers, engineer inspections, safety and security personnel.

J-021-021

10. PUBLIC TRANSPORTATION, AIRPORT AND PORTS

The need for reliable mass ground transportation is required. In addition, the airport and the commercial ports must also be expanded due to the increase in population for travelers and for all commodities being shipped into Guam for public consumption or for use.

J-021-022

11. TOURIST INDUSTRY

The tourist industry will be affected as the population as the population increases. This means more people waiting in long lines in restaurant and other recreational facility and high occupancy rates for all hotels and airline carriers.

12. REVENUES

DPW should increase our existing fees so that we can sustain our needs related to Labor Cost & other operational costs. In addition, bond funds related to CIP and infrastructure projects should be made available as the bond market will be interested in Guam's military growth and investments. We should adopt an aggressive revenue fees (or establish a new legislation to increase DPW's budget) by enacting legislation for the following DPW inflow:

- Liquid Fuel Taxes
- Motor Vehicles License Fees
- Building, Design & Permit Fees
- Solid Waste Tipping Fees
- Bus Fares (Field Trips)
- Bond Funds for CIP, Schools and Infrastructure projects
- Increase our Federal Grant Awards for projects and admin fees from
 - USDOT
 - FHWA
 - NHTSA
 - USDOJ

RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered "mitigation measures" because these actions are being done as part of existing laws and regulations and not as part of new "mitigation". However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health,



Arleen Pierce <arleen.pierce@dpw.guam.gov>

Division's Impact on Military Building

Barbara Purugganan <barbara.purugganan@dpw.guam.gov>

Thu, Jan 7, 2010 at 10:58 PM

To: "Lawrence 'Larry' P. Perez" <zerepyrral@yahoo.com>, Arleen Pierce <arleen.pierce@dpw.guam.gov>
Cc: Dominic G Muna <dominic.muna@dpw.guam.gov>, Oscar Yanger <oscar.yanger@dpw.guam.gov>, Mona Duenas <mona.duenas@dpw.guam.gov>, Roselily Cruz <roselily.cruz@dpw.guam.gov>, Maryrose Wilson <maryrose.wilson@dpw.guam.gov>, Barbara Purugganan <barbara.purugganan@dpw.guam.gov>

January 08, 2010

MEMORANDUM

TO: Director, DPW
Arleen Pierce, Controller DPW

FROM: Dominic Muna, Manager
Building Construction & Facility Maintenance

SUBJECT: Division's Impact on Military Building
"Draft on Environment Impact Statement"

Buenas Yan Hafa Adai! Herewith impacts and comments are provided on the brief review of Volume 2 and 3 of subject draft as per your memo request dated 12/21/09 as due today.

In regards to Volume 2 on the Marine Corps Relocation - Guam, please reference the attached. In respect to Volume 3 on Marine Corps Relocation - Training on Tinian, we have no comments for we find it not directly applicable to our division's operation.

DMUNA/BCPURUGGANAN/MWILSON/bcp

Cc: Manager, MA, Engr, Supt., AO

Chapter 1.2 PURPOSE AND NEED

As discussed in Volume 1, the overarching purpose for the proposed actions is to locate U.S. military forces to meet international agreement and treaty requirements and to fulfill U.S. national

<http://mail.google.com/mail/imap/imap?ui=2&ik=ed2c6f52d8&view=nt&search=inbox&...> 1/11/2010

welfare, and the environment from adverse impacts associated with the use of hazardous substances.

J-021-016

Thank you for your comment.

J-021-017

Comment noted.

J-021-018

Thank you for your comment. The final EIS has been modified to include more concerns regarding water. In addition, meetings between DoD and GWA are bearing fruit in the effort to seek solutions to the water system challenges. Meetings with GPA have also been fruitful and have resulted in concurrence on power solutions.

J-021-019

Thank you for your comment. There are many reasons why the Marines (about half) are being moved from Okinawa. This discussion is provided in section 3.5.2 of the Socioeconomic Impact Assessment Study (SIAS) that is in Appendix F, Volume 9 of the Draft EIS. Serious crimes by military personnel in Okinawa are committed at a lower rate than the overall civilian population in Okinawa, despite reports to the contrary. Many serious crimes are based on singular incidents that are reported multiple times so that it appears to be multiple incidents.

The impacts of crimes on Guam are discussed in Volume 2 of the FEIS. As noted in the SIAS: "A critical distinction when analyzing crime impacts is between the total numbers of crimes ("volume of crime") and the actual crime rate (numbers divided by population). Population increases always bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely

security policy requirements to provide mutual defense, deter aggression, and dissuade coercion in the Western Pacific Region. The need for the proposed actions is to meet the following criteria based on U.S. policy, international agreements, and treaties:

Significantly: The release of more than 11,000 pages of documents of the Environmental Impact State "DRAFT" has brought much more light to the island's people. The document opens eyes as to the huge impact as we begin to perceive and/or understand that the buildup's proposed scope is way beyond the initial public realm and now realization that paints a true picture of the proposal is way bigger and something to reckon with. The overarching purpose for this proposed action is that the overall benefit to provide mutual defense plainly justifies the move because of our strategic location and our need for protection during the height of terrorism and war.... BUT the island must be FUNDED to accommodate the anticipated rapid buildup and its rippling effect. The influx of an estimated 90,000 people is one third of our current population which compared to growth that takes 20 years to occur without the buildup. Of course, many of the increase will be transient workers but the number of additional people will stay as drawn to economic prospects.

J-021-023

To date there has been approved funding but is not significant as we continue to study the impact at this time. We agree that we need to continue to press the federal government to work collaboratively with us to ensure that we receive financial assistance necessary for the impact and costs of buildup. We need to push that we get the buildup right so that our island benefits from it and not only the military colony that is brought over. Our present budget levels make it difficult for our operations to effectively provide maintenance and repairs to meet OSHA & Building Codes of Guam for it will be much more challenging with the projected population boom as we adhere to our mandates. We must capture the limited time to identify the true assessment of our government buildings and facilities as to the readiness of our financial infrastructure for the buildup.

Chapter 16.1.5.3 Public Safety

Public Safety includes the protection from and prevention of events endangering the general public's safety, including crime and disasters, both natural and man-made. Government agencies on Guam involved in law and traffic enforcement, fire suppression, emergency medical response, safety inspections, civil and criminal litigation, justice, and corrections are all considered public safety agencies.

Significance: HEALTH AND SAFETY

J-021-024

Impacts on health and safety vary among projects. For example large and complex operations of any facilities especially industrial facilities can pose threat to health and safety of workers, public and ecosystem in general. Health and safety issues tend to be more significant during operations because they occur on over extended period of time.

The three major health and safety concerns are accidents, exposure to contaminants and noise. Depending on the nature of work, hazardous or potential dangerous materials may be used to produced and or stored on site. Workers and the environment maybe exposed to these materials through direct contact , exposure to fugitive dust and other air emissions or spills.

To determine the impact of the influx of military buildup, we must realistically see a clear picture of our existing conditions and needs, then, we can proceed to accurately assess and evaluate the actual

to commit crimes."

The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by a proportionate increase in crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct and enforce laws to protect the citizens of Guam and our military personnel.

J-021-020

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-021-021

Thank you for your comment. The 2030 Guam Transportation Plan outlines recommendations for an improved mass transit system on Guam. These recommendations included forming the Guam Mass Transit Authority and implementing high-capacity bus service on the



Arleen Pierce <arleen.pierce@dpw.guam.gov>

2nd Report - DEIS

Cecilia D Javier <cecilia.javier@dpw.guam.gov>
To: Arleen Pierce <arleen.pierce@dpw.guam.gov>

Thu, Jan 7, 2010 at 9:28 PM

Hi Arleen,

Submitted is OHS second report on the Draft DEIS with both volumes at a No Adverse Impact for our office.

--
Cil D. Javier
Management Analyst IV
Highway Safety Coordinator
Office of Highway Safety, DPW
(671) 647-4343
(671) 646-3733 - Fax

OHS DEIS 2nd Report Jan 8, 2010.doc
111K

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 2 and Vol. 3

Vol. 2 - Impact on Transportation Maintenance Division -

At this point I see no negative impact to TMD reason for is Vol 2 mainly speaks of the marines and there family relocating to Guam in which they will be utilizing existing DOD structure and if need be to acquire property to build new infrastructure.

Vol. 2 - Impact to Gov. Gu. -

This will have a tremendous impact on DPW's engineers, Federal highways, building permits, CIP and CQC. With the current staffing with these divisions it will not be sufficient enough to handle the influx in infrastructure thus causing a back log on these projects.

Vol. 3 - no comments

J-021-026

Thank you for your comment. DoD recognizes the potential strain on GovGuam resources created by the proposed military relocation program. DoD would work with local officials and stakeholders to lessen any adverse impacts associated with implementation of the proposed actions.

J-021-026



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

VOLUME 4, VOLUME 5

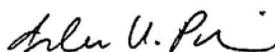


Lawrence P. Perez
Director
Andrew S. Leon Guerrero
Deputy Director

January 19, 2010

Memorandum

To: Director
Deputy Director
All Division Managers

From: 
Arleen U. Pierce, Controller

Subject: Draft Environmental Impact Statement (DEIS)
(Report number 3)

Buenas yan Hafa Adai!

Transmitted herewith for your review and action are DPW's response to the DEIS related to the Executive Summary, Readers' Guide, Volume 4 and 5. The attached responses were received from the following divisions:

- Administration
- Building Construction & Facilities Maintenance
- Office of Highway Safety
- Highways

Should there be any questions regarding this memorandum,, please feel free to contact me at 646-3154 or the Fiscal office at 646- 3231.

Un Dangkulo na Si Yu'os Maase.

Attachments

DPW
Division of Administration
DEIS – Overall Review Notes
Volumes 4 & 5
1/15/10

Filename: DEIS review notesv4

VOLUME 4 Aircraft Carrier Berthing

- J-021-027 | 1. **TOURISM**
Due to the closeness of Tinian and Saipan to Guam, the military personnel and their families can come to Guam to visit. This will result in an increase in the number of tourist not only from the Asia market. Hotels, rental cars, restaurants and recreation will need to accommodate more customers.
- J-021-028 | 2. **ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS**
Environmental concerns must be noted even if the training ranges are in Tinian. The pollution related to air, land and sea may be impacted here on Guam. The air we breathe, the plants we eat, the deer, chickens, pigs and all livestock and the fish, seafood we eat. The remains of the ammunition and dredging equipment will affect our vegetation as the wind will be a factor in passing on the residues.
- J-021-029 | 3. **WATER AND WASTEWATER**
Customer demands will be tremendously increase due to the influx of the user population. Ocean water will be affected with the dredging requirements. In addition, the Clean Water Act should be complied with as it can pass contamination into our sea food and sea animals and drinking water consumed by our human bodies and all other non human consumption.
- J-021-030 |
- J-021-031 | 4. **DREDGING DAMAGES**
Our corals will be damaged due to all of the dredging required. More importantly the ocean will be affected and the sea creatures will no longer be living in that environment. We will then have fewer creatures and our waters will not be as beautiful as it once was. The natural resources for corals and the surroundings will be negatively impacted. Diving, swimming, fishing and boating will prohibited in these areas.
- J-021-032 | 5. **HAZARDOUS MATERIALS WASTE MANAGEMENT**
There will be a need for clean up due to kinds of hazardous materials related to the dredging. This will also require a haz mat team who are trained to do the clean up spills. We should also anticipate accidents such as oil spills, radiation/nuclear spillage or leakage, gas spills, etc. We need a specialized team for this type of clean up as it can provide serious health issues such as cancer, etc.

J-021-027

Thank you for your comment. Please see the Socioeconomic Impact Assessment Study (Appendix F of the EIS) for more information on Tourism.

J-021-028

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam and Tinian, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people of Guam and Tinian and the Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation and operations reflect DoD policies to be good neighbors and responsible citizens. The DoD has kept the public informed as required by NEPA, which includes holding public scoping meetings and public hearings and allowing the public to comment on the DEIS. DoD has had ongoing discussions with Cooperating Agencies (those federal and local agencies with special expertise or regulatory oversight) throughout the preparation of the DEIS and will continue these discussions with agencies through the completion of the Final EIS.

J-021-029

Thank you for your comment. DoD is aware of the potential increase to the civilian population, inclusive of construction workers. The DEIS did quantify that potential increase. The final EIS has been revised to include indirect impacts of the proposed DoD buildup caused by this civilian population increase and its impact on potable water demand. DoD remains committed to working with GWA in finding solutions to their water system.

- J-021-033 | 6. ROADS
There is a need to expand all the roads due to heavy traffic along Polaris Point. The traffic will include heavy equipment to regular automobiles for loading and unloading docks, etc.
- J-021-034 | 7. COMMERCIAL PORT
There will be a need for expansion for Guam's commercial port due to the influx of the population. Large cargos with various commodities will be shipped to Guam.

VOLUME 5 Army Air and Missile Defense Task Force

Concerns are the same as above Numbers 2, 3, & 5

J-021-030

Thank you for your comment. Dredging impacts to water resources are addressed in Chapter 4 of Volumes 2 and 4. Compliance with the Clean Water Act is addressed in these chapters and in Chapter 3 of Volume 8.

J-021-031

Thank you for your comment. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

J-021-032

The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and



Arleen Pierce <arleen.pierce@dpw.guam.gov>

DPW DIVISION DEADLINE ON DEIS

Barbara Purugganan <barbara.purugganan@dpw.guam.gov>

Thu, Jan 14, 2010 at 5:12 PM

To: "Lawrence 'Larry' P. Perez" <zerepyrral@yahoo.com>, Arleen Pierce <arleen.pierce@dpw.guam.gov>
Cc: Dominic G Muna <dominic.muna@dpw.guam.gov>, Oscar Yanger <oscar.yanger@dpw.guam.gov>, Mona Duenas <mona.duenas@dpw.guam.gov>, Roselly Cruz <roselly.cruz@dpw.guam.gov>

ENVIRONMENTAL IMPACT STATEMENT GUAM & CNMI MILITARY RELOCATION

*Building Construction & Facility Maintenance Division (BCFM)
Department of Public Works (DPW)*

SUBJECT: *DPW DIVISION DEADLINE ON DEIS
Impact Comments on Volume 4 & 5
Due Date: January 15, 2010*

VOLUME 4: **Aircraft Carrier Berthing**

Comments: No direct impact applicable to division's operation.

VOLUME 5 **Army Air & Missile Defense Task Force**

J-021-035

Comments: No direct impact applicable at this time, but we foresee a secondary impact (indirect) from the sudden influx of populations. The rapid wear and tear of the daily increased used of government facilities and equipment will induced changes demanding repair and maintenance services. Our existing funding and manpower must be addressed to parallel these increases.

This is the main reason why we must address the current backlogs of present hazardous conditions of our facilities and increase the manpower to bring our ailing infrastructure to par.

regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered "mitigation measures" because these actions are being done as part of existing laws and regulations and not as part of new "mitigation". However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. For information on the status of the cleanup efforts of specific hazardous waste sites, the associated RAB provides a vehicle to obtain such information and for the general public/stakeholders to voice their concerns. These comprehensive actions (e.g., BMPs, SOPs, etc.)



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor



DIPTAMENTON CHECHO' PUPALEKO
Lawrence P. Perez
Director
Andrew Leon Guerrero
Deputy Director

OFFICE OF HIGHWAY SAFETY
REVIEW & COMMENTS
Draft Environmental Impact Statement (DEIS)
3rd Report
January 15, 2010

- | | | |
|-----|--------------------------------|---------------------|
| I. | DEIS Vol 4. – Aircraft Carrier | “No Adverse Impact” |
| II. | DEIS Vol. 5 – AMDTF | “No Adverse Impact” |

will protect public health, welfare, and the environment from adverse impacts associated with the use of hazardous substances.

J-021-033

Thank you for your comment. The FEIS traffic studies indicate that Polaris Point road and Route 1 in the vicinity of the Polaris Point intersection are adequate to handle future traffic associated with the Marine relocation.

J-021-034

Thank you for your comment. The Jose D. Leon Guerrero Commercial Port (also known as the Port of Guam) is administered by the Port Authority. The Port Authority is part of GovGuam and operates as a public corporation and autonomous instrumentality. Since its construction in 1969, the Port has remained largely unchanged. With many areas near capacity or unusable, expansion of the Port's facilities and equipment upgrades would create operational efficiencies and maximize Port capacity. Prior to the announcement of the proposed military relocation, Port improvements and expansion were under consideration; however, the military relocation created an additional impetus to implement planning studies and improvements to service the anticipated construction work and additional population.

J-021-035

Thank you for your comment. A new chapter (Chapter 4) has been added to Volume 1 identifying information and analysis that has been added between publication of the Draft EIS and the Final EIS. This includes a section specifying effects associated with indirect and induced growth.

Table No. and Revision	Project Business Information	NOI Action Reviewed	NOI Response Covered	Comments
MITIGATION MEASURES				
Description of mitigation activities for all significant impacts to both the natural and man (socioeconomic) environment)				
J-021-036				
DISE	Volume 1, Executive Summary, Page ES 34, Table ES-4, "Summary of Significant Impact of the Preferred Alternatives" & Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".		X	Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation has not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views.
	Description of mitigation measures with adequate information to evaluate environmental consequences and residual impacts		X	Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".
J-021-037				
TRANSPORTATION	Volume 8, Chapter 4, page 4-2		X	"according to the 2030 Guam Transportation Plan it is recommended that, "All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to alleviate substandard LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1 Delay Thresholds for Level of Service.
	Identification of best mitigation measures to avoid or minimize potential impacts during all stages of project, including siting and design, facility operation, and post facility closure.			
A. Pollutants Generation, Transport, and receptors	Volume 1, Executive Summary, Page ES-29 through ES-31			Road improvement project are subject to alternative selected.
B. Habitat Alterations				
	Support of the following types of mitigation measures in the following decreasing order of preference:			

J-021-036

Thank you for your comment. Several mitigation measures are proposed. Adaptive program management for construction would stretch out construction time and alleviate construction noise by reducing the number of construction equipment on site at any one time, but the impacts would have a longer duration. Foliage and Barrier Attenuation would reduce noise impacts associated with the Route 15 firing ranges. Volume 2, Chapter 6.2.8 has been revised to include these mitigation measures and presents the effect of the mitigations. These mitigation measures have also been added to Volume 7, Chapter 2.

J-021-037

Thank you for your comment. Chapter 4 of Volume 6 presents the analysis for impacts to Guam's land transportation system. Four alternatives are presented that complement the four action alternatives related to the location of the Marine Corps main cantonment. These four roadway alternatives are a combination of projects that corresponds to the needs associated with each main cantonment alternative. As the preferred alternative for the main cantonment is Alternative 2, the preferred alternative for the roadway projects is also Alternative 2 as discussed in Chapter 2 of Volume 6.

- > Avoidance or prevention
- > Minimization
- > Reduction or elimination over time
- > Correction
- > Compensation

J-021-038

3. Implementation plan (Schedule) and criteria for performance for all mitigation measures

Volume 6, Chapter 8, page 8-6

X

- 3. Responsible entity assigned to carrying out each mitigation measure
- 7. Measures are socially and culturally acceptable
- 3. Adequate financial and non-financial resources to implement the measure

X

"Guam DPW would also identify noise receptors on undeveloped land for which development is planned, provided such development includes activity sites of the types described in the NAC and provided that local permits for the development have been acquired or applied for on or before commencement of the noise analysis. Guam DPW would furnish the results of highway traffic noise analysis to local government officials and would encourage local communities and developers to practice noise compatible development. Local government coordination would be accomplished through the distribution". However, this is not summarized in Volume 7, of Mitigation strategy through Guam DPW. Recommend re-issuing Volume 6, Chapter 8 Noise Abatement Information for "Mitigation". Also, what will be the discussion on Noise walls in Volume 7. Refer to Volume 1, Executive Summary, page ES-34, Table ES-4.

Refer to item #5 above.

J-021-038

Thank you for your comment. Volume 7 has been updated to include sound walls as the mitigation measure for traffic noise, where determined to be feasible and reasonable in accordance with Guam's Traffic Noise Abatement Policy (refer to Table 2.2-1, Volume 7). The statement also indicates that sound walls are considered following identification of sensitive receptors in project corridors and associated noise studies. In addition, best management practices for addressing noise generated during roadway construction have been included in Table 2.1-1 of Volume 7.

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 4 and Vol. 5

Vol. 4 – No Adverse Impact

Vol. 5 – No Adverse Impact

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 6 and Vol. 7

J-021-039

Vol. 6 and Vol 7 – Will not have an immediate impact on TMD. However it will have an impact on DPW Hwy. Maintenance, Federal Hwys and Engineering section. With the lack of personnel vehicles and equipment to perform there duties and responsibilities these division will not be able to keep up with the demand thus causing delays on projects. And as these divisions start to build up in personnel, vehicles and equipment then this will have an impact on TMD. DPW as a whole is not prepared for the impact regarding the road projects and infrastructure up grades

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 8 and Vol. 9

Vol. 8 and Vol 9 – No adverse impact

J-021-039

Thank you for your comment. The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DoD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible or funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to assist the Government of Guam in seeking funds for projects that are not eligible for the DAR program.



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

VOLUME 6, VOLUME 7



The Honorable
Felix P. Camacho
Governor
The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor

COPY



Lawrence P. Perez
Director
Andrew S. Leon Guerrero
Deputy Director

January 25, 2010

Memorandum

To: Director
Deputy Director
All Division Managers

From: 
Arleen U. Pierce, Controller

Subject: Draft Environmental Impact Statement (DEIS)
(Report number 4)

Buenas yan Hafa Adai!

Transmitted herewith for your review and action are DPW's response to the DEIS related to the Executive Summary, Readers' Guide, Volume 6 and 7. The attached responses were received from the following divisions:

- Administration
- Building Construction & Facilities Maintenance
- Transportation Maintenance

We have also attached a status report on all DPW Divisions related to their divisions Impact statement.

Should there be any questions regarding this memorandum,, please feel free to contact me at 646-3154 or the Fiscal office at 646- 3231.

Un Dangulo na Si Yu'os Maase.

Attachments

Department of Public Works
 Division of Administration
 DEIS Reporting Requirements - DPW Director
 Division Submission Checklist

1/25/10
 Bohline

Division	Division Head	Point of Contact	Report 1	Report 2	Report 3	Report 4	Report 5	Report 6	Report 7
Administration	Arleen Pierce	Arleen Pierce	√	√	√	√			
Building Maintenance	Dominic Muna	Barbara Purugganan	√	√	√	√			
Bus Operations	Franklin Taitano	Julie Manglona	√	-	-	-			
Capital Improvement	Ramon Padua	Eleanor Borja	-	-	-	-			
Highway Maintenance	George Bamba	Elizabeth Barcinas	-	-	-	-			
Highways & Parsons*	Joaquin Blaz	Parsons	-	-	-	-			
		Mario Garcia*							
Solid Waste	GBB	Chace Anderson	-	-	-	-			
Transportation	Paul Cepeda	Sandra Perez	√	√	√	√			
Office of Highway Safety	Cil Javier	Cil Javier	-	√	√	-			

*Mario Garcia provided support to the DEIS project. As of January 25, 2010

- Footnotes:
 Report #1 (due 12/31/2009) Volume 1 & 9, Readers Guide and Executive Summary
 Report #2 (due 01/08/2010) Volume 2 & 3
 Report #3 (due 01/15/2010) Volume 4 & 5
 Report #4 (due 01/22/2010) Volume 6 & 7
 Report #5 (due 01/29/2010) Volume 8
 Report #6 (due 02/05/2010) All Volumes
 Report #7 (due 02/12/2010) Final DPW Submission to JCPO

DPW
Division of Administration
DEIS – Overall Review Notes
Volumes 6 & 7
1/22/10

Filename: DEIS review notesv5

VOLUME 6 Utilities and Roadway Projects

FOOTNOTES:

J-021-040

- A. There are several incorrect references to maps within volume 6 of the DEIS that needs to be corrected. There were multiple maps where the average user will have to go from page to page (rather than summary pages and linked per grids, etc). The maps were not user-friendly to layman readers; instead they appeared to be more confusing.**
- B. We need to obtain copies of the deliverables from the Matrix consultant to further analyze volumes 6 & 7 of the DEIS documentations.**
- C. This is a specialized subject matter area that requires professionals to review from the various capacities such as the current consultants (Parsons) and their sub-contractors, FHWA, lawyers, environmentalist, engineers, architects, CIP, inspectors, financial and other experts within the highway industry.**
- D. The methodologies adopted within this volume such as the Level of Service, traffic management analysis, were adequately presented and documented to support each alternatives/assessments within the DEIS study.**

J-021-041

- 1. ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS**
Environmental concerns must be noted for the occurrence of heavy traffic, light and heavy equipment, and military mobilization and construction materials and vehicles in which pollution will be major factor. The pollution related to air, land and sea may be impacted here on Guam. The air we breathe, the plants we eat, the deer, chickens, pigs and all livestock and the fish, seafood we eat. The remains of the ammunition and dredging equipment will affect our vegetation as the wind will be a factor in passing on the residues.

J-021-042

- 2. NOISE**
Noise from the construction build up and the firing ranges will also be a factor. Moreover, the firing range is located within a residential and a school district region.
- 3. POWER, WATER AND WASTEWATER**

J-021-040

Thank you for your comment.

J-021-041

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with Government of Guam and the people of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation and operations reflect DoD policies to be good neighbors and responsible citizens. The DoD has kept the public informed as required by NEPA, which includes holding public scoping meetings and public hearings and allowing the public to comment on the DEIS. DoD has had ongoing discussions with Cooperating Agencies (those federal and local agencies with special expertise or regulatory oversight) throughout the preparation of the DEIS and will continue these discussions with agencies through the completion of the Final EIS.

J-021-042

Thank you for your comment. Mitigation measures have been proposed for the firing ranges and the results of noise modelling with the mitigations is presented in Volume 2, Chapter 6.2.8.

p. 2/4

- J-021-043** | 3. **POWER, WATER AND WASTEWATER**
Customer demands will be tremendously increase due to the influx of the user population. The Clean Water Act should be complied with as it can pass contamination into our sea food and sea animals and drinking water consumed by our human bodies and all other non human consumption.
- J-021-044** | 4. **HAZARDOUS MATERIALS & WASTE MANAGEMENT**
There will be a need for clean up due to kinds of hazardous materials related to the dredging. This will also require a haz mat team who are trained to do the clean up spills. We should also anticipate accidents such as oil spills, radiation/nuclear spillage or leakage, gas spills, etc. We need a specialized team for this type of clean up as it can provide serious health issues such as cancer, etc.
- J-021-045** | 5. **ROADS**
There is a need to expand all the roads due to heavy traffic along Polaris Point. The traffic will include heavy equipment to regular automobiles for loading and unloading docks, etc.
- J-021-046** | 6. **MASS TRANSPORTATION & SCHOOL BUSES**
Due to the increase in population, mass transit buses and school buses will have to increase as well to accommodate the public demand. Bus stops are also in need throughout the whole island.
- J-021-047** | 7. **COMMERCIAL PORT**
There will be a need for expansion for Guam's commercial port due to the influx of the population. Large cargos with various commodities will be shipped to Guam.
- J-021-048** | 8. **LAND ACQUISITION FOR ROADS**
Will there be more land (from private homeowners) needed for this build up?
- J-021-048** | 9. **OHS ADDITIONAL FEDERAL GRANT FUNDINGS**
Will there be more federal grant funding from OHS to promote road safety?
- J-021-048** | 10. **FUNDING ISSUES**
Who will be paying for what projects?
Will the funding be 100% federal or will there be a matching of funds?
How about other funding sources?
Federal Grants
a. FHWA
b. DOD
c. NHTSA
d. USDOJ
Other Funding Sources
e. Bond Financing
f. GHF-Liquid Fuel Taxes
g. Mass Transit fees

J-021-043

Thank you for your comment. DoD is aware of and concerned with the potential increased demands from both the direct impacts of the proposed DoD buildup and the indirect impacts from increases in the civilian population. The final EIS has been revised to include an assessment of the indirect impacts. DoD has every intention of complying with the Clean Water Act.

J-021-044

The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered "mitigation measures" because these actions are being done as part of existing laws and regulations and not as part of new "mitigation". However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the

p. 3/4

J-021-048

11. PROJECT COST

What is the cost breakdown per projects? What is the scope of work? Will we be outsourcing 100% of the work? How much will DPW receive for each project, direct cost, indirect cost and administrative costs? How are the funds being received by electronic funds transfer or by US postal service?

VOLUME 7 - SOLID WASTE MANAGEMENT

FOOTNOTES:

A. This is a specialized area that requires professionals to review from the various capacity such as the receivership consultants, lawyers, judges, environmentalist, health and safety experts, engineers, architects, financial and other experts within the solid waste management industry.

J-021-049

1. FUNDING ISSUES

Will GovGuam receive any federal grants from military to help with our landfill costs since the military will be a large client? Guam will be financing the landfill closure and opening cost, but can the military provide some federal funding
As they too will benefit from the landfill (Guam cannot afford to pay this full cost when the military are also part of the cost and not 100% general public use and yet we pay 100% of the financing)? How much more in revenues will we receive due to increase in Tipping Fees? How about congressional funding such as the Clean Air and Clean Water Act, Superfund, etc.? How about a special appropriation from Congress to support Guam's solid waste management needs due to the military's base and work requirements, similar to the Defense Access Road Program funding?

2. HAZARDOUS MATERIALS

What are the mitigations related to all hazardous materials related to construction, ammunition and other environmental waste? Is there a materials management spill response plan, treatment and handling, mitigation plans, etc? Establish reasonable pricing policies for community services to include military customers? Is there a recycling and waste program?

3. OPERATIONAL COST

Cost related to SW Management will need to increase due to personnel cost and training for staff. Training needs are required for the various disciplines within waste management.

leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. For information on the status of the cleanup efforts of specific hazardous waste sites, the associated RAB provides a vehicle to obtain such information and for the general public/stakeholders to voice their concerns. These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the environment from adverse impacts associated with the use of hazardous substances.

J-021-045

Thank you for your comment. The 2030 Guam Transportation Plan outlines recommendations for an improved mass transit system on Guam. These recommendations included forming the Guam Mass Transit Authority and implementing high-capacity bus service on the island. In late 2009/early 2010, the Guam Regional Transit Authority (GRTA) was formed and will now be responsible for all public transit functions. The GRTA approved the Guam Transit Business Plan in January 2010, which includes purchasing new buses, constructing a bus maintenance facility, and modifying the bus schedule.

P. 4/6

J-021-049

4. RECEIVERSHIP INVOLVEMENT

To what extent is the GBB receivership's (based upon the federal district courts rules) involvement related to the military buildup, DEIS planning & implementation, scope of work, etc? After GBB's work, who, when and what will happen next? DPW cannot be left out of the equation or be the clean up committee after GBB's contract is over.

J-021-046

Thank you for your comment. The Jose D. Leon Guerrero Commercial Port (also known as the Port of Guam [Port] is administered by the Port Authority. The Port Authority is part of GovGuam and operates as a public corporation and autonomous instrumentality. Since its construction in 1969, the Port has remained largely unchanged. With many areas near capacity or unusable, expansion of the Port's facilities and equipment upgrades would create operational efficiencies and maximize Port capacity. Prior to the announcement of the proposed military relocation, Port improvements and expansion were under consideration; however, the military relocation created an additional impetus to implement planning studies and improvements to service the anticipated construction work and additional population.

In August 2007, work began to update the Port's master plan. The recommendations and updates address future expansion and development based on typical commercial growth, as well as the impending military buildup. A final draft Port master plan was completed in April 2008 which updated the existing master plan and set the road map for upgrading the facilities. The Port master plan was approved by the Guam Legislature in December 2009. The master plan calls for nearly \$200 million in capital improvement upgrades to the Port facilities. The modernization program would address both Guam's expected growth without the proposed action and the anticipated increase in cargo volume resulting from the proposed action. While DoD is not directing the Port improvements, an amendment to the 2010 Defense Appropriations Bill is proposed in Congress which calls for the transfer of \$50M of DoD FY10 funds to the Department of Transportation to fund Phase I of the port improvements.

J-021-047

Thank you for your comment. DoD acknowledges that the issue of land acquisition is a complex and sensitive one with both historical and



Arleen Pierce <arleen.pierce@dpw.guam.gov>

DEIS Volume 6 & 7

Barbara Purugganan <barbara.purugganan@dpw.guam.gov> Thu, Jan 21, 2010 at 8:16 PM
To: "Lawrence 'Larry' P. Perez" <zerepyrral@yahoo.com>, Andrew Leon Guerrero
<andrew.leonguerrero@dpw.guam.gov>, Arleen Pierce <arleen.pierce@dpw.guam.gov>
Cc: Dominic G Muna <dominic.muna@dpw.guam.gov>, Mona Duenas <mona.duenas@dpw.guam.gov>, Roselily Cruz <roselily.cruz@dpw.guam.gov>

ENVIRONMENTAL IMPACT STATEMENT

Buenas!

Herewith transmitted is this weeks comment.

GUAM & CNMI MILITARY RELOCATION

*Building Construction & Facility Maintenance Division (BCFM)
Department of Public Works (DPW)*

SUBJECT: *DPW DIVISION DEADLINE ON DEIS
Impact Comments on Volume 6 & 7
Due Date: January 22, 2010*

Comments: No direct impact applicable to division's operation.

contemporary contexts. Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value.

DoD is confident that all parties can reach agreement on any potential land acquisition. Further, any proposed major DoD land acquisition, such as those associated with the preferred alternatives for the main cantonment and live fire ranges, must be approved by the Congressional defense committees.

Specific areas being considered for acquisition are identified in the Final EIS.

J-021-048

Thank you for your comment. A mass transportation plan is part of the 2030 Guam Transportation Plan (GTP). The Guam Regional Transit Authority (GRTA) has the responsibility to carry out the plan established in the 2030 GTP. The Department of Defense will also be developing an on-base transit system and will coordinate with GRTA to have both systems work together. The airport is in the process of updating its master plan to accommodate the increased travel due to the military build up. The port has a master plan that address the increases in cargo transport due to the military build up.

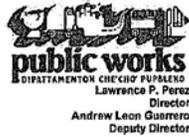
The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DOD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor



Lawrence P. Perez
Director
Andrew Leon Guerrero
Deputy Director

**OFFICE OF HIGHWAY SAFETY
REVIEW & COMMENTS
Draft Environmental Impact Statement (DEIS)
4th Report
January 29, 2010**

I. DEIS Vol 6. –

J-021-050

Section 2.5.1.6 Safety – Addresses Guam DPW “Office of Highway Safety as funded through Federal Highway Administration safety improvement funds” which must be corrected and addressed as:

The Guam DPW Office of Highway Safety is funded through the National Highway Traffic Safety Administration (NHTSA) to provide leadership by developing, promoting, and coordinating programs; influencing public and private policies; and increasing public awareness of highway safety. Highway Safety means the reduction of traffic crashes, deaths, injuries and property damage resulting on Guam’s Highways.

J-021-051

With the impact of the island’s roadway expansion the Guam Office of Highway Safety plays a major factor with regards to increase of enforcement activities and massive public awareness campaigns. Educational outreaches must be set in accordance to teach and educate the laws pertaining to highway safety, i.e. DUI, Seat Belt, Texting, bicycle and pedestrian education training on crosswalks.

II. DEIS Vol. 7 – “No Adverse Impact”

The Department of Defense, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to seek solutions to island-wide traffic issues.

OHS funding is dependent upon the amount of lane miles. The amount of lane miles will not increase and therefore it is anticipated that additional funding will not be provided.

J-021-049

1. Funding Issues: DoD is restricted in its budget expenditures to their own personnel and facilities. DoD would be a customer of the new landfill and would pay tipping fees. Guam needs to arrange the tipping fees such that they will sustain the landfill for all aspects, including operations, maintenance, closure, financing for future expansion or replacement, etc. The EIS contains an estimate of the volume of waste expected from DoD. Knowing the tipping fee, the landfill operator should be able to estimate the amount of revenue they would receive. If required, Guam should pursue Congressional funding from other sources. A sustainable business approach to solid waste needs to be adopted by Guam.

2. Hazardous Materials: The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible, substituting them for less toxic substances, and to recycle whenever possible. When using hazardous substances, environmental laws and regulations

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 4 and Vol. 5

Vol. 4 – No Adverse Impact

Vol. 5 – No Adverse Impact

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 6 and Vol. 7

J-021-052

Vol. 6 and Vol 7 – Will not have an immediate impact on TMD. However it will have an impact on DPW Hwy. Maintenance, Federal Hwys and Engineering section. With the lack of personnel vehicles and equipment to perform there duties and responsibilities these division will not be able to keep up with the demand thus causing delays on projects. And as these divisions start to build up in personnel, vehicles and equipment then this will have an impact on TMD. DPW as a whole is not prepared for the impact regarding the road projects and infrastructure up grades

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 8 and Vol. 9

Vol. 8 and Vol 9 – No adverse impact
VOL 8, VOL 7

ADMIN - Page 9 of 21

(e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances. These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered “mitigation measures” because these actions are being done as part of existing laws and regulations and not as part of new “mitigation”. However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

VOLUME 8

environment from adverse impacts associated with the use of hazardous substances.

3. Operational Costs: Please see response to item 1 above within this comment.

4. Receivership Involvement: The FEIS is not required to address the status of the receivership. The preferred alternative for solid waste disposal only involves the receivership to the extent that DoD will use the new Layon Landfill. It would be expected that Gov Guam and DPW coordinate with the receiver and the courts to effect a logical handoff for the time when the operations revert to Gov Guam. This is not a DoD issue.

J-021-050

Thank you for your comment. Section 2.5.1.6, Safety, in Volume 6 of the FEIS has been updated as suggested.

J-021-051

Thank you for your comment. The text in the FEIS has been revised to incorporate the information provided.

J-021-052

Thank you for your comment. The off-base roadway projects may be funded through requests under the Defense Access Road (DAR) Program and annual allocations through the FHWA. The Defense Access Road Program provides the means for the Department of Defense to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement. These projects will be procured through the Guam DPW. Funds for supervision, inspection and overhead is included in the budget requests.



The Honorable
Rafael P. Camacho
Governor
The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor



Lawrence P. Perez
Director
Andrew S. Leon Guerrero
Deputy Director

February 1, 2010

Memorandum

To: Director
Deputy Director
All Division Managers
From: Arleen U. Pierce, Controller *A.U. Pierce*
Subject: Draft Environmental Impact Statement (DEIS)
(Report number 5)

Buenas yan Hafa Adai!

Transmitted herewith for your review and action are DPW's response to the DEIS related to Volume 8. The attached responses were received from the following divisions:

- Administration
- Building Construction & Facilities Maintenance
- Transportation Maintenance *No submission*
- Office of Highway Safety

To date, we have not received any response from the Highways (with the exception of Mario Garia), Solid Waste and CIP Division.

Also, attached to this memo is the minutes of DPW 's Legislative Hearing held on January 28, 2010.

Should there be any questions regarding this memorandum, please feel free to contact me at 646-3154 or the Fiscal office at 646-3231.

Un Dangkulo Na Si Yu'os Ma'ase.

Attachments

Department of Public Works
 Division of Administration
 DEIS Reporting Requirements - DPW Director
 Division Submission Checklist

Division	Division Head	Point of Contact	Report 1	Report 2	Report 3	Report 4	Report 5	Report 6
Administration	Arleen Pierce	Arleen Pierce	√	√	√	√	√	√
Building Maintenance	Dominic Muna	Barbara Purugganan	√	√	√	√	√	√
Bus Operations	Franklin Taitano	Julie Mangiona	√	-	-	-	-	-
Capital Improvement	Ramon Padua	Eleanor Borja	-	-	-	-	-	-
Highway Maintenance	George Bamba	Elizabeth Barcinas	-	-	-	-	-	-
Highways & Parsons*	Joaquin Blaz	Parsons	-	-	-	-	-	-
		Mario Garcia*	√	√	√	√	√	√
Solid Waste	GBB	Chace Anderson	-	-	-	-	-	-
Transportation	Paul Cepeda	Sandra Perez	√	√	√	√	√	√
Office of Highway Safety	Cil Javier	Cil Javier	-	√	√	√	√	√
*Mario Garcia provided support to the DEIS project.			√					

Footnotes:

- Report #1 (due 12/31/2009) Volume 1 & 9, Readers Guide and Executive Summary
- Report #2 (due 01/08/2010) Volume 2 & 3
- Report #3 (due 01/15/2010) Volume 4 & 5
- Report #4 (due 01/22/2010) Volume 6 & 7
- Report #5 (due 01/29/2010) Volume 8
- Report #6 (due 02/05/2010) All Volumes

As of February 1, 2010

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**DPW Legislative Hearing - DEIS
Jan.28, 2010 Thursday 6:00-9:00 pm
Senator Tom Ada (minutes)**

Legislative Hearings Departments

1. Department of Public Works
2. Guam Regional Transit Authority (DOA)
3. Port Authority of Guam

DPW

Presentation were done by Director Larry Perez, Deputy Director, Andy Leon Guerrero & Kin Blaz Highway Division. Kin provided a power-point presentation Volume 6 highlights.
CIP Inspectors, Software
Training - IBC codes

DPW Building Fund - Fees Permit goes to Guam Preservation Trust

Bus Division need 53 new Buses with a budget of \$10 million.

GHF Govt. Funds & Divisions funded by Liquid Fuel Taxes.

1. GHF
2. CIP
3. BM

Question & Answer's (Senator's)

Senator Palacios:

1. Traffic- Controlling the number of vehicles for mitigating number of traffic flow.

Senator BJ Cruz:

1. Over Ametes Road in DEIS but not worded in 2030 plan.
How much Land to be use?
How much Land to use on GRN?
2. Will Perez and counsel determined how much land will be utilizing for Government Domain? Not at this juncture we are reviewing Land inventory = Gov't
How much Land needed?

P. 2/5

Build - up: DEIS does not address 21st Century mass transit transportation
plan = Joey Manibusan

Senator Pangelinan

1. Is Building Permit required from the Military?
What are the military's requirement for within the base? Do we know types of activity are going on? If not, this is a deficiency within the DEIS documents.
2. Construction?
 - DEIS none
 - DEIS deficiency none written
3. \$50 million military approp. FY2010 Budget.
How much is for roads?
 - About \$4 million, DPW is not yet doing this until ROD & pending NEPA
 - No land for \$50 million.
 - There is no improvement for traffic only guard rails & lanes painting
 - DEIS \$1.7 billion for Construction for new roads & widening, Traffic improvement, realignments & Bridge repairs.
4. FY2008 Gov. request \$4.4billions from Fed's on state of the island address.
 - Per Larry Perez only \$1.7 billion.

Senator Guthertz

1. Did FHWA provide funding for this on build up? None
2. Land next to two Lovers point + Home owners does not know: DPW is not responsible for this on DEIS. GovGuam does not want any land condensation. Per Guthertz there is a law on land needing authorize from legislature.
3. Concern home owners don't know about land on DEIS for roads: Families do not know this.

Larry Perez:

- DPW did public hearing on 2030 plan with roads on land taking. Land talking will follow fed'l and local request.
- Land Condemnation = Legislature to approve or disapprove
- Includes land acquisitions

Senator Telo Taitague

1. Mass Transit
2. Water run Off - Flooding on lowland area, what is DOD going to do?

p. 3/5

Larry Perez: It is included as part of the \$1.7 billion all NEPA requiring.

Ex. Yigo area - need mitigation next to military area.

3. Number of student on Buses 6K, How much are compact kids?

Senator Tom Ada

1. Cost estimate for various roads to be constructed on slides: Cost may be on low side price does not include acquiring of land.

Larry Perez:

Cost is added on as part of the project cpst to include - ROW at a cost 2%.

2. 2030 master plan
Routes 1,15,8
Connecting the roads. Ex: Perez Acres Gayrinora Road. Perez Acre need c
connector road Route 8,10A,16 & 1, due to the much traffic.

DPW works with Tiyan & GIAA.

Question & Answer's (Audience)

1. PAG
- Need a cruise liners for more tourism.
2. GMTA
- Better get the system up like Hawaii due to large tourist.
3. DPW
- Build Bull cart trails built one in Tumon.

Joe Garrido

1. DPW treat military like developer. They need to follow
Guams Law.
2. Super Fund - CIRCLA
3. Guam Highways Fund - Needs to be reassess GovGuam losing money. It does
not go to present fund.
4. Roads expansion GRN - DPW & AG = Condensation in mitigation
Domain. - Pagat Land = Firing Range
5. Does Guam have over Proof alternative besides the DEIS?

Peter Mayer

1. DPW - Experiential
2. 2030 GTP is better than DEIS
- ROWS law for community

P. d/e

3. Sidewalks & Bicycle Path
- ROW = public transport, pedestrian and Bicycles
4. Reef Problem – This is a cause for concern.

Adrian Cruz

1. Security agrees President Obama
- Do we have the right to say yes or no? Is so, does the DEIS self determine .
2. Will GovGuam note for self determination?

Maria T.

1. Hazardous Materials – PAG accident
2. DPW – Roads
- Housing / Utilities / Mass Transit / Bus stops
Protect Condemnation

Taotao Pagat

Says no to DEIS, roads are already dangerous to much cars on road.

ED LG:

- DPW
1. Highway funding – failed to get more federal grants
 2. DPW lost Solid Waste – Landfill
 3. DPW not ready – prioritize, connection routes and more roads.
 4. Why DPW gives permit when there is safety issue?
- DPW Director on he's way out DPW needs more funding and better Administrations without proper training & education and experience. It's not what you know, it's who you know.
 - DPW is not ready for this build up.
 - DPW needs to control building permits.

Jeff Peck:

- Former Federal Employee & says can go thru
- Local requirements so that military will need to comply with local.

Sen. Ted Nelson:

- Compensations for land taking \$150 million land taking for schools, roads and no compensation no justice.

P. 51

- Give Larry 5 FTE's for Land surveyors to help DPW

Caller: From Phone Bank

- Why only North and Central roads and none for South roads? Roads cannot be touched unless they go thru Right - of - way.

Rick Toves

DPW

1. Bicycle Trails -- DEIS
 - yes on 2030 GTP Route 4
2. Pedestrians
 - Will have cross walks
 - School Lanes
3. Carpool
 - Park & Ride
 - Add railroads to DEIS military

Hearing Adjoined 9:10 pm

DPW
DEIS – Overall Review Notes
Volume 8
2/1/10

Filename: DEIS review notesv6

VOLUME 8 Additional Items Required by NEPA

NO DIRECT IMPACT

Review notes comment:

J-021-053

1. Is Guam EPA ready to handle these hazardous materials clean up to ensure the people of Guam that our land, air, water and environment are all safe? What methods are used to perform the clean up functions and do they have enough staff to do the police work?

J-021-054

2. There should be laws or existing laws that should have the Military obtain licenses fees and permits before any construction activities commence, so that the GovGuam will determine the compliance procedures to ensure public safety and Gov't wide planning.
3. Funding is an issue for the DEIS military build up. We have no federal funds earmarked to ensure the build up is congressionally funded rather for GovGuam to absorb.
4. Compliance to all US laws such as NEPA and USEPA, etc are great benefits to the public. The roles and responsibilities of ensuring compliance procedures that gets confusing between the local and federal Gov't? Will Govguam get the necessary training and education to the first responder agencies such as USEPA, Fire dept, GPD, Agriculture, DPHSS and Customs?

J-021-053

The DoD will be responsible for the safe handling and use of all hazardous materials and hazardous waste. In the event of an inadvertent spill, release, or leak the DoD will be responsible to ensure that clean-up occurs in an expedited manner and that risk to human health and the environment is minimized. GEPA's role is to oversee and monitor the actions of DoD regarding the use and potential clean-up of hazardous materials and hazardous wastes. In this capacity GEPA should have the resources to accomplish the oversight mission.

J-021-054

Thank you for your comment. Compliance with laws, regulations and policies is presented in Chapters 2 and 3 of Volume 8. Effects of the proposed action on staffing of GovGuam agencies is addressed in Chapter 16 of Volume 2. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

January 29, 2010

MEMORANDUM

TO: Director, DPW
Arlene Pierce, Controller DPW

FROM: Dominic Muna, Manager
Building Construction & Facility Maintenance

SUBJECT: Division's Impact on Military Building
"Draft on Environment Impact Statement"

Buenas Yan Hafa Adai! Herewith impacts and comments are provided on the brief review of Volume 8 of subject draft as per your memo request dated 01/21/09 as due today.

In regards to Volume 8 on the Marine Corps Relocation - Guam, please reference the attached.

DMUNA/BCPURUGGANAN/MWILSON/bcp

Cc: Manager, MA, Engr, Supt., AO

January 29, 2010

J-021-055

Volume 8 : Under 5 and 6 Relationship between Short and Long- term Resources

This Volume is self explanatory although in application to the division the following should be integrated whether long-term or short term .

Short Term: Staging areas is still within the project footprint.

Long Term: Operations are expected to have a positive impact if planning is forecasted and anticipated.

Final Analysis:

Environmental Impact Assessment should focus more on the feasible, cost effective and alternative solution.

DMUNA/BCPURUGGANAN/MWILSON/bcp

Cc: Manager, MA, Engr, Supt., AO

J-021-055

Thank you for your comment. Statements about the construction staging areas were added to short-term descriptions as appropriate. Chapter 6 of Volume 8 has been updated in the Final EIS based on the updated sustainability planning information.

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 4 and Vol. 5

Vol. 4 – No Adverse Impact

Vol. 5 – No Adverse Impact

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 6 and Vol. 7

Vol. 6 and Vol 7 – Will not have an immediate impact on TMD. However it will have an impact on DPW Hwy. Maintenance, Federal Hwys and Engineering section. With the lack of personnel vehicles and equipment to perform there duties and responsibilities these division will not be able to keep up with the demand thus causing delays on projects. And as these divisions start to build up in personnel, vehicles and equipment then this will have an impact on TMD. DPW as a whole is not prepared for the impact regarding the road projects and infrastructure up grades

TRANSPORTATION MAINTENANCE DIVISION
Draft Environmental Impact Statement (DEIS)
Vol. 8 and Vol. 9

Vol. 8 and Vol 9 – No adverse impact



Government of Guam

Department of Public Works

Comments from Divisions

as Submitted



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

Administration Division

DEPARTMENT OF PUBLIC WORKS
 Division of Administration
 Draft Environmental Impact Statement DEIS
 Executive Summary
 Review / Impact / Comments
 February 17, 2010

DIVISION OF ADMINISTRATION

	DESCRIPTION OF IMPACT	TEXT REFERENCE	PREFERRED ALTERNATIVE / MITIGATION	RECOMMENDATIONS
J-021-056	<p>REPORT NO. 2 VOL 2, VOL 3</p> <p>LAND</p> <p>Land acquisitions from private owners will be affected if the military wishes to develop a shooting range and other projects that requires more land. The DEIS does not discuss how the land will be acquired or the funding source to acquire.1.</p>	VOL 2 Chapter 2	<p>Military requires more land for use when current DOD owns 27% land on Guam.</p> <p>Military requires land for more roads.</p>	<ol style="list-style-type: none"> 1. Military should use the existing land that they currently owned and are not in used. 2. Acquisition land exchange or long term lease of land would be ideal rather than imminent domain without some form of compensation. 3. Land.
J-021-057	<p>ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS & NOISE</p> <p>4. Environmental concerns must be noted related to air, land and sea. The air we breathe, the plants livestock and fish, we eat. Coral will also affected from the major dredging for a new wharf.</p> <p>5. The environment will all be contaminated from the ammunition projects and wharf activities.</p>	VOL 4, 5, 6	<p>We have no assurance from Federal and Local officials to motion compliance to federal laws. Dredging 600 ft. is Apra Harbor will remedy damage all habitat ,corals, fish and other creatures.</p>	<p>Establish federal agency to conduct inspection quality assurance and enforce compliance to NEPA and all federal laws. Provide funding and training to GovGuam agencies to ensure compliance.</p>
J-021-058	<p>C. The noise related to construction and the ammunition will also affect the public and the nearby schools. The firing range proposed will be detrimental to Guam's natural resources and prime property hot spots thereby deterring tourism and other outdoor activities events as hiking, biking, swimming, fishing and hunting.</p>			<ol style="list-style-type: none"> 1. Relocate the firing range to Tinian. 2. Why build a new firing range when the military should consolidate and use the current firing range.

J-021-056

Thank you for your comment. The impact on DPW Highway Maintenance is anticipated to be minimal once the construction of the GRN is complete. The GRN projects include pavement strengthening and bridge/culvert replacements, where appropriate, which should result in improved roadways and consequently requiring less maintenance. Roadway widening projects will not only result to wider roads but also better pavement strength, which would also consequently require less maintenance. Additional maintenance would only be required for the proposed new road (Finegayan Connector).

J-021-057

Thank you for your comment. Effects of dredging and other actions on coral are addressed in Chapter 11 of Volume 2 and Volume 4. Mitigation measures associated with these impacts are summarized in those chapters and in Volume 7. The Record of Decision will specify the mitigation measures and associated monitoring efforts to be implemented by DoD.

J-021-058

Thank you for your comment. The Marine Corps investigated numerous possibilities for locations for the firing ranges including the alternatives you suggest. A firing range is proposed on Tinian for this action, but there would still need to be a range on Guam. The existing ranges were also investigated but determined that due to logistical and environmental reasons, there is insufficient space to add the requirements for training to these ranges. Mitigation measures for the proposed alternatives include foliage attenuation and barriers and are described in Volume 2, Chapter 6.2.8.

DIVISION OF ADMINISTRATION

	DESCRIPTION OF IMPACT	TEXT REFERENCE	PREFERRED ALTERNATIVE / MITIGATION	RECOMMENDATIONS
J-021-059	<p>DREDGING DAMAGES</p> <p>Our corals will be damaged due to all of the dredging required. More importantly the ocean will be affected and the sea creatures will no longer be living in that environment.</p>	VOL 4 CHAPTER 11	The large acres of dredging should be carefully evaluated.	<p>Damages from the dredging will be reverse.</p> <p>We will then have fewer creatures and our waters will not be as beautiful as it once was.</p> <p>The natural resources for corals and the surroundings will be negatively impacted. Diving, swimming, fishing and boating will be prohibited in these areas.</p>
J-021-060	<p>TRAFFIC</p> <p>Traffic will be affected through out the island not especially in the northern end (Andy South). Traffic will also include various construction vehicles including heavy military jeeps and other motor carrier. Road projects have been addressed within the DEIS but funding was not clearly defined.</p> <p>A. ROADS</p> <p>There is a need to expand all the roads due to heavy traffic along Polaris Point. The traffic will include heavy equipment to regular automobiles for loading and unloading docks, etc.</p> <p>B. There are several incorrect references to maps within volume 6 of the DEIS that needs to be corrected. There were mutiple maps where the average user will have to go from page to page (rather than summary pages and linked per grids, etc). The maps were not user-friendly to layman readers; instead they appeared to be more confusing.</p> <p>C. Funding may be funded by FHWA or DOD.</p> <p>D. OHS ADDITIONAL FEDERAL GRANT FUNDINGS</p> <p>Will there be more federal grant funding from OHS to promote road safety?</p> <p>E. FUNDING ISSUES</p> <p>Who will be paying for what projects?</p>	<p>VOL 1 VOL 6 CHAPTER 4</p> <p>VOL 6</p> <p>VOL 1 CHAPTER 2 PAGE ES-30</p> <p>VOL 1 CHAPTER 2 PAGE ES-30</p> <p>VOL 6</p> <p>VOL 1 VOL 9</p>	<p>DEIS did not discuss funding to address their concern.</p> <p>DEIS did not discuss funding to address their concern.</p> <p>DEIS did not discuss funding to address their concern.</p> <p>DEIS did not discuss funding to address their concern.</p> <p>DEIS did not discuss funding to address their concern.</p> <p>DEIS did not discuss funding to address their concern.</p>	<p>Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.</p> <p>Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.</p> <p>Funding should be provided and not "maybe".</p> <p>Funding should be provided and not "maybe".</p> <p>Additional funding should be provided.</p> <p>Funding should be provided.</p>

J-021-059

Thank you for your comment. A detailed compensatory mitigation plan would be submitted as part of the Clean Water Act 404 permit application for construction affecting the navigable waters of the United States (including the CVN transient wharf). Due to the ongoing review of DoD's habitat assessment methodology for coral reef ecosystems and associated uncertainties regarding the scope of mitigation required, a detailed mitigation plan has not been developed nor will one be available for incorporation into the FEIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Section 11.2 of the FEIS. DoD recognizes that, as part of the CWA Sec. 404 permitting process, additional NEPA documentation may be required to address specific permitting requirements and implementation of required compensatory mitigations.

J-021-060

Thank you for your comment. A mass transportation plan is part of the 2030 Guam Transportation Plan (GTP). The Guam Regional Transit Authority (GRTA) has the responsibility to carry out the plan established in the 2030 GTP. The Department of Defense will also be developing an on-base transit system and will coordinate with GRTA to have both systems work together. The airport is in the process of updating its master plan to accommodate the increased travel due to the military build up. The port has a master plan that address the increases in cargo transport due to the military build up.

The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DOD) to pay a fair share for public highway improvements required as a result of a sudden or unusual

DIVISION OF ADMINISTRATION

	DESCRIPTION OF IMPACT	TEXT REFERENCE	PREFERRED ALTERNATIVE / MITIGATION	RECOMMENDATIONS
J-021-061	4. SOLID WASTE MANAGEMENT Waste Management will need to be reconfigured into the existing landfill plans to accommodate the huge influx of military and their dependents population. This will require a more specialized expert to review for reasonableness and adequacy.	VOL 6	Long term financing and funding from the military waste is not addressed in DEIS.	Request an appropriate from Congress to review the cost allocate from the military build up's share of about 30% to pay GovGuam for their share of the landfill in addition to the tipping fee charges.
	Will GovGuam receive any federal grants from military to help with our landfill costs since the military will be a large client? Guam will be financing the landfill closure and opening cost, but can the military provide some federal funding	VOL 6	DEIS did not discuss funding to address their concern.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.
J-021-062	POWER AND WATER AND WASTEWATER Customer demands for water and power will be tremendously increase due to the influx of the user population. The Clean Water Act should be complied with as it can pass contamination into our sea food and sea animals and drinking water consumed by our human bodies and all other non human consumption.	VOL 6	DEIS did not discuss funding to address their concern.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.
J-021-063	6. PUBLIC SAFETY The Crime rates will increase due to the military population. The type of crimes include rape, theft, riots, human trafficking and dividing the influence of drugs and or alcohol will also be a huge factor for accidents. The increase in public safety to include border controls around our harbor for illegal immigrants or drug smuggling will also be needed.	VOL 2 VOL 9	DEIS did not discuss funding to address their concern.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.
J-021-064	7. HOSPITALS AND CLINICS Hospital beds and health care & public health professionals will be in demand due to the influx of the outside labor of immigrants (construction related work force) population.	VOL 2 VOL 9	DEIS did not discuss funding to address their concern.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.
	8. SCHOOLS Increase in the student population will be affected. This will include all grade levels including higher education (college level).	VOL 2 VOL 9	DEIS did not discuss funding to address their concern. In addition, DPW will need to provide additional school buses for the 6,000 new public school students.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate. It is estimated that we need 53 new buses costing at least \$10M to operate.

defense-generated traffic impact or unique defense-related public highway requirement.

Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DOD commits to seeking funding for these projects. The Department of Defense, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to seek solutions to island-wide traffic issues.

The traffic impacts along Polaris Point were studied as part of the DEIS. The traffic volumes did not warrant any widening along this corridor.

The incorrect references have been corrected in the FEIS.

OHS funding is dependent upon the amount of lane miles. The amount of lane miles will not be increased and therefore additional funding will not be provided.

J-021-061

Thank you for your comment. Tipping fees that the DoD would pay to dispose of solid waste in the new landfill would be used to pay for the construction of the landfill and repayment of bond that Guam borrowed to construct the new landfill. DoD has signed a Letter of Intent to use the new Guam Landfill for the disposal of municipal solid waste.

J-021-062

Thank you for your comment. DoD is aware of the potential increases to utility demands from the indirect civilian population growth. Assessment of the impacts of this indirect demand has been added to the final EIS. While DoD is legally limited in how it can spend its budget, DoD has agreed to lead a federal interagency task force to seek resources to assist Guam in implementing solutions to its infrastructure in preparation

DIVISION OF ADMINISTRATION

	DESCRIPTION OF IMPACT	TEXT REFERENCE	PREFERRED ALTERNATIVE / MITIGATION	RECOMMENDATIONS
J-021-064	LABOR FORCE Increase in the job market in both the private and public sectors. GovGuam will need to hire more staff in the areas of health care, law enforcement, teachers, engineer inspections, safety and security personnel.	VOL 2 VOL 9	DEIS did not discuss funding to address their concern.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.
J-021-065	PUBLIC TRANSPORTATION The need for reliable mass ground transportation is required. In addition, the airport and commercial ports must also be expanded due to increase in population for travelers and for all commodities being shipped into Guam for public consumption or for use.	VOL 2 VOL 6 vol 9	DEIS did not discuss funding to address their concern.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.
J-021-066	TOURISM The tourist industry will be affected as the population as the population increases. This means more people waiting in long lines in restaurant and other recreational facility and high occupancy rates for hotel and airline carrier. Due to the closeness of Tinian and Saipan to Guam, the military personnel and their families can come to Guam to visit. This will result in an increase in the number of tourist not only from the Asia market. Hotels, rental cars, restaurants and recreation will need to accommodate more customers.	VOL 2 VOL 3	The tourist market will be affected since Guam's natural resources, oceanic, land and outdoor activities will be dismissed due to the military's needs. The DEIS addressed this issue.	Congress should appropriate federal funds to Guam to compensate for this losses. Moreover, there is no price tag to bench market this types of loss.
J-021-067	COMMERCIAL PORT There will be a need for expansion for Guam's commerial port due to the influx of the population. Large cargos with various commodities will be shipped to Guam.	VOL 2	DEIS did not discuss funding to address their concern.	Funding should be provided.
J-021-068	ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS Environmental concerns must be noted for the occurrence of heavy traffic, light and heavy equipment, and military mobilization and construction materials and vehicles in which pollution will be major factor. The pollution related to air, land and sea may be impacted here on Guam. The air we breathe, the plants we eat, the deer, chickens, pigs and all livestock and the fish, seafood we eat. The remains of the ammunition and dredging equipment will affect our vegetation as the wind will be a factor in passing on the residues.	VOL 9	DEIS did not discuss funding to address their concern.	GovGuam does not have this specialized team. The need funding to train and to hire staff for GEPA to ensure public's safety and environmental effects.

for the proposed DoD buildup. This commitment has been added to the EIS.

J-021-063

Thank you for your comment. There are many reasons why the Marines (about half) are being moved from Okinawa. This discussion is provided in section 3.5.2 of the Socioeconomic Impact Assessment Study (SIAS) that is in Appendix F, Volume 9 of the Draft EIS. Serious crimes by military personnel in Okinawa are committed at a lower rate than the overall civilian population in Okinawa, despite reports to the contrary. Many serious crimes are based on singular incidents that are reported multiple times so that it appears to be multiple incidents.

The impacts of crimes on Guam are discussed in Volume 2 of the FEIS. As noted in the SIAS: "A critical distinction when analyzing crime impacts is between the total numbers of crimes ("volume of crime") and the actual crime rate (numbers divided by population). Population increases always bring with them increases in the volume of crime, but the crime rate would increase only if new populations are disproportionately likely to commit crimes."

The DoD acknowledges that any increase in population, such as the one that these proposed actions would cause, may be accompanied by a proportionate increase in crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa cause Guam residents to be concerned about possible repercussions on the island brought about by the increase in military population on Guam. The increase in population during the construction phase of the build up is recognized as a time for concern for increases in incidents of crime. Moreover, it is also acknowledged that the age group of many military personnel is often characterized as prone to conflicts and misbehavior. DoD educates its service men and woman on good behavior and will act promptly and rigorously to curtail any misconduct

DIVISION OF ADMINISTRATION

	DESCRIPTION OF IMPACT	TEXT REFERENCE	PREFERRED ALTERNATIVE / MITIGATION	RECOMMENDATIONS
J-021-069	<p>NOISE</p> <p>Noise from the construction build up and the firing ranges will also be a factor.</p> <p>Moreover, the firing range is located within a residential and a school district region.</p>	VOL 1 EXECUTIVE SUMMARY	The DEIS did not determine how.	GovGuam does not have this specialized team. The need funding to train and to hire staff to ensure safety concerns are addressed.
J-021-070	<p>HAZARDOUS MATERIALS WASTE MANAGEMENT</p> <p>We should also anticipate accidents such as oil spills, radiation/nuclear spillage or leakage, gas spills, etc. We need a specialized team for this type of clean up as it can provide serious health issues such as cancer, etc.</p> <p>What are the mitigations related to all hazardous materials related to construction, ammunition and other environmental waste? Is there a materials management spill response plan, treatment and handling, mitigation plans, etc? Establish reasonable pricing policies for community services to include military customers? Is there a recycling and waste program?</p>	VOL 1, 9 VOL 6	DEIS did not discuss the long term financing and funding to accommodate military as a significant chertile.	<p>Request an appropriate from Congress to GovGuam GEPA to hire or train staff for hazardous materials cleanup and to ensure compliance.</p> <p>There will be a need for clean up due to kinds of hazardous materials related to the dredging. This will also require a haz mat team who are trained to do the clean up spills.</p>
J-021-071	<p>MASS TRANSPORTATION & SCHOOL BUSES</p> <p>Due to the increase in population, mass transit buses and school buses will have to increase as well to accommodate the public demand. Bus stops are also in need throughout the whole island.</p>	VOL 2	DEIS did not discuss funding to address their concern.	DPW NEEDS \$10 million to purchase 53 buses for 6K additional student's.
J-021-072	<p>PROJECT COST</p> <p>What is the cost breakdown per projects? What is the scope of work? Will we be outsourcing 100% of the work? How much will DPW receive for each project, direct cost, indirect cost and administrative costs? How are the funds being received by electronic funds transfer or by US postal service?</p>	VOL 6	DEIS did not discuss funding to address their concern.	Request an appropriate from congress to GovGuam for their share in preparing us for this mandate.

and enforce laws to protect the citizens of Guam and our military personnel.

J-021-064

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of many social services on Guam and the interest to have DoD fund improvements to these services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-021-065

Thank you for your comment. A mass transportation plan is part of the 2030 Guam Transportation Plan (GTP). The Guam Regional Transit Authority (GRTA) has the responsibility to carry out the plan established in the 2030 GTP. The Department of Defense will also be developing an on-base transit system and will coordinate with GRTA to have both systems work together. The airport is in the process of updating its master plan to accommodate the increased travel due to the military build up. The port has a master plan that address the increases in cargo transport due to the military build up.

The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the US Department of Transportation (USDOT) Federal Highway Administration. The Defense Access Road Program provides the means for the Department of Defense (DOD) to pay a fair share for public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement. Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DOD commits to seeking

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Report No. 1 Volume 1 & 9

Island-wide Infrastructure:

Highway:

Roadway/Highways/Village Streets (primary/secondary/arterial roads)

Infrastructure:

Bridges/Ponding Basins/Land Acquisition/Condemnations/Sidewalks/Bus Shelters

Capital Improvement Projects:

Professional/Technical/Engineer/Architects/Construction/Inspection support for Government infrastructure projects

Public Safety

Roads/Highways Safety (signs/markings/signal/traffic signs/street lights/guardrails/roadways clearing and maintenance)

Construction/Building Safety (building permits/inspection/building safety code/flooding hazard mitigation assistance)

Public Health

Solid Waste Management (residential/commercial trash/white goods/tires/metallic/others/emergency debris cleanup) - Environmental concerns

Transportation

Public transportation (island-wide bussing of pupils/students/other emergency community and mass transit for public services)

Government-Wide Support

Public Support (building/infrastructures/recreation facilities/emergency community assistance and maintenance)

Resources, administration, maintenance support services, repairs, construction services and custodial work for government buildings and facilities

funding for these projects.

The Department of Defense, Guam Department of Public Works and Federal Highway Administration are continuing to work together to identify projects eligible for funding under the DAR program. The DoD will lead an interagency council which includes the USDOT to seek solutions to island-wide traffic issues.

J-021-066

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process. Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-021-067

Thank you for your comment. Funding for the Port's improvements (modernization) and expansion is anticipated to come from various federal agencies, GovGuam, and private sources. The funds for capital improvements would likely be repaid through user fees that would then be passed on to consumers, businesses, and other entities (i.e., DoD). DoD will work with the Port to identify possible sources of federal funds. While DoD is not directing the Port improvements, an amendment to the 2010 Defense Appropriations Bill is proposed in Congress which calls for the transfer of \$50M of DoD FY10 funds to the Department of Transportation to fund Phase I of the port improvements.

J-021-068

Thank you for your comment. Effects of the proposed action on staffing of GovGuam agencies is addressed in Chapter 16 of Volume 2. The

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DPW Operating Cost and Revenue Enhancement

Personnel/Operating Costs (increase in number of personnel, increase in Equipment & Capital-Outlay, and increase in Contractual Services for expert Consultants and/or outsourcing)

Budgetary Funding Source

Budget increase to meet direct project cost. DPW funding sources consist of the following fund type:

- o General Funds-from Legislature's General Fund appropriation
- o Guam Highway Funds-from liquid fuel taxes
- o DPW Building & Design Fund-from building fees
- o Abandoned Vehicle Streetlights Fund-Motor Vehicle license fees
- o Solid Waste Fund-Tipping Fees
- o Federal Grants In Aide FGLA (FHWA, OHS, USDOJ) – Federal Grants Award

- 1 How much is FHWA & Us DOD going to fund our projects?
 - A. How much will our construction cost?
 - B. Will the cash be received instantly or will it be in form of drawdown? If drawdowns are used, will it be in electronic EFT form so that cash will be transferred quickly to Govguam?
 - C. Do we have the necessary grant awards in place?
- 2 Does the 2030 Highway master plan include the Military Build-up, as part of it's original (population growth) assumptions.
- 3 Need technical advice & review by specialist.
 - GBB for Solid Waste
 - Parsons for Roadway Projects
 - Legal assistance
 - Other Professional
- 4 Breakdown of the 58 Roadway projects
 - Cost per Projects
 - Project name
 - Scope
 - Funding source
 - Maps
- 5 Volume 9 Appendices: does not include cost Analysis

Record of Decision will specify the mitigation measures and associated monitoring efforts to be implemented by DoD.

J-021-069

Thank you for your comment. Several mitigation measures are proposed. Adaptive program management for construction would stretch out construction time and alleviate construction noise by reducing the number of construction equipment on site at any one time, but the impacts would have a longer duration. Foliage and Barrier Attenuation would reduce noise impacts associated with the Route 15 firing ranges. Volume 2, Chapter 6.2.8 has been revised to include these mitigation measures and presents the effect of the mitigations. These mitigation measures have also been added to Volume 7, Chapter 2.

J-021-070

The DoD is committed to the protection and responsible stewardship of the environment. In addition, the DoD is committed to the safe handling and use of all hazardous substances, including fuels, lubricants, solvents, munitions and explosives of concern (MEC), nuclear materials, pesticides, herbicides, PCBs, and other hazardous substances. In fact, when feasible, the DoD attempts to reduce or eliminate the use of various hazardous substances to the greatest extent possible and substituting them for less toxic substances. When using hazardous substances, environmental laws and regulations (e.g., RCRA) must be followed by DoD that are designed to be protective of human health, welfare, and the environment. In order to implement these laws and regulations, DoD has developed various procedures, protocol, and directives designed to proactively eliminate or minimize the inadvertent leakage, spill or release of pollutants to the environment. These actions involve comprehensive administrative, engineering, and operations mandates, best management practices (BMPs), standard operating procedures (SOPs), and controls in place to prevent or minimize the inadvertent leakage, spill, or release of hazardous/toxic substances.

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Rick's Question

* What impact is expected with the military build-ups?

* How is it going to benefit the island?

* Are the roads going to minimize and utilize by military only?

* What routes are the military going to use for transportation for these machines and artilleries?

* How do we know if the money given by the US is going to be use for the structure needed?

Is the governor and senators going to play a role in this build-up?

1. Route 15 after passing Andersen South to Yigo highway site before the yigo drag strip need pave for parking lots and streetlights for safety measures.
2. Route 17 cross island road also a hiking site to Sigua and Tarzan Falls same projects needed as route 15.

Report No. 2 - Volume 2 & 3

J-021-073

1. LAND

Land acquisitions from private owners will be affected if the military wishes to develop more projects that requires more land. Acquisition, land exchange or long term lease of land would be ideal rather than imminent domain without some form of compensation

2. ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS & NOISE

Environmental concerns must be noted related to air, land and sea. The air we breathe, the plants livestock and fish, we eat. Coral will also affected from the major dredging for a new wharf. The environmental will all be contaminated from the ammunition projects and wharf activities. The noise related to construction and the ammunition will also affect the public.

3. TRAFFIC

Traffic will be affected through out the island not especially in the northern end (Andy South). Traffic will also include various construction vehicles including heavy military jeeps and other motor carrier. Road projects have been addressed within the DEIS.

4. SOLID WASTE MANAGEMENT

Waste Management will need to be reconfigured into the existing landfill plans to accommodate the huge influx of military and their dependents population. This will require a more specialized expert to review for reasonableness and adequacy.

These BMPs, SOPs, and other controls are fully described in the EIS document (Volume 7). Note that BMPs and SOPs are not considered "mitigation measures" because these actions are being done as part of existing laws and regulations and not as part of new "mitigation". However, if a leak, release, or spill is suspected or confirmed, aggressive mitigation measures are used to first clean up the leak, spill, or release as quickly as possible, followed by an assessment of risks to the public and/or the environment and a plan to remediate these risk concerns to within regulatory acceptable levels. These actions generally include environmental media (e.g., groundwater, surface water, soil, air, and/or biota) sampling and monitoring to ensure that and hazards are mitigated quickly and effectively. In many cases, part of remediation plan includes the requirement to perform regularly scheduled long-term sampling and monitoring of environmental media to ensure that remedial actions have been effective. If long-term monitoring indicates that risks to human health or the environment are still unacceptable, more aggressive remediation approaches are considered. In fact, many such clean-up efforts are underway. As part of the clean-up process, the DoD provides various opportunities for the general public, stakeholders, and other interested parties to get involved in the process. One such opportunity is Restoration Advisory Boards (RABs) where interested party questions and concerns may be communicated. For information on the status of the cleanup efforts of specific hazardous waste sites, the associated RAB provides a vehicle to obtain such information and for the general public/stakeholders to voice their concerns.

These comprehensive actions (e.g., BMPs, SOPs, etc.) will protect public health, welfare, and the environment from adverse impacts associated with the use of hazardous substances.

The DoD will be responsible for the safe handling and use of all hazardous materials and hazardous waste. In the event of an inadvertent spill, release, or leak the DoD will be responsible to ensure that clean-up occurs in an expedited manner and that risk to human

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J-021-073

5. UTILITIES AND WATER AND WASTEWATER
Customer demands for water and power will be tremendously increase due to the influx of the user population. DEIS has addressed some of the concern.

6. PUBLIC SAFETY
human trafficking and dividing the influence of drugs and or alcohol will also be a huge factor for accidents. The increase in public safety to include border controls around our harbor for illegal immigrants or drug smuggling will also be needed.

7. HOSPITALS & CLINICS

Hospital beds and health care & public health professionals will be in demand due to the influx of the outside labor of immigrants (construction related work force) population.

8. SCHOOLS
Increase in the student population will be affected. This will include all grade levels including higher education (college level).

9. LABOR FORCE
Increase in the job market in both the private and public sectors. GovGuam will need to hire more staff in the areas of health care, law enforcement, teachers, engineer inspections, safety and security personnel.

10. PUBLIC TRANSPORTATION
The need for reliable mass ground transportation is required. In additional, the airport and commercial ports must also be expanded due to increase in population for travelers and for all commodities being shipped into Guam for public consumption or for use.

11. TOURISM

The tourist industry will be affected as the population as the population increases. This means more people waiting in long lines in restaurant and other recreational facility and high occupancy rates for hotel and airline carrier.

health and the environment is minimized. Appropriate funding will be granted to ensure that DoD may accomplish this mission.

J-021-071

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-021-072

Thank you for your comment. Please see response to J-022-068.

J-021-073

Thank you for your comment. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short-term impacts of construction are managed effectively and that the long-term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

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12. REVENUES

DPW should increase our exiting fees so that we can sustain our needs related to Labor Cost & other operational costs. In additional, bonds funds related CIP and infrastructure projects should be made available. We should adopt an aggressive generating revenue fees for the following:

- Liquid Fuel Taxes
- Motor Vehicles License Fees
- Building & Design Permits Fees
- Solid Waste Tipping Fees
- Bus Fares (Field Trips)
- Increase our Federal Grant Awards from
 - USDOT
 - FHWA
 - NHTSA
 - USDOJ

VOLUME 3 Tinian

J-021-074

1. TOURISM

Due to the closeness of Tinian and Saipan to Guam, the military personnel and their families can come to Guam to visit. This will result in an increase in the number of tourist not only from the Asia market. Hotels, rental cars, restaurants and recreation will need to accommodate more customers.

2. ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS

Environmental concerns must be noted even if the training ranges are in Tinian. The pollution related to air, land and sea may be impacted here on Guam. The air we breathe, the plants we eat, the deer, chickens, pigs and all livestock and the fish, seafood we eat.

The remains of the ammunition will affect our vegetation as the wind will be a factor in passing on the residues.

3. TRAFFIC

Traffic will be affected from more tourist as well as the population growth of military and all other influx of people.

4. UTILITIES AND WATER AND WASTEWATER

Customer demands will be tremendously increase due to the influx of the user population.

Ocean water will be affected with the ammunition firing range in Tinian. The Clean Water Act should be complied with as it can pass contamination from Tinian to Guam and to other neighboring islands.

J-021-074

Thank you for your comment. 1) There is no permanent military population proposed on Tinian or Saipan as part of the proposed action of Volume 3. Training ranges on Tinian would be utilized by Marines stationed in Guam. 2) Chapter 17 of Volume 3 discusses standard operating procedures and best management practices which would be implemented when dealing with hazardous materials and waste. 3) Traffic impacts are discussed in Chapter 4 of Volume 6 for Guam and Chapter 14 of Volume 3 for Tinian. 4) Chapter 4 of Volume 3 analyzes the impacts to water resources. 5 and 6) Impacts relating to Crime and Health Care on Guam are discussed in Chapter 16 of Volume 2.

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J-021-074

5. CRIME

Crime rates will increase due to the military population.

6. HOSPITALS & CLINICS

Hospital beds and health care & public health professionals will be in demand due to the influx of the outside labor of immigrants (construction) population.

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J-021-075 | Report No. 3 - Volume 4 & 5

VOLUME 4 Aircraft Carrier Berthing

1. TOURISM

Due to the closeness of Tinian and Saipan to Guam, the military personnel and their families can come to Guam to visit. This will result in an increase in the number of tourist not only from the Asia market. Hotels, rental cars, restaurants and recreation will need to accommodate more customers.

2. ENVIRONMENTAL CONCERNS RELATED TO POLLUTION & TOXINS

Environmental concerns must be noted even if the training ranges are in Tinian. The pollution related to air, land and sea may be impacted here on Guam. The air we breathe, the plants we eat, the deer, chickens, pigs and all livestock and the fish, seafood we eat.

The remains of the ammunition and dredging equipment will affect our vegetation as the wind will be a factor in passing on the residues.

3. WATER AND WASTEWATER

Customer demands will be tremendously increase due to the influx of the user population.

Ocean water will be affected with the dredging requirements. In addition, the Clean Water Act should be complied with as it can pass contamination into our sea food and sea

animals and drinking water consumed by our human bodies and all other non human consumption.

4. DREDGING DAMAGES

Our corals will be damaged due to all of the dredging required. More importantly the ocean will be affected and the sea creatures will no longer be living in that environment.

We will then have fewer creatures and our waters will not be as beautiful as it once was.

The natural resources for corals and the surroundings will be negatively impacted. Diving, swimming, fishing and boating will prohibited in these areas.

5. HAZARDOUS MATERIALS WASTE MANAGEMENT

There will be a need for clean up due to kinds of hazardous materials related to the dredging. This will also require a haz mat team who are trained to do the clean up spills.

We should also anticipate accidents such as oil spills,

J-021-075

Thank you for your comments. These issues are addressed in the Final EIS. The table of contents in each of the Volumes provides the location of the resource discussions that provides information on the existing conditions and environmental impacts associated with the implementation of the proposed military relocation program.

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J-021-075

6. ROADS

There is a need to expand all the roads due to heavy traffic along Polaris Point. The traffic will include heavy equipment to regular automobiles for loading and unloading docks, etc.

7. COMMERCIAL PORT

There will be a need for expansion for Guam's commercial port due to the influx of the population. Large cargos with various commodities will be shipped to Guam.

VOLUME 5 Army Air and Missile Defense Task Force

Concerns are the same as above Numbers 2, 3, & 5

Report No. 4 - Volume 6 & 7

VOLUME 6 Utilities and Roadway Projects

FOOTNOTES:

A. There are several incorrect references to maps within volume 6 of the DEIS that needs to be corrected. There were multiple maps where the average user will have to go from page to page (rather than summary pages and linked per grids, etc). The maps were not user-friendly to layman readers; instead they appeared to be more confusing.

B. We need to obtain copies of the deliverables from the Matrix consultant to further analyze volumes 6 & 7 of the DEIS documentations.

C. This is a specialized subject matter area that requires professionals to review from the various capacities such as the current consultants (Parsons) and their sub-contractors, FHWA, lawyers, environmentalist, engineers, architects, CIP, inspectors, financial and other experts within the highway industry.

D. The methodologies adopted within this volume such as the Level of Service, traffic management analysis, were adequately presented and documented to support each alternatives/assessments within the DEIS study.

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J-021-075

**1. ENVIRONMENTAL CONCERNS RELATED TO
POLLUTION & TOXINS**

Environmental concerns must be noted for the occurrence of heavy traffic, light and heavy equipment, and military mobilization and construction materials and vehicles in which pollution will be major factor. The pollution related to air, land and sea may be impacted here on Guam. The air we breathe, the plants we eat, the deer, chickens, pigs and all livestock and the fish, seafood we eat. The remains of the ammunition and dredging equipment will affect our vegetation as the wind will be a factor in passing on the residues.

2. NOISE

Noise from the construction build up and the firing ranges will also be a factor.

Moreover, the firing range is located within a residential and a school district region.

3. POWER, WATER AND WASTEWATER

Customer demands will be tremendously increase due to the influx of the user population.

The Clean Water Act should be complied with as it can pass contamination into our sea food and sea animals and drinking water consumed by our human bodies and all other non human consumption.

**4. HAZARDOUS MATERIALS & WASTE
MANAGEMENT**

There will be a need for clean up due to kinds of hazardous materials related to the dredging. This will also require a haz mat team who are trained to do the clean up spills.

We should also anticipate accidents such as oil spills, radiation/nuclear spillage or leakage, gas spills, etc. We need a specialized team for this type of clean up as it can provide serious health issues such as cancer, etc.

5. ROADS

There is a need to expand all the roads due to heavy traffic along Polaris Point. The traffic will include heavy equipment to regular automobiles for loading and unloading docks, etc.

6. MASS TRANSPORTATION & SCHOOL BUSES

Due to the increase in population, mass transit buses and school buses will have to increase as well to accommodate the public demand. Bus stops are also in need throughout the whole island.

Department of Public Works
Division of Administration

Draft Environmental Impact Statement (DEIS)
Review / Impact / Comments
As of Feb.10, 2010

J-021-075

7. COMMERCIAL PORT

There will be a need for expansion for Guam's commercial port due to the influx of the population. Large cargos with various commodities will be shipped to Guam.

8. LAND ACQUISITION FOR ROADS

Will there be more land (from private homeowners) needed for this build up?

9. OHS ADDITIONAL FEDERAL GRANT FUNDINGS

Will there be more federal grant funding from OHS to promote road safety?

10. FUNDING ISSUES

Who will be paying for what projects?

Will the funding be 100% federal or will there be a matching of funds?

How about other funding sources?

- a. FHWA
- b. DOD
- c. NHTSA
- d. USDOJ

Other Funding Sources

- e. Bond Financing
- f. GHF-Liquid Fuel Taxes
- g. Mass Transit fees

11. PROJECT COST

What is the cost breakdown per projects? What is the scope of work? Will we be outsourcing 100% of the work? How much will DPW receive for each project, direct cost, indirect cost and administrative costs? How are the funds being received by electronic funds transfer or by US postal service?

VOLUME 7 - SOLID WASTE MGMT

A. This is a specialized area that requires professionals to review from the various capacity such as the receivership consultants, lawyers, judges, environmentalist, health and safety experts, engineers, architects, financial and other experts within the solid waste management industry.

Department of Public Works
Division of Administration

Draft Environmental Impact Statement (DEIS)
Review / Impact / Comments
As of Feb.10, 2010

J-021-075

1. FUNDING ISSUES

Will GovGuam receive any federal grants from military to help with our landfill costs since the military will be a large cliental? Guam will be financing the landfill closure and opening cost, but can the military provide some federal funding

As they too will benefit from the landfill (Guam cannot afford to pay this full cost when the military are also part of the cost and not 100% general public use and yet we pay 100% of the financing)? How much more in revenues will we receive due to increase in Tipping Fees? How about congressional funding such as the Clean Air and Clean Water Act, Superfund, etc.? How about a special appropriation from Congress to support Guam's solid waste management needs due to the military's base and work requirements, similar to the Defense Access Road Program funding?

2. HAZARDOUS MATERIALS

What are the mitigations related to all hazardous materials related to construction, ammunition and other environmental waste? Is there a materials management spill response plan, treatment and handling, mitigation plans, etc? Establish reasonable pricing policies for community services to include military customers? Is there a recycling and waste program?

3. OPERATIONAL COST

Cost related to SW Management will need to increase due to personnel cost and training for staff. Training needs are required for the various disciplines within waste management.

4. RECEIVERSHIP INVOLVEMENT

To what extent is the GBB receivership's (based upon the federal district courts rules) involvement related to the military buildup, DEIS planning & implementation, scope of work, etc? After GBB's work, who, when and what will happen next? DPW cannot be left out of the equation or be the clean up committee after GBB's contract is over.



Arleen Pierce <arleen.pierce@dpw.guam.gov>

Procurement Circular 2010-01 Compliance P.L. 30-72

Josephine Torres <josephine.torres@dpw.guam.gov>
To: Arleen Pierce <arleen.pierce@dpw.guam.gov>

Sun, Feb 7, 2010 at 5:28 PM

Ms. Pierce,

These were submitted on Friday.

Josephine Torres
Work: 646-3224
Cell: 888-6176

Forwarded conversation

Subject: CIP Submitted DEIS Comments

From: Josephine Torres <josephine.torres@dpw.guam.gov>
Date: Sat, Feb 6, 2010 at 5:53 AM
To: "P.E.Ray Padua" <ramon.padua@dpw.guam.gov>, Andrew Leon Guerrero <andrew.leonquerrero@dpw.guam.gov>
Cc: John Calanayan <john.calanayan@dpw.guam.gov>, Maria Duarte <maria.duarte@dpw.guam.gov>, Maryrose Wilson <maryrose.wilson@dpw.guam.gov>, Liberty Perez <liberty.perez@dpw.guam.gov>, Dionie DeLeon <dionisio.deleon@dpw.guam.gov>, Roger Capati <rogerio.capati@dpw.guam.gov>, ray junio@dpw.guam.gov, Arce Fontbuena <arce.fontbuena@dpw.guam.gov>, Jeri Calao <jccalao@yahoo.com>

The following attachments were submitted Friday, Feb 05, 2010. May I ask that you submit your comments in the proper format and forward an electronic copy in addition to the hard copy? Please refer to M Wilson and M Duarte's submittal to get an idea. Thank you and I look forward to receiving the remainder.

From: Mail Delivery Subsystem <mailer-daemon@googlemail.com>
Date: Sat, Feb 6, 2010 at 5:53 AM
To: josephine.torres@dpw.guam.gov

Delivery to the following recipient failed permanently:

ray.junio@dpw.guam.gov

Technical details of permanent failure:
Google tried to deliver your message, but it was rejected by the recipient domain. We recommend contacting the other email provider for further information about the cause of this error. The error that the other server returned was: 550 5.1.1 The email account that you tried to reach does not exist. Please try 550-5.1.1 double-checking the recipient's email address for typos or 550-5.1.1 unnecessary spaces. Learn more at 550 5.1.1 <http://mail.google.com/support/bin/answer.py?answer=6596> 11si6309276pzk.135 (state 17).

----- Original message -----

<http://mail.google.com/a/dpw.guam.gov/?ui=2&ik=e42cff53d8&view=pt&search=inbox&...> 2/8/2010

MIME-Version: 1.0

Received: by 10.231.158.205 with SMTP id g13mr1783064ibx.30.1265464428411;
Sat, 06 Feb 2010 05:53:48 -0800 (PST)

From: Josephine Torres <josephine.torres@dpw.guam.gov>

Date: Sat, 6 Feb 2010 23:53:25 +1000

Message-ID: <5b326fd71002060553w2d3cc091t7e4155461e81fc20@mail.gmail.com>

Subject: CIP Submitted DEIS Comments

To: "P.E.Ray Padua" <ramon.padua@dpw.guam.gov>,

Andrew Leon Guerrero <andrew.leonquerrero@dpw.guam.gov>

Cc: John Calanayan <john.calanayan@dpw.guam.gov>, Maria Duarte <maria.duarte@dpw.guam.gov>,

Maryrose Wilson <maryrose.wilson@dpw.guam.gov>, Liberty Perez <liberty.perez@dpw.guam.gov>,

Dionie DeLeon <dionisio.deleon@dpw.guam.gov>, Roger Capati <rogerio.capati@dpw.guam.gov>,

ray.junio@dpw.guam.gov, Arce Fontbuena <arce.fontbuena@dpw.guam.gov>,

Jeri Calaor <jccalaor@yahoo.com>

Content-Type: multipart/mixed; boundary=00504501416dbb71fb047eeee510

4 attachments

 J Calanayan DEIS Vol.9.pdf
1307K

 L Perez DEIS Vol 3.pdf
580K

 M Duarte Vol. 5.pdf
2639K

 M Wilson DEIS Vol 8.pdf
357K



Arleen Pierce <arleen.pierce@dpw.guam.gov>

Re: DEIS Report #5

Arleen Pierce <arleen.pierce@dpw.guam.gov>

Sun, Feb 7, 2010 at 4:22 PM

To: Ramon Padua <ramon.padua@dpw.guam.gov>, Joaquin Blaz <kindob@gmail.com>, Josephine Torres <josephine.torres@dpw.guam.gov>, Eleanor F Borja <eleanor.borja@dpw.guam.gov>

Cc: Andrew Leon Guerrero <andrew.leonguerrero@dpw.guam.gov>, "Lawrence 'Larry' P. Perez" <zerepyrral@yahoo.com>, Mario Garcia <mario.garcia@dpw.guam.gov>

Kin, Ray and Josephine,

I am following up on your division's response to the DEIS.
I have not received any as of today. Please advise.
Your divisions here at DPW are very much impacted.

Thank you.
aup

----- Forwarded message -----
From: Arleen Pierce <arleen.pierce@dpw.guam.gov>

Date: Tue, Feb 2, 2010 at 7:47 PM

Subject: Re: DEIS Report #5

To: "Lawrence 'Larry' P. Perez" <zerepyrral@yahoo.com>, Andrew Leon Guerrero <andrew.leonguerrero@dpw.guam.gov>

Cc: Dominic G Muna <dominic.muna@dpw.guam.gov>, Barbara Purugganan <barbara.purugganan@dpw.guam.gov>, Franklin Taitano <franklin.taitano@dpw.guam.gov>, Julie Manglona <julie.manglona@dpw.guam.gov>, Ramon Padua <ramon.padua@dpw.guam.gov>, Eleanor F Borja <eleanor.borja@dpw.guam.gov>, Bernadita Perez <bernadita.perez@dpw.guam.gov>, Gloria Cordero <gloria.cordero@dpw.guam.gov>, "Joaquin R. Blaz" <joaquin.blaz@dpw.guam.gov>, Mario Garcia <mario.garcia@dpw.guam.gov>, Cecilia D Javier <cecilia.javier@dpw.guam.gov>, Therese Matanane <therese.matanane@dpw.guam.gov>, Paul Cepeda <paul.cepeda@dpw.guam.gov>, Sandra Perez <sandra.perez@dpw.guam.gov>, Chace Anderson <candersongb@gmail.com>, Linda JI Ibanez <linda.ibanez@dpw.guam.gov>, Leopoldo Oinagan <leopoldo.oinagan@dpw.guam.gov>, Marlene Tydingco <marlene.tydingco@dpw.guam.gov>, Barbara Ann Narcis <barbaraann.narcis@dpw.guam.gov>, Jolyn <jolynjean21@yahoo.com>

Boss & Division Managers,
Attached is the DEIS report number 5 (volume 8).
Please submit all comments by Friday February 5, 2010.

Thank you.
aup

On Mon, Jan 25, 2010 at 3:38 PM, Barbara Ann Narcis <barbaraann.narcis@dpw.guam.gov> wrote:
All Division Heads:

Attached please find the Draft Environmental Impact Statement Report No. 4 for your file.

Thank you

Bobbi Narcis

<http://mail.google.com/a/dpw.guam.gov/?ui=2&ik=e42cff53d8&view=pt&q=deis&search=...> 2/8/2010

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Arleen Unpingco Pierce
Controller, Dept of Public Works
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 **DEISREPORT#5.PDF**
234K

* GUAM AND CNMI MILITARY RELOCATION *

VOLUME 9 : VISITING AIRCRAFT CARRIER
BERTHING, AND ARMY AIR
AND MISSILE DEFENSE TASK
FORCE.

J-021-076

FINDING :

NO SIGNIFICANT ENVIRONMENTAL
IMPACT ON VERTICAL HAZARD
AREAS FOR PROPOSED CONSTRUCTION
WITHIN THE VICINITY. MONITORING
THE IMPACT IS MOSTLY CONSIST
POWERING AGENCY; GUAM POWER
AUTHORITY, ENVIRONMENTAL PROTECTION
AGENCY, SOLID WASTE AND GUAM
WATERWORK AUTHORITY DILEMMA.
MONITORING IS NECESSARY DUE
DUE TO DIRECT AND INDIRECT
IMPACT TO OUR ENVIRONMENT



J-021-077

QUESTION : REGARDING OFF BASE ON ROAD
VEHICLE IN GUAM

- ① ~~THE~~ DO CONVOY MOVEMENT WILL NOT
CREATE MAJOR TRAFFIC FROM
POINT "A" TO POINT "B"
MAIN
- ② IS GUAM ROAD ARE DESIGN
FOR EXISTING ROAD FOR
MILITARY HEAVY EQUIPMENT

J-021-078

① REGARDING SOCIOECONOMIC IMPACT
DUE TO
① MILITARY BUNDUP THERE WILL BE :

J-021-076

Thank you for your comment. Monitoring and mitigation measures identified in this Final EIS are presented in all Volumes with a consolidated listing appearing in Volume 7. Final decisions on these measures would be included in the Record of Decision.

J-021-077

Thank you for your comment. For the most part, training will occur on DoD lands. When it is necessary to move military vehicles in a convoy between installations, the convoys will be scheduled to travel during off peak hours to avoid creating traffic congestion on affected roadways.

Guam's main roads and bridges are not designed to carry heavy military vehicles. To support heavy military vehicles, certain roads will be widened and pavement will be strengthened. Bridges on which military vehicles are expected to traverse will be replaced and/or widened as appropriate with the appropriate rating factor to have a load-bearing capacity that can carry heavy military vehicles.

J-021-078

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

- ① TEMPORARY INCREASE IN POPULATION RELATED TO THE CONSTRUCTION-RELATED WORK FORCE
 - ② PERMANENT INCREASE IN NUMBERS OF MILITARY AND CIVILIAN PERSONNEL AND DEPENDENTS ON GUAM.
 - ③ INCREASE IN TRANSIENT PRESENCE ON GUAM
 - ④ INCREASE IN NUMBERS AND TYPE OF MAJOR EQUIPMENT ASSETS TO SUPPORT MILITARY PERSONNEL AND OPERATION
 - ⑤ INCREASE IN NUMBER AND TYPE OF TRAINING ACTIVITIES
 - ⑥ CONSTRUCTION OF NEW FACILITIES
 - ⑦ IMPROVEMENT OF EXIST. FACILITIES
 - ⑧ IMPROVEMENT TO INFRASTRUCTURE
- Therefore there will be a "boom" in construction in public/private developments like in housing developments and services sectors and there will be shortages in men - power and mostly inspectors and engineers. Professional pay adjustment scale ^{needed} to compete with U.S. mainland to retain its existing engineers and technical staff from public and private sector.

J-021-079

Thank you for your comment.



Relocating Marines from Okinawa, Visiting
Aircraft Carrier Berthing and Army Air and
Missile Defense Task Force

Volume 3: Marine Corps Relocation -
Training on Tinian

Findings:

1. Overall there is no significant environmental
impact within Tinian, Guam or Andersen
on the land vertical height associated with
the development and construction of five
firing ranges; Air space use for
There is no requirement for special use
airspace (SUA) associated with the proposed
firing ranges, and there would be
no changes to designated airspace.
Overlying the proposed firing, mostly
the potential impact is on the resources
like the water resources, marine
biological resources, noise, airspace,
public health and safety.

2. Transportation Improvement:

- Due to military build up there will be
- o temporary increase of population related to
the construction - related ~~most~~ more
jobs within the Marianas
- o permanent increase in number of military
and civilian personnel and dependents
over.
- o Increase in transient presence in Guam, Tinian
at and then the Marianas
- If they could have also another

J-021-079

J-021-079

Source of transportation like Ferry Boat,
including the Public Port / Wharves for the
Ferry Boat within Guam, Tinian & the
Mariana's.

DEIS – Volume 5 – Army Air and Missile Defense Task Force.

J-021-080

Chapter 1. Purpose of and need for action.

The purpose is to develop land-based terminal defense and to develop infrastructure and facilities that support the presence and operation of an Air and Missile Defense Task Force (AMDTF) land based air defense capability on Guam.

Impact:

The Dept. of Public Works (DPW) is the governing agency for the procurement of construction for the Territory in conformity with 5 GCA Chapter 5. If DPW will be the project manager for construction related activities, then there would be a direct impact as DPW Capital Improvement Projects (CIP) may not have the capability due to perform and oversee construction activity due to manpower shortage in Construction Management, Contracts Management and Technical Review, Program Coordination and Quality Control, Construction Quality Control Management and Building Inspections.

Chapter 2. Proposed Action and Alternatives.

The proposed action addressed in this volume is to construct facilities an infrastructure on Guam to support relocating Army and dependent personnel, and to establish and operate an Army, AMDTF.

Impact. Same response as to Chapter 1.

J-021-081

Chapter 3. Geological and Soil Resources.

This chapter describes the potential environmental impact to geologic and soil resources associated with implementation of the alternatives within the region of influence (ROI).

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The Guam Environmental Protection Agency (GEPA) may be the leading agency to define the assessment and impact for geological and soil resources.

J-021-082

Chapter 4. Water Resources.

This chapter describes the potential consequences for water resources associated with implementation of the alternatives within the region of influence (ROI).

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The Guam Waterworks Authority (GWA), GEPA and Department of Parks and Recreation may be the leading agencies to define the

J-021-080

Thank you for your comment. The items identified in this comment are not part of the proposed action and are therefore not addressed in the EIS.

J-021-081

Thank you for your comment. The Determination of Significance for impacts to geology and soil can be found in Volume 2, Chapter 3, Section 2, Environmental Consequences. GEPA regulations were considered in analysis of impacts throughout the document.

J-021-082

Thank you for your comment. As described in the EIS, proposed construction activities would include the implementation of site- and activity-specific Best Management Practices (BMPs) to reduce potential water quality impacts.

J-021-082 | assessment and impact for geological and soil resources. DPW CIP may entertain the section as it applies to wetlands and flood mitigation.

J-021-083 | **Chapter 5. Air Quality.**
This chapter describes the potential environmental consequences associated with implementation of the alternatives within the region of influence (ROI) – North and Central – where air quality resources may be impacted.

Impact.
This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The GEPA may be the leading agency to define the assessment for air quality.

J-021-084 | **Chapter 6.**
This chapter describes the potential environmental consequences associated with implementation of the alternatives within the region for noise.

Impact.
This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The GEPA may be the leading agency to define the assessment for noise mitigation.

J-021-085 | **Chapter 7.**
This chapter describes the potential environmental consequences on airspace associated with implementation of the alternatives within the region of influence (ROI).

Impact.
This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The GEPA may be the leading agency to define the assessment on airspace.

J-021-086 | **Chapter 8.**
This section relies on the Volume 2 affected environmental description of land and submerged land ownership and use for both civilian and Department of Defense (DoD) property.

Impact.
This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. However, several agencies may have assessment such as GEPA, GWA, Dept. of Land Management, Dept. of Public Health and Social Services and it may impact land ownership and use.

J-021-083

Thank you for your comment. Air quality emissions from construction activities related to the proposed CVN requirements are covered in Volume 5 Chapter 5.

J-021-084

Thank you for your comment. Construction would occur under the proposed action and mitigation measures are proposed to avoid or reduce impacts. Adaptive program management for construction would stretch out construction time and alleviate construction noise by reducing the number of construction equipment on site at any one time, but the impacts would have a longer duration.

J-021-085

Thank you for your comment.

J-021-086

Thank you for your comment. There are no anticipated land use impacts that would affect the operations of the GovGuam agencies listed.

J-021-087

Chapter 9.

This chapter provides the assessment of potential environmental consequences associated with implementation of the alternatives within the region of influence (ROI) for recreational resources and public access.

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. However, several agencies may have assessment such as GEPA, GWA, Dept. of Land Management, Dept. of Public Health and Social Services, Dept. of Parks and Recreation as it may impact land, parks and recreational facilities.

J-021-088

Chapter 10. Terrestrial Biological Resources.

This chapter contains a description of the potential environmental consequences to terrestrial biological resources associated with implementation of the action alternatives within the region of influence (ROI).

Impact .

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. However, several agencies may have assessment such as GEPA, GWA, Dept. of Land Management, Dept. of Public Health and Social Services, Dept. of Parks and Recreation, Dept. of Agriculture as it may impact terrestrial biological resources.

J-021-089

Chapter 11. Marine Biological Resources.

This chapter contains a description of the potential environmental consequences to marine biological resources associated with implementation of the action alternatives within the region of influence (ROI).

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities.

J-021-090

Chapter 12. Cultural Resources.

This chapter contains a description of the potential environmental consequences to cultural resources associated with implementation of the action alternatives within the region of influence (ROI).

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Impact maybe for Dept. of Parks and Recreation, Dept. of Chamorro Affairs, and DPW Division of Highways.

J-021-087

Thank you for your comment.

J-021-088

Thank you for your comment.

J-021-089

Thank you for your comment.

J-021-090

Thank you for your comment.

DEIS Vol. 5
M. Duarte

J-021-091

Chapter 13. Visual Resources.

This chapter describes the potential environmental consequences with implementation of the alternatives within the region of influence (ROI) for this resources.

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Area of impact may be GEPA, DPW Division of Highway, and Dept. of Chamorro Affairs.

J-021-092

Chapter 14. Marine Transportation.

This chapter describes the potential environmental consequences associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI) for marine transportation.

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities.

Chapter 15. Utilities.

J-021-093

Chapter 16.

This chapter describes the potential environmental consequences associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI) for socioeconomic and general services.

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Areas of concern that may have direct impact due to socioeconomic impacts island-wide may be DPW Division of Highway, Guam Chamber of Commerce, Dept. of Revenue and Taxation, GPSS, GCC, UOG, DPHSS, DPS, GFD, GDISID, DYA, GVB, and/or just about all agencies of the government.

J-021-094

Chapter 17. Hazardous Materials and Waste.

This chapter describes the potential environmental consequences of hazardous materials and waste associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI).

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Areas of direct impact may be GEPA, GWA, GSA, and DRMO.

J-021-091

Thank you for your comment.

J-021-092

Thank you for your comment. The AMDTF project does not include any improvements to facilities in Apra Harbor.

J-021-093

Thank you for your comment. Economic impacts and impacts to Guam service/permitting agencies are addressed in the Socioeconomic Impact Assessment Study (Appendix F of the DEIS).

J-021-094

The DoD will be responsible for the safe handling and use of all hazardous materials and hazardous waste. In the event of an inadvertent spill, release, or leak the DoD will be responsible to ensure that clean-up occurs in an expedited manner and that risk to human health and the environment is minimized. GEPA's role (and other agencies) is to oversee and monitor the actions of DoD regarding the use and potential clean-up of hazardous materials and hazardous wastes. In this capacity GEPA should have the resources to accomplish the oversight mission.

J-021-095

Chapter 18. Public Health and Safety.

This chapter describes the potential public health and safety impacts associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI).

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Definitely, there will be a great impact as to public health and safety for the island as there will be a influx of residents subject to increased risk of contracting of disease and experiencing personal injury. Areas of impact would be DPHSS, GMH, GFD, DYA, DMH&SA, DOC, and Superior Court of Guam.

J-021-096

Chapter 19. Environmental Justice and the Protection of Children.

This chapter focuses on the potential for racial and ethnic minorities, low income populations, or children to be disproportionately affected by project-related impacts.

Impact:

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. There may be an adverse affect due to the difference ethnic groups, low income and disproportionate families. Areas of impact my, DYA, DPHSS and areas of public assistance, DMH&SA, GFD, and Superior Court of Guam.

J-021-095

Thank you for your comment. Volume 5, Chapter 18 discusses the potential public health and safety impacts of as a result of population growth associated with the Army AMDTF. Volume 5, Chapter 16 discusses the potential impact of an increased patient to health care provider ratio as a result of population growth associated with the Army AMDTF. Potential cumulative effects of the Army AMDTF action with other build up actions is addressed in Volume 7. As documented in this EIS, the DoD acknowledges the existing sub-standard conditions of social services on Guam and the interest to have DoD fund improvements to these services. DoD's ability to fund these services is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, the DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-021-096

Thank you for your comment. Significant indirect impacts to social, health care, and protective services on Guam related to the projected increase in population associated with the construction workforce and other induced development that would disproportionately affect minority and low-income populations and children are discussed in Volume 2 Chapters 16 and 19 and Volume 6 Chapter 20. DoD acknowledges the existing sub-standard conditions of key public infrastructure and services on Guam that particularly affect minority and low-income populations and children, and the interest to have DoD fund improvements to these services. DoD's ability to fund actions is limited by federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam, particularly its disadvantaged populations.

February 4, 2010



Volume 8 : Additional Items required by NEPA

J-021-097

Chapter 5: Relationship between short-term use of the environment and long-term productivity

Short-Term:

Construction is expected to overlap. This overlap is the effect of spin of economic growth. Economic opportunities could off-set by rapid population growth, labor shortages cost of living increases, temporary demands on general services that will strain the quality of life.

Long-Term :

Operations are expected to have a positive impact if planning is forecasted and anticipated, although they maybe some adjustment because of population growth then local government increase its level of services in most agencies.

Chapter 6.1.1

Sustainability and small growth work to meet the needs of present build-up without compromising the future generations.

Significance:

Their own needs are accommodated and what about the needs of the people of Guam. As we continue to study the impact we need to ensure that it will be beneficial to both local and federal government including the resident of Guam.

We need too continue to have a component for the master plan and identify every infrastructure project especially the new facilities that should comply with legal mandates including rules, regulations and international building code.

Final Analysis:

Environmental Impact Assessment should focus more to develop a milestone plan outlining the major components to a feasible, cost effective and alternative solution to the existing condition of Guam.

MRWilson:02/04/10

Cc: Coe, Eng'r. Supervisor, Eng'r III

J-021-097

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The Final EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

Through the process of public involvement that has accompanied this proposed action, the Chamorro people of Guam have voiced clearly and concisely their concern that the traditional Chamorro culture, including dance, language and traditions, will be forgotten. While population increases can highlight cultural differences, they also present unique opportunities for cultural learning and sharing. As noted in the Final EIS, the DoD plans for cultural sensitivity orientation and awareness programs will focus on mutual respect and tolerance and strive to educate all incoming and currently present military personnel on the rich and varied cultural history that has created the culture that is Guam today. Finally, the DoD plans to increase military civilian joint activities in order to foster strong and mutually beneficial military civilian relationships that include the sharing and understanding of culture.



Fwd: DEIS

Thursday, February 11, 2010 7:12 PM

From: "Arleen Pierce" <arleen.pierce@dpw.guam.gov>
To: "Marlene Tydingco" <marlene.tydingco@dpw.guam.gov>, "Jolyn" <jolynjean21@yahoo.com>
1 File (191KB)



img09813.tif

Mar,
Pls include into your compilation.

Jo,
Pls print attachment for me.

Thank you.
aup

----- Forwarded message -----

From: **Liberty A. Perez** <liberty.perez@dpw.guam.gov>
Date: Thu, Feb 11, 2010 at 5:40 PM
Subject: DEIS
To: Ramon Padua <ramon.padua@dpw.guam.gov>, Andrew Leon Guerrero <andrew.leonguerrero@dpw.guam.gov>, Josephine Torres <josephine.torres@dpw.guam.gov>, Arleen Pierce <arleen.pierce@dpw.guam.gov>, Mario Garcia <mario.garcia@dpw.guam.gov>, "Liberty A. Perez" <libertyperez_pe@yahoo.com>

COE/Acting Director

For your review, comment.

Thanks...

Liberty

--

Arleen Unpingco Pierce
Controller, Dept of Public Works
542 N. Marine Drive
Tamuning, Guam 96913
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Defense Task Force Relocating Marines From Okinawa, Visiting Aircraft Carrier Berthing and Army Air and Missile

VOLUME 3: Marine Corps Relocating-Training on Tinian

Chapter I: Introduction

Purpose of and Need of Action:

Volume 3- focuses on development and construction of facilities to support training and operation that would occur on Tinian in Commonwealth of the Northern Marianas Island (CNMI) associated with the proposed United States (US) Marine Corps relocation in Guam.

Significance:

The potential/significance impact on Guam is the waste materials that the military will be taking back to Guam.

Final Analysis:

I. For a Small Island Developing States (SIDS) like Guam the disposal of waste is a serious constraint to a sustainable development; the limited land area and resources of a safe disposal. Due to military build up there will be:

1. There will an increased of population.
2. Unsustainable consumption patterns.
3. Increase of imports of polluting and hazardous substances.
4. Combined to make pollution prevention.
5. The management of waste critical issue.
6. Post closure of Ordot Landfill (Consent Decree)
7. Opening of Layon Landfill
8. Long term disposal options limited

Guam needs to develop a modern dependable and efficient waste management system which would be accessible to all people of Guam and foster participation of the federal, local government and of private sector in a structured manner.

Guam must establish a minimum waste diversion of ninety five percent (95%) and five (5%) land filling and securing at least fifty years of processing and disposal capacity.

To facilitate reaching these goals Guam must convert Layon landfill into a Layon Integrated Waste Management Center (LIWMC) and shall consists of the following structures/buildings, mechanical technologies to attain 95% waste diversification and 5% landfilling:

J-021-098

Thank you for your comment. DoD has prepared the Guam Solid Waste Utility Study that looks at the existing and projected solid waste volumes generated from the future Marine Corp buildup. Estimates for this Utility Study were developed using Marine Corps Base (MCB) Hawaii, Kaneohe Bay (KB) solid waste characterization analysis. Solid waste generation activities for military installation on Guam and MCB Hawaii-KB are similar. Both military installations have similar facilities including maintenance shops, administrative offices, commissary and exchange facilities, fast-food establishments, club operations, family housing and unaccompanied personnel housing. The results of the solid waste characterization study will be incorporated into the FEIS.

The DoD has also prepared a Construction and Demolition (C&D) Debris Reuse and Diversion Study which addresses the anticipated waste streams during the demolition of old buildings and construction of new facilities identified in the EIS. The study also addresses green waste that will be generated from clearing many acres of vegetation. The goal of the study is to divert 50% of the C&D debris by the end of fiscal year 2015.

The non-DoD project solid waste volumes will be handled in accordance with the existing Guam Integrated Solid Waste Management Plan (ISWMP). GBB is expediting the closure of Ordot and the opening of Layon in the most expeditious manner possible.

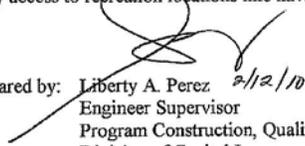
DoD is in the process of updating the military Integrated Solid Waste Management Plan (ISWMP) to reflect how waste will be managed now and in the future. The updated DoD ISWMP will include any new information from studies and reports that have been conducted as part of the NEPA process.

J-021-098

1. Waste Reception: Waste treatment and sorting
2. Exploiting technological synergies: composting and digestion (aerobic/anaerobic).
3. Pre-processing for optimal recycling and energy capture.
4. Recycling: The waste must be separated into two principal waste flows: wet (organic) and dry. The wet must be taken to organic treatment area. The dry fraction undergoes further sorting processes (manual, optical and magnetic) designed to recover the highest amount recyclable materials.
5. Automatic Sorting Equipment: Maximum Recovery Materials
6. Waste to Energy Plant: Energy recovery such as:
 - a. Mechanical Biological Treatment Plant: Organic materials
 - b. Advance Thermal Treatment Plant: Refuse-Derived fuel through advance thermal processes becomes electricity.
7. Construction and Demolition Waste Treatment
8. Landfill Area
9. Waste Water Treatment Plant: Water and Air Control. In LIWMC must never discharge any waste water into the surrounding sanitary sewer system or surface waters.

LIWMC concept must specifically address concerns regarding potential odors, diseases carriers such as rats and flies, litter derived from delivery vehicles and waste processing noise. The design of the concept must such that delivered waste is immediately covered and surrounded by enclosed buildings. As a result, a negative visual impact was avoided when we isolated the waste from surrounding neighborhoods. The processing systems and buildings must be kept under negative air pressure with all facility process air being subjected to biologic filtration aimed at the elimination of substances that produces odors such as mercaptans, amines and amides. Maintaining waste processes within closed buildings also minimizes facility noise to the site surroundings.

II. Due to military build up, there will be an increased of population and you should have intermodal transportation within the Micronesia, were people can easily transient, easy access to recreation locations like having a Perry boat.

Prepared by:  Liberty A. Perez 2/12/10
Engineer Supervisor
Program Construction, Quality Control Section
Division of Capital Improvement Projects



Department of Public Works Capital Improvement Projects - Verticals



GUAM AND CNMI MILITARY RELOCATION EIS/OEIS

**Comments on:
DRAFT ENVIRONMENTAL IMPACT
STATEMENT (DEIS)**

VOLUME 2 : MARINE CORPS RELOCATION

Chapter 2 Proposed Action Alternative

J-021-099

There will be an increase of aerial operations by the military aircraft due to the military build-up. This will obviously affect the off-base civilian communities. The noise and vibration levels will create much larger envelopes whereby the off base civilian facilities within these envelopes will have to be retrofitted and insulated. As buildings and dive lungs were constructed before the advent of the military build-up retrofitting will be required.

Noise inside the buildings and residential dwellings can be reduced by sound insulation. Similarly, there should be some method of reducing the effects of vibrations to these structures. Although our structures are constructed following the federal specifications, the military may still require additional supplemental specifications/standards for their structures to be "livable".

If these environment impact military standards are not incorporated to building facilities for the civilian community, then there will be adverse effects to the people staying closer to the base. Very particularly, are the safety and health concerns of the residents/occupants and DOD components, who are afforded off-base housing.

Recommendations:

The military should appropriate funds for the civilian communities affected by their operations. This can be estimated by determining how much it will cost to retrofit the facilities structurally due to considerable destructive vibrations, and to provide insulation to reduce the noise to an acceptable level. Structures for future construction shall add up to these requirements. These will entail additional costs which shall be borne by the military.

Chapter 5 Air Quality

J-021-100

This is another concern that as the air-craft takes off ^{AND LANINGS} on ~~one~~ lanes on the runways, a considerable fuel exhaust is generated thereby, polluting the atmosphere and is detrimental.

Recommendation:

A protective measure shall be devised to monitor the air quality within an acceptable level. In case of emergency, military operations which may happen occasionally or inevitable war, the military training involving operations should be properly scheduled considering the safety and health concerns of the local communities. Air quality should be more closely coordinated with the Guam Environmental Protection Agency.

J-021-099

Thank you for your comment. Soundproofing by the USMC in high noise areas is not planned at this time because of several factors. Each individual structure has noise reduction capabilities and the average reduction for windows closed is about 25 dBA and 15 dBA with windows open (personal communication, Czech 2010). The amount of reduction for a specific structure depends upon many factors including; source and intensity of the noise, age of the structure, quality of construction, type and quality of building materials, topography, other structures nearby, and the proximity of trees around the structure. Furthermore, at this time funds for soundproofing are not allowed because regulations prohibit using USMC project funds for improvements to property which the Navy/USMC does not have a real property interest.

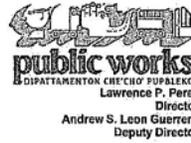
J-021-100

Thank you for your comment. The emissions from aircraft landing and taking off at Andersen AFB and from various pattern training flights at Andersen AFB and other airfields were estimated using the methods and emission factors obtained from the US Environmental Protection Agency, the Navy's Aircraft Environmental Support Office, and Air Force Center for Environmental Engineering and Excellence (See Volume 2, Section 5.2.1). The predicted emissions (see Tables 5.2-3 and 5.2-4) are not considered significant as per the significant threshold discussed in the DEIS. Therefore, no additional emissions monitoring is considered necessary.



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor



Lawrence P. Perez
Director
Andrew S. Leon Guerrero
Deputy Director

**Department of Public Works - Division of Engineering
CAPITAL IMPROVEMENT PROJECTS**

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VOLUMES I & II - Marine Corps Relocation- GUAM

Chapter I: Introduction

Purpose of and Need of Action:

Volume 1 & 2 - Focuses on the following:

1. Marine Corps. (a) Develop and construct facilities and infrastructure to support approximately 8,600 marines and their 9,000 dependents relocated from Okinawa to Japan (b) Develop and construct facilities and infrastructure to support training and operations on Guam and Tinian for the relocated Marines.
2. Navy. Construct a new deep-draft wharf with shoreside infrastructure improvements creating the capability in Apra Harbor, Guam to support transient nuclear powered aircraft carrier.
3. Army. (a) Develop facilities and infrastructure on Guam to support relocating 600 military personnel and their 900 dependents to establish and operate an Army AMDTP.

Significance:

The potential/significance impact on Guam is the geologic disturbance there might have an impact on the earth plates and erosion.

Final Analysis:

Due to Military Build Up there will be:

- I. An Increase of Population. Intermodal Transportation. We need additional roads but you cannot expand the roads due to limited rights of way, limited land. We need additional source of transportation like:
 1. Monorail in Guam: Need reliable public transportation, protect the environment, pollution; lessen vehicle on the road;
 2. Improve the Public Transportation like the busing.
- II. Increase in Population & Massive Developments on the Military Bases/Properties, Public, An Private Properties, there is geologic disturbances and significant impacts on the following :
 1. Earth Plates: Guam has a history of 8.1 magnitude earthquake in 1993 and all Public Buildings, Facilities has to be upgraded to meet Seismic Zone 4, and 2009 New International Building Code, especially the Public Schools.
 2. Erosion Control: The significant impact to Guam is flooding. Flood control should be address in this military buildup in every Guam Villages; ponding

DPW CIP /DEIS Comment

2-2

Volume 2

J-021-101

Thank you for your comment.

Seismic risks on Guam are addressed in every area/Alternative of the EIS as follows: Hazards associated with earthquakes, fault rupture, slope instability and liquefaction would be minimized by adherence to UFC 3-310-04 Seismic Design for Buildings (USACE 2007).

Impacts to soil and geological resources due to hazards have been determined to be less than significant.

Erosion will be controlled with best management practices (BMPs). The implementation of BMPs is included in every area/Alternative of the EIS. A complete list of BMPs that will be implemented can be found in Volume 7.

J-021-102

Thank you for your comment. The 2030 Guam Transportation Plan outlines recommendations for an improved mass transit system on Guam. These recommendations included forming the Guam Mass Transit Authority and implementing high-capacity bus service on the island. In late 2009/early 2010, the Guam Regional Transit Authority (GRTA) was formed and will now be responsible for all public transit functions. The GRTA approved the Guam Transit Business Plan in January 2010, which includes purchasing new buses, constructing a bus maintenance facility, and modifying the bus schedule.

J-021-103

Thank you for your comment. The Final EIS includes an updated discussion and analysis of potential measures that would be implemented to reduce impacts from stormwater flooding.

J-021-101

J-021-102

J-021-103

J-021-103

basins, storm drain, curved and gutter must be included in all road construction, all waterways must be cleared and upgraded, seashore protections all over the island especially in the south.

VOLUME 3 : MARINE CORPS RELOCATION –TRAINING ON TINIAN

Chapter I: Introduction

Purpose of and Need of Action:

Volume 3- focuses on development and construction of facilities to support training and operation that would occur on Tinian in the Commonwealth of the Northern Marianas Island (CNMI) associated with the proposed United States (US) Marine Corps relocation in Guam.

Significance:

J-021-104 The potential/significance impact on Guam is the waste materials that the military will be taking back to Guam.

Final Analysis:

I. For a Small Island Developing States (SIDS) like Guam the disposal of waste is a serious constraint to a sustainable development; the limited land area and resources of a safe disposal. Due to military build up there will be:

1. An increased population.
2. Unsustainable consumption patterns.
3. Increase of imports of polluting and hazardous substances.
4. Combined to make pollution prevention.
5. The management of waste critical issue.
6. Post closure of Ordot Landfill (Consent Decree)
7. Opening of Layon Landfill
8. Long term disposal options limited

Guam needs to develop a modern dependable and efficient waste management system which would be accessible to all people of Guam and foster participation of the federal, local government and of private sector in a structured manner.

Guam must establish a minimum waste diversion of ninety five percent (95%) and five (5%) land filling and securing at least fifty years of processing and disposal capacity.

To facilitate reaching these goals Guam must convert Layon landfill into a Layon Integrated Waste Management Center (LIWMC) and shall consists of the following structures/buildings, mechanical technologies to attain 95% waste diversification and 5% landfilling:

1. Waste Reception: Waste treatment and sorting
2. Exploiting technological synergies: composting and digestion

J-021-104

Thank you for your comment. The Navy is preparing a Recycling and Solid Waste Diversion Study for DoD Bases, Guam that has established a diversion goal of 50 percent, not including construction and demolition debris. The Study is considering the following alternatives: 1) DoD would construct two refuse transfer facilities, one in northern Guam and one in Southern Guam; 2) DoD would implement a source separation recycling program at all facilities; 3) DoD would construct recycling center(s); and 4) DoD would construct a materials resource recovery facility.

The DoD has also prepared a Construction and Demolition (C&D) Debris Reuse and Diversion Study which addresses the anticipated waste streams during the demolition of old buildings and construction of new facilities identified in the EIS. The study also addresses green waste that will be generated from clearing many acres of vegetation. The goal of the study is to divert 50% of the C&D debris by the end of fiscal year 2015.

The non-DoD project solid waste volumes will be handled in accordance with the existing Guam Integrated Solid Waste Management Plan (ISWMP). GBB is expediting the closure of Ordot and the opening of Layon in the most expeditious manner possible. DoD is in the process of updating the military ISWMP to reflect how waste will be managed now and in the future. The updated DoD ISWMP will include any new information from studies and reports that have been conducted as part of the NEPA process.

J-021-105

Thank you for your comment.

J-021-104

- (aerobic/anaerobic).
3. Pre-processing for optimal recycling and energy capture.
 4. Recycling: The waste must be separated into two principal waste flows: wet (organic) and dry. The wet must be taken to organic treatment area. The dry fraction undergoes further sorting processes (manual, optical and magnetic) designed to recover the highest amount recyclable materials.
 5. Automatic Sorting Equipment: Maximum Recovery Materials
 6. Waste to Energy Plant: Energy recovery such as:
 - a. Mechanical Biological Treatment Plant: Organic materials
 - b. Advance Thermal Treatment Plant: Refuse-Derived fuel through advance thermal processes becomes electricity.
 7. Construction and Demolition Waste Treatment
 8. Landfill Area
 9. Waste Water Treatment Plant: Water and Air Control. In LIWMC must never discharge any waste water into the surrounding sanitary sewer system or surface waters.

LIWMC concept must specifically addresses concerns regarding potential odors, diseases carriers such as rats and flies, litter derived from delivery vehicles and waste processing noise. The design of the concept must such that delivered waste is immediately covered and surrounded by enclosed buildings. As a result, a negative visual impact was avoided when we isolated the waste from surrounding neighborhoods. The processing systems and buildings must be kept under negative air pressure with all facility process air being subjected to biologic filtration aimed at the elimination of substances that produces odors such as mercaptans, amines and amides. Maintaining waste processes within closed buildings also minimizes facility noise to the site surroundings.

J-021-105

II. Due to military build up, there will be an increased of population and you should have intermodal transportation within the Micronesia, were people can easily transient, easy access to recreation locations like having a ferry boat.

VOLUME 4 : AIRCRAFT CARRIER BERTHING

Chapter 1. – Purpose and Need For Action

J-021-106 The purpose is to develop the new deep-draft wharf with shoreside infrastructure improvement, creating the capacity to support a transient nuclear powered aircraft carrier.

Impact :

This chapter may have no direct impact to the Department of Public Works, Capital Improvement Project, of the Government of Guam, the proposed implementation of the alternative within the region of influence are under the military responsibility, the construction and operation are subject for navy guidelines, laws and international standards. The Guam Environmental Protection Agency (GEPA), Army Corps of Engineers, the local Department of Agriculture, Bureau of Statistics and Planning-Coastal Zone Management, Department of Agriculture Fish and Wildlife with mandate for preservation and other Government agencies involve for the protection of environment are the leading agencies to define the assessment and impact of any construction and operation within the region of influence (ROI).

Chapter 2. - Proposed Action and Alternatives

This chapter begins with a description of operation, facilities and design standards, the navy propose to construct a new deep-draft wharf with shore side infrastructure, channel realignment and other improvement in Apra Harbor.

Impact :

J-021-107 Channel realignment, new proposed wharf alignment for Polaris point and former Shipyard Repair Facilities (SRF). The proposed upgrading and construction operation may not have any direct impact to the Department of Public Work, Capital Improvement Project Division. However, during the operation for demolition, solid waste disposal may have an impact on the island landfill, the volume and capacity of debris and other hazardous material should be accounted and reported to the proper authorities. The upgrading of Apra Harbor, construction operation may have direct impact with other leading agencies of the Government of Guam, such as Guam Environmental Protection Agency (GEPA), Army Corps of Engineers, Department of Agriculture for the protection of preserve coastal area, Bureau of Statistics and Planning-Coastal Zone Management. For further study, how safe for the island population health in the event nuclear emergency, particularly any damage to the reactor during the transient visit of this carriers.

Chapter 3. – Geological and Soil Resources

This chapter describes the potential environmental impact associated the upgrading and operation for the implementation of the proposed action and alternative.

J-021-106

Thank you for your comment.

J-021-107

Thank you for your comment. The Navy is preparing a Construction and Demolition (C&D) Debris Reuse and Diversion Study for DOD Bases, Guam that addresses waste characterization, processing, recycling and disposal of construction debris. Information from this study will be used to update the FEIS.

The study is considering the following alternatives: 1) Contractors would continue to process all C&D debris, and DoD would construct a composting facility to process green waste and 2) DoD would construct a C&D debris central processing facility and a composting facility to process green waste.

Through project specific contractual requirements, DoD contractors would be required to process and divert 50% of C&D debris that is generated on each project. Another alternative would be for the DoD to construct a central processing facility that would be used to recover and reuse or recycle scrap metal, concrete (without lead-based paint), asphalt concrete, and untreated wood. Contractors would be required to haul C&D to this facility. Based on the C&D debris composition assumed in the study, the Navy will be able to achieve a C&D debris waste diversion goal of greater than 50% by the end of fiscal year 2015. A site for the central processing facility is currently being evaluated but will most likely be located in northern Guam. Disposal of C&D debris that is not divertible or recyclable will be disposed at the Navy Hardfill at Apra Harbor. The study also evaluates the construction of a composting facility to handle green waste generated by land clearing activities required for new development.

Impact :

J-021-110 | This chapter may have no direct impact to the Department of Public Works-Capital Improvement Project Division. All propose construction operation will be under the Navy Engineering Standard and Operation Procedure. The Guam Environmental Protection Agency (GEPA), Army Corps of Engineers, the local Department of Agriculture, Bureau of Statistics and Planning-Coastal Zone Management and other Government agencies involve for the protection of environment are the leading agencies to define the assessment and impact of any construction and operation within the region of influence (ROI).

Chapter 4 ~ 19

J-021-111 | Have no direct impact to DPW CIP Division, other Government of Guam agencies concerned with environmental issues are the proper agencies to assess the impact on environment vs population growth. The consequences and effect of military bases upgrading or development on our island resources must be carefully assess^{ed}.

CHAPTER 4	WATER RESOURCES - GEPA, GWA, Army Corps of Engineer
CHAPTER 5	AIR QUALITY- study the effect on the population close to the ROI
CHAPTER 6	NOISE- study the effect on the population close to the ROI
CHAPTER 7	AIR SPACE- should be regulated safe enough from community
CHAPTER 8	LAND AND SUBMERGE LAND USE - DLM mandate, DOA
CHAPTER 9	RECREATIONAL RESOURCES - GVB must regulate the location.
CHAPTER 10	TERRESTRIAL BIOLOGICAL RESOURCES-GEPA, GHS
CHAPTER 11	MARINE BIOLOGICAL RESOURCES
CHAPTER 12	CULTURAL RESOURCES
CHAPTER 13	VISUAL RESOURCES
CHAPTER 14	TRANSPORTATION .
CHAPTER 15	UTILITIES- Should be upgraded at least for the next 20 years
CHAPTER 16	SOCIOECONOMICS AND GENERAL SERVICES
CHAPTER 17	HAZARDOUS MATERIAL AND WASTE-GEPA
CHAPTER 18	PUBLIC HEALTH AND SAFETY-All population should be aware of consequences for this action

Chapter 19 Environmental Justice and Protection of Children

J-021-112 | Children are our future, at all cost, the Government should invest for the safety of our innocent little one for our future generation.

Chapter 20 Reference, List Of Figure, List Of Table

J-021-108

Thank you for your comment. DoD will continue to coordinate with the agencies referenced in your comment.

J-021-109

Thank you for your comment. Volume 4, Section 18 indicates that all Naval Nuclear Propulsion Program (NNPP) activities have plans in place that define responses to a wide range of emergency situations. These plans are regularly exercised to ensure that proficiency is maintained. These exercises consistently demonstrate that Navy personnel are well prepared to respond to emergencies regardless of the location. Actions are taken to continually evaluate and improve emergency preparedness. If there ever were a radiological emergency, civil authorities would be promptly notified and kept fully informed of the situation. Local civil authorities would determine appropriate public actions, if any, and communicate this information via their normal emergency communication methods. The EIS does not identify specific funding sources for training, and equipping public emergency responders.

J-021-110

Thank you for your comment.

J-021-111

Thank you for your comment.

J-021-112

Thank you for your comment. DoD understands your concerns about Guam's children and recognizes the significance of impacts that may affect them. The FEIS has been updated (Volumes 2 and 6) to better address impacts on infrastructure and services that would affect children. In addition to mitigation measures summarized in Volume 7, DoD is leading a federal inter-agency effort to identify other federal programs

**VOLUME 5: ARMY AIR AND MISSILE DEFENSE
TASK FORCE**

Chapter 1.

J-021-113 Purpose of and need for action: The purpose is to develop land-based terminal defense and to develop infrastructure and facilities that support the presence and operation of an Air and Missile Defense Task Force (AMDTF) land based air defense capability on Guam.

Direct Impact:

The Dept. of Public Works (DPW) is the governing agency for the procurement of construction for the Territory in conformity with 5 GCA Chapter 5. If DPW will be the project manager for construction related activities, then there would be a direct impact as it will significantly affect DPW Capital Improvement Projects (CIP) capability to perform and oversee construction activity due to manpower shortage in Construction Management, Contracts Management and Technical Review, Program Coordination and Quality Control, Construction Quality Control Management and Building Inspections and Permitting.

Indirect Impact.

The development of the terminal defense infrastructure and facilities that support the AMDTF may affect other areas due to the flight path of air carriers in the residential zone and surrounding areas, noise mitigation, hazard exposure to incoming and outgoing flights, requirement for air space and height restrictions on high rise structural building. Review on this chapter may have an indirect impact and less significant to DPW CIP, but may have a direct impact and highly significant to DPW Division of Highway and Guam Environmental Protection Agency (GEPA).may be the lead agency for their review and assessment as it affects the environment (land and air), traffic management and highway encroachment. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

DEIS does not identify or address the funding source for this chapter. More so, there are no alternative method of funding source introduce (100% federal fund or matching fund). Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 2.

Proposed Action and Alternatives. The proposed master planning action for AMDTF on Guam contains three missile components: (1) The Terminal High Altitude Area Defense; (2) Patriot Missile; and (3) A Surface-Launched Advanced Medium-Range Air-to-Air Missile.

DPW/CIP
DEIS Comments

5-1

VOLUME 5

and funding sources that could benefit the people of Guam including children.

J-021-113

Thank you for your comment. The items identified in this comment are not part of the proposed action and are therefore not addressed in the EIS.

J-021-114

Thank you for your comment.

Direct Impact:

J-021-113

The Dept. of Public Works (DPW) is the governing agency for the procurement of construction for the Territory in conformity with 5 GCA Chapter 5. If DPW will be the project manager for construction related activities, then there would be a direct impact as it will significantly affect DPW Capital Improvement Projects (CIP) capability to perform and oversee construction activity due to manpower shortage in Construction Management, Contracts Management and Technical Review, Program Coordination and Quality Control, Construction Quality Control Management and Building Inspections and Permitting.

Indirect Impact:

The development of the terminal defense infrastructure and facilities that support the AMDTF may affect other areas due to the flight path of air carriers in the residential zone and surrounding areas, noise mitigation, hazard exposure to incoming and outgoing flights, requirement for air space and height restrictions on high rise structural building. Review on this chapter may have an indirect impact and less significant to DPW CIP, but may have a direct impact to DPW Division of Highway and Guam Environmental Protection Agency (GEPA) may be the lead agency for their review and assessment as it affects the environment (land and air), traffic management and highway encroachment. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source: DEIS has identified funds for the construction of the required facilities.

Chapter 3. Geological and Soil Resources

This chapter describes the potential environmental impact to geologic and soil resources associated with implementation of the alternatives within the region of influence (ROI).

J-021-114

Indirect Impact:

This chapter may have indirect impact to the DPW CIP Division unless it involves construction related activities. The Guam Environmental Protection Agency (GEPA) may have a direct impact and greater significant as GEPA is the leading agency to define the assessment and impact for geological and soil resources. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 4. Water Resources.

This chapter describes the potential environmental consequences associated with the implementation of the alternatives within the region of influence (ROI) for water resources.

J-021-115 Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The Guam Waterworks Authority (GWA), GEPA, Department of Agriculture and Department of Parks and Recreation may be the leading agencies to define the assessment, impact and significant for geological and soil resources. DPW CIP may entertain this section as it applies to wetlands and flood mitigation. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

J-021-116 Funding Source: Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 5. Air Quality.

J-021-117 This chapter describes the potential environmental consequences associated with implementation of the alternatives within the region of influence (ROI) – North and Central – where air quality resources may be impacted.

Indirect Impact. This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The GEPA may be the leading agency to define the assessment, impact and significant, and standards for air quality. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source: Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 6.

J-021-118 This chapter describes the potential environmental consequences associated with implementation of the alternatives within the region for noise.

Indirect Impact.

J-021-115

Thank you for your comments.

J-021-116

Thank you for your comment. Prior to construction, the funding source(s) would be identified. Potential mitigation measures associated with the Preferred Alternative are discussed in Section 4.2.2.4 of the Final EIS.

J-021-117

Thank you for your comment. As noted in the comment, the only potential impacts to air quality are associated with construction-related activities. No mitigation measures are required, as emissions would be below criteria levels (i.e., below 250 tons per year [TPY] threshold or 100 TPY SO2 threshold applicable for SO2 nonattainment areas). Funding sources are not identified in the air quality chapters, as these chapters focus on existing conditions and impacts.

J-021-118

Thank you for your comment. The mitigation measure of adaptive program management for construction would stretch out construction time and alleviate construction noise by reducing the number of construction equipment on site at any one time, but the impacts would have a longer duration.

J-021-118 This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The GEPA and DPW Division of Highway may be the leading agency to define the assessment, impact and standards for noise mitigation. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 7.

J-021-119 This chapter describes the potential environmental consequences on airspace associated with implementation of the alternatives within the region of influence (ROI).

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. The GEPA may be the leading agency to define the assessment, impact and significant on airspace. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 8.

J-021-120 This section relies on the Volume 2 affected environmental description of land and submerged land ownership and use for both civilian and Department of Defense (DoD) property.

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. However, several agencies may have a direct impact such as GEPA, GWA, Dept. of Land Management, Dept. of Public Health and Social Services and it may impact land ownership and land use. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

J-021-119

Thank you for your comments. There would be no construction required for establishing proposed Special Use Airspace and there would be no construction mitigation required under this proposal.

J-021-120

Thank you for your comment.

J-021-120 Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 9.

J-021-121 This chapter provides the assessment of potential environmental consequences associated with implementation of the alternatives within the region of influence (ROI) for recreational resources and public access.

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. However, several agencies may have assessment such as GEPA, GWA, Dept. of Land Management, Dept. of Public Health and Social Services, Dept. of Parks and Recreation as it may impact land, parks and recreational facilities, health and welfare. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 10.

J-021-122 Terrestrial Biological Resources. This chapter contains a description of the potential environmental consequences to terrestrial biological resources associated with implementation of the action alternatives within the region of influence (ROI).

Indirect Impact. .

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. However, several agencies may have direct impact such as GEPA, GWA, Dept. of Land Management, Dept. of Public Health and Social Services, Dept. of Parks and Recreation, Dept. of Agriculture as it may have a direct impact and significant to terrestrial biological resources, destruction to the land, loss of habitat, and standards of living. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

J-021-121

Thank you for your comment.

J-021-122

Thank you for your comment. Indirect impacts from such things as noise, lighting, and activity are not expected for the actions being proposed in Volume 5, except for the weapons emplacement site alternatives where it was considered.

J-021-122 | **Funding Source:**

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 11.

J-021-123 | Marine Biological Resources. This chapter contains a description of the potential environmental consequences to marine biological resources associated with implementation of the action alternatives within the region of influence (ROI).

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 12. Cultural Resources.

J-021-124 | This chapter contains a description of the potential environmental consequences to cultural resources associated with implementation of the action alternatives within the region of influence (ROI).

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Several agencies such as Dept. of Parks and Recreation, Dept. of Chamorro Affairs, and DPW Division of Highways may have direct impact and significant as it affects environmental and cultural resources, and historic preservation. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

J-021-123

Thank you for your comment. The EIS performed sediment transport modeling regarding indirect impacts from dredging activities, including worse-case scenarios based on multiple factors. Mitigation measures and BMPs are discussed in the is Chapter and summarized in Volume 7.

The identification of funding sources is not required under NEPA. This is a planning document not a funding document.

J-021-124

Thank you for your comment. Mitigation measures are summarized in Volume 7 of this Final EIS.

J-021-124 Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 13. Visual Resources.

J-021-125 This chapter describes the potential environmental consequences with implementation of the alternatives within the region of influence (ROI) for this resources.

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Area of impact and significant may be GEPA, DPW Division of Highway, and Dept. of Chamorro Affairs, Guam Visitors Bureau as my affect vistas and overlooks. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 14. Marine Transportation.

J-021-126 This chapter describes the potential environmental consequences associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI) for marine transportation.

Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

J-021-125

Thank you for your comment. In the event DoD becomes engaged with GovGuam DPW CIP in the construction management, efforts will be made to identify and/or address encumbered funding sources established under terms and conditions for construction activities discussed in said chapter 13.

J-021-126

Thank you for your comment. The proposed action would impact locations in the central and northern portions of Guam. The anticipated effects of the alternatives are discussed in other chapters of Volume 5; there will be no impact to marine transportation.

Chapter 15. Utilities.

Chapter 16.

J-021-127 This chapter describes the potential environmental consequences associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI) for socioeconomic and general services.

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Areas of concern that may have direct impact and significance to socioeconomic impacts island-wide may be DPW Division of Highway, Guam Chamber of Commerce, Dept. of Revenue and Taxation, GPSS, GCC, UOG, DPHSS, DPS, GFD, GDISID, DYA, GVB, and/or just about all agencies of the government. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 17. Hazardous Materials and Waste.

J-021-128 This chapter describes the potential environmental consequences of hazardous materials and waste associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI).

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. Areas of direct impact and significance may be GEPA, GWA, GSA, and DRMO as it may impact soils, surface water, groundwater, air and biota. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

J-021-127

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-021-128

Thank you for your comment. The DoD will be responsible for the safe handling and use of all hazardous materials and hazardous waste. In the event of an inadvertent spill, release, or leak the DoD will be responsible to ensure that clean-up occurs in an expedited manner and that risk to human health and the environment is minimized. GEPA's role (and other agencies) is to oversee and monitor the actions of DoD regarding the use and potential clean-up of hazardous materials and hazardous wastes. In this capacity GEPA should have the resources to accomplish the oversight mission.

Appropriate levels of funding will be granted to the DoD to ensure that the safe handling and use of hazardous materials and hazardous waste and any necessary clean-up may be performed.

Chapter 18. Public Health and Safety.

J-021-129 This chapter describes the potential public health and safety impacts associated with implementation of the alternatives for the AMDTF project within the region of influence (ROI).

Indirect Impact.

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. There will be a great impact and significance to public health and safety for the island as there will be a influx of residents subject to increased risk of contracting of disease and experiencing personal injury. Areas of impact would be DPHSS, GMH, GFD, DYA, DMH&SA, DOC, and Superior Court of Guam. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

Chapter 19. Environmental Justice and the Protection of Children.

J-021-130 This chapter focuses on the potential for racial and ethnic minorities, low income populations, or children to be disproportionately affected by project-related impacts.

Indirect Impact:

This chapter may have no direct impact to the DPW CIP Division unless it involves construction related activities. There may be an adverse affect due to the difference ethnic groups, low income and disproportionate families. Areas of impact and significance may by , DYA, DPHSS and areas of public assistance, DMH&SA, GFD, and Superior Court of Guam. There are no mitigation and proposed alternate methods to determine impact and damages to surrounding areas affected.

Funding Source:

Should DPW CIP engage in the construction management, DEIS does not identify or address funding source for this chapter. Prior to any construction activity, funding source must be identified, encumbered, and terms and condition established. There are no mitigation measures/action proposed that resulted in the temporary impact or alternative solution.

J-021-129

Thank you for your comment. Volume 5, Chapter 18 discusses the potential public health and safety impacts of as a result of population growth associated with the Army AMDTF. Volume 5, Chapter 16 discusses the potential impact of an increased patient to health care provider ratio as a result of population growth associated with the Army AMDTF. Potential cumulative effects of the Army AMDTF action with other build up actions is addressed in Volume 7. As documented in this EIS, the DoD acknowledges the existing sub-standard conditions of social services on Guam and the interest to have DoD fund improvements to these services. DoD's ability to fund these services is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, the DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

J-021-130

Thank you for your comment. Impacts to social, health care and protective services on Guam related to the projected increase in population during the construction and operational periods are discussed in Volume 2 Chapter 19. DoD is proposing force flow reduction and adaptive management, among other mitigation measures, to reduce impacts to Guam residents during the construction period. DoD acknowledges the existing sub-standard conditions of key public services on Guam that particularly affect minority and low income populations and children, and the interest to have DoD fund improvements to these services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other federal programs and funding sources that could benefit the people of Guam, particularly its disadvantaged populations.

VOLUME 6: RELATED ACTIONS – UTILITIES AND ROADWAY

CHAPTER 2: PROPOSED ACTIONS AND ALTERNATIVES

Interim and Basic Alternatives:

J-021-131 | The interim and basic alternatives for utilities and roadways can not meet the demand for the influx of military buildup.

At present, existing Government of Guam utilities and roadways are deteriorating rapidly even without the actual impact of increased personnel and activities here on island because of lack of maintenance due to limited appropriated funds and shortage of manpower.

Long Term Alternatives:

Long term Alternatives might be too late or will not be materialized before the mass transition of the estimated thousands of military personnel, families and support groups. Consider the time in studying, planning, environmental impact evaluation, appropriation and acquisition of private properties for road rights of way and utility easements.

Recommendation:

Utilities and Roadways must be ready in a safe, operable and hazard-free to accommodate the expected influx prior to their arrival on island.

J-021-131

Thank you for your comment. DoD shares your concerns over the infrastructure of Guam. Our studies indicate that the proposed interim and basic utility and roadway projects can meet the needs of the DoD relocation within the proposed schedule. These are direct impacts of the proposed relocation. DoD acknowledges that there would also be indirect impacts of the proposed relocation related to induced civilian population growth. The final EIS addresses these indirect impacts as much as possible as the DoD does not have detailed information regarding the existing infrastructure to pinpoint areas that may be underserved when this indirect impact occurs. DoD has no intent of overtaxing the civilian infrastructure and has been working with GPA and GWA on proposed solutions. Should it become apparent during the relocation preparations that the civilian infrastructure can not adequately perform, DoD would invoke mitigations of force flow reductions and/or adaptive management techniques to control the demand on this infrastructure. These approaches are discussed in the final EIS Volume 7.

**VOLUME 7: POTENTIAL MITIGATION, PREFERRED ALTERNATIVES
IMPACTS AND CUMULATIVE IMPACTS**

Best Management Practices (BMPs) are regularly occurring/ongoing as summarized on Volumes 2 through 6. Various Preferred Alternatives are established for achieving the proposed Marine Corps, Navy and Army objectives as identified on Guam in regards to the relocation. Potential Impacts of the numerous proposed alternatives and actions are also reflected on subject volumes. There are also proposed mitigation measures of the preferred Alternatives identified in the same volumes.

J-021-132

In my point of view, relocation of military personnel and their dependents, H-2 workers and other temporary residents associated with the construction-related work will result significant increase in crime rate, prostitution, sexually transmitted disease, high cost of living, etc. Guam with only land area of 212 square miles, increase of population of such magnitude will have tremendous impact.

Some preferred alternatives operation are rated less impact than what is expected. Further evaluation is hereby recommended.

Chapter 4: Cumulative Impacts:

Cumulative Impacts is also outlined on subject volumes.

In addition to the above expected impact, the following are some of my concerns/comments/suggestions:

Airplane path should not be over the Residential area. It should be on the sea side for the safety of the residents.

Land acquisition for the needed right of way should be within fair market value.

Traffic reduction might not be enough during school days. In north, Route 3, cars exiting from Finegayan & Okkodo School in addition to Military Personnel & dependents will create backup at the intersection of Marine Corps Drive.

Massage Parlors, Adult entertainments should be far from Residential areas/Isolated.

J-021-132

Thank you for your comment. The purpose and need for the proposed relocation is to meet alliance and treaty requirements. As discussed in Volume 1 of the Final EIS, the alliance agreement with Japan states that approximately half the U.S. Marines on Okinawa would be relocated to Guam by 2014. Adaptive program management is proposed as potential mitigation in the Final EIS and could potentially extend the construction period. As currently envisioned (and as discussed in Volume 7 of the Final EIS), adaptive program management would entail adjusting the construction tempo to reduce environmental impacts if it is determined that, through monitoring, key infrastructure systems on Guam are reaching “action” or “tipping” points. DoD would chair a multi-agency council that would oversee the application of adaptive management post-Record of Decision.

Based on comments received on the Draft EIS and new information since the Draft EIS was published, some of the operational impact analyses have resulted in higher levels of significance.

All commercial and federal flight paths are subject to federal review and approval to minimize impact to public health and safety. To the extent practical, flight paths are over submerged lands.

DoD acknowledges that the issue of land acquisition is a complex and sensitive one with both historical and contemporary contexts. Should DoD determine that additional land is necessary to meet its requirements, DoD policy requires that it negotiate with affected public and private land owners in good faith, seek agreements to acquire desired lands interests and pay fair market value. DoD is confident that all parties can reach agreement on any potential land acquisition. Further, any proposed major DoD land acquisition, such as those associated with the preferred alternatives for the main cantonment and live fire ranges, must be approved by the Congressional defense committees.

VOLUME 8: ADDITIONAL ITEMS REQUIRED BY NEPA

Chapter 1:

No Adverse Impact

Chapter 2.2.1 : DOD Land Use Planning

J-021-133

The Navy does not have zoning laws or codes but they're ideal and functional relationship among land uses that guides the development. In general the working zones that includes industrial , operational and mission support functions are distinct from the living areas such as housing and community support.

Significance:

In these instances it is important to incorporate as many of the local communities values into an assessment of compatibility and its conformance. Conformance in the sense of local land use plan and zoning regulations in Guam.

Chapter 2.3 : Tinian Land Use Planning

Chapter 3 and 4: No Adverse Impact

Chapter 5: Relationship between short-term use of the environment and long-term productivity

J-021-134

Short-Term:

Construction is expected to overlap. This overlap is the effect of spin of economic growth. Economic opportunities could be off-set by rapid population growth, labor shortages cost of living increases, temporary demands on general services that will strain the quality of life.

Long-Term :

Operations are expected to have a positive impact if planning is forecasted and anticipated, although they may require some adjustment because of population growth then local government increase its level of services in most agencies.

Chapter 6.1.1

Sustainability and small growth work to meet the needs of present build-up without compromising the future generations.

The Navy acknowledges the potential for significant traffic impacts to off-base roadways. Traffic improvements are proposed to reduce the operational traffic impacts of military personnel and dependents in the northern part of the island (Route 3) and on Marine Drive to acceptable levels of service at key intersections, including access roads to schools. DoD concurs that residential areas and adult entertainment are not compatible land uses; however, DoD does not have influence over Guam land use planning and zoning. The Government of Guam is responsible for the review and approval of new businesses and building permits. Government of Guam's responsibility includes ensuring that new land uses are consistent with zoning laws and approved community land use plans.

J-021-133

Thank you for your comment. The land and submerged land ownership and use analyses in Volumes 2 through 6 includes land use consistency/compatibility as a criterion. The Guam community plans and zoning regulations represent community values. The proposed actions were evaluated for consistency and compatibility with Guam community land use plans (even if they had not been adopted yet) and existing land uses adjacent to the proposed actions. Inconsistencies with community plans are identified and mitigation measures are proposed in the Final EIS.

J-021-134

Thank you for your comment. DoD recognizes the importance of managing efforts in implementing the proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military

J-021-134

Significance:

Their own needs are accommodated and what about the needs of the people of Guam. As we continue to study the impact we need to ensure that it will be beneficial to both local and federal government including the resident of Guam.

We need to continue to have a component for the master plan and identify every infrastructure project especially the new facilities that should comply with legal mandates including rules, regulations and international building code.

Final Analysis:

Environmental Impact Assessment should focus more to develop a milestone plan outlining the major components to a feasible, cost effective and alternative solution to the existing condition of Guam.

relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

The DoD has kept the public informed as required by NEPA, which includes holding public scoping meetings and public hearings and allowing the public to comment on the Draft EIS. DoD has had ongoing discussions with Cooperating Agencies (those federal and local agencies with special expertise or regulatory oversight) throughout the preparation of the Draft EIS and will continue these discussions with agencies through the completion of the Final EIS. As part of the engagement with Cooperating Agencies, they were asked to conduct an early technical review of the partially completed Draft EIS in late July 2009. The DoD has also met with elected officials and community leaders.

VOLUME 9: APPENDICES

J-021-134

Short-Term:

There will be a great demand in construction industry in private, public and also business sector. A shortage of man-power in construction industry will hamper the operation of some business and government of Guam work force, mostly engineers and construction inspector.

Long Term:

Permanent increase in numbers of military and civilian personnel and dependents, increase in number and type of major equipment assets to support the military personnel and operation, increase in numbers and type of training activities in guam.

Socioeconomic Impact:

Professional Pay Adjustment Scale is greatly needed to compete with U.S. Mainland to retain it's existing Engineering and Technical Staff from Public, Private and Federal Jobs.

Significance:

No, Environmental Impact on vertical hazard areas for proposed construction within vicinity. The impact mostly consist of the following agency; Guam Power Authority, Environmental Protection Agency, Solid Waste and Guam Waterworks Authority Dilemma. Monitoring is necessary due to direct and indirect impact to our environment.

Final Analysis:

J-021-135

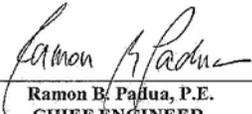
Increase in numbers of military, civilian personnel, dependents, major equipment assets to support the military personnel and operation. Are Guam's main roads designed for heavy military equipment?

J-021-135

Thank you for your comment. Existing roads and bridges on Guam have inadequate load capacity for heavy military vehicles. The proposed action includes pavement strengthening and bridge replacements on roads to be used by military vehicles during the buildup.

Department of Public Works - Division of Engineering
CAPITAL IMPROVEMENT PROJECTS

Respectfully submitted:



Ramon B. Padua, P.E.
CHIEF ENGINEER

Date: 02/12/10



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

Highway Division



DEPARTMENT OF PUBLIC WORKS

Draft Environmental Impact Statement (DEIS)

VOLUME 4, VOLUME 5



The Honorable
Felix P. Camacho
Governor

The Honorable
Michael W. Cruz, M.D.
Lieutenant Governor

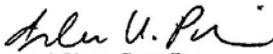


Lawrence P. Perez
Director
Andrew S. Leon Guerrero
Deputy Director

January 19, 2010

Memorandum

**To: Director
Deputy Director
All Division Managers**

From: 
Arleen U. Pierce, Controller

**Subject: Draft Environmental Impact Statement (DEIS)
(Report number 3)**

Buenas yan Hafa Adai!

Transmitted herewith for your review and action are DPW's response to the DEIS related to the Executive Summary, Readers' Guide, Volume 4 and 5. The attached responses were received from the following divisions:

- Administration
- Building Construction & Facilities Maintenance
- Office of Highway Safety
- Highways

Should there be any questions regarding this memorandum, please feel free to contact me at 646-3154 or the Fiscal office at 646- 3231.

Un Dangkulo na Si Yu'os Maase.

Attachments

Source/Reference	Cross-Reference Information	Assessment Covered	Assessment Scored	Comments
J-021-136 OISE Description of mitigation measures with adequate information to evaluate environmental consequences and residual impacts TRANSPORTATION Identification of best mitigation measures avoid or minimize potential impacts during all stages of project, including siting and design, facility operation, and post facility construction. A. Pollutants Generation, Transport, and receptors B. Habitat Alterations Support of the following types of mitigation measures in the following descending order of preference:	Volume 1, Executive Summary, Page ES-34, Table ES-4, "Summary of Significant Impact of the Preferred Alternatives" & Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".	X		Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation has not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views.
		X		Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".
	Volume 6, Chapter 4, page 4-2	X		"According to the 2030 Guam Transportation Plan it is recommended that, "All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to alleviate substandard LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1 Delay Thresholds for Level of Service.
	Volume 1, Executive Summary, Page ES-29 through ES-31			Road improvement project are subject to alternative selected.

J-021-136

Thank you for your comment. Soundwalls have been identified as mitigation measures for traffic noise in the North and Central regions of Guam. They would be designed not to infringe on roadway intersections or to block driveways with direct access to the road. Soundwalls would also be located at areas between the road and residential backyards. During the design phase, other factors such as views of impacted residence or recreational areas would be taken into consideration.

Volume 7 has been updated to include sound walls as a mitigation measure for traffic noise, where determined to be feasible and reasonable in accordance with Guam's Traffic Noise Abatement Policy (refer to Table 2.2-1, Volume 7). In addition, best management practices for addressing noise generated during roadway construction have been included in Table 2.1-1 of Volume 7.

- > Avoidance or prevention
- > Minimization
- > Reduction or elimination over time
- > Correction
- > Compensation

3. Implementation plan (Schedule) and criteria for performance for all mitigation measures

Volume 6, Chapter 6, page 8-6

X

"Guam DPW would also identify noise receptors on undeveloped land for which development is planned, provided such development includes activity sites of the types described in the NAC and provided that local permits for the development have been acquired or applied for on or before commencement of the noise analysis. Guam DPW would furnish the results of highway traffic noise analyses to local government officials and would encourage local communities and developers to practice noise compatible development. Local government coordination would be accomplished through the distributor". However, this is not summarized in Volume 7, of Mitigation strategy through Guam DPW. Recommend re-iterating Volume 6, Chapter 6 Noise Abatement Information for "mitigation". Also, what will be the discussion on Noise walls in Volume 7, Refer to Volume 1, Executive Summary, page ES-34, Table ES-4.

3. Responsible entity assigned to carrying out each mitigation measure
 7. Measures are socially and culturally acceptable
 3. Adequate financial and non-financial resources to implement the measure

X

Refer to item #6 above.

Issue and Title Reference	Cross-Reference Information	Advisory Content	Not Adequately Covered	Comments
Description of Environmental Setting				
Region of concern defined, including boundary areas				
1. Physical-Chemical Environment				
a. Air Resources				
<ul style="list-style-type: none"> > meteorological data > ambient air quality > Stationary sources of Emissions > Mobile sources of emissions 				
b. Surface Water				
<ul style="list-style-type: none"> > Location and type > Water quality information (dissolved oxygen, temperature, nutrients, pH, solids) > Existing pollutant sources > Future uses > Discussion of flooding events > Ground water (Description of key factors) 				
c. Soils and Geology				
<ul style="list-style-type: none"> > Topography > Soil Structure > Ground water movement > Erosion potential > Subsidence > Seismic activity (faults, lbs. of earthquake activity, volcanic eruptions) 				
d. Noise emissions				
<ul style="list-style-type: none"> > Airports > Highways > Industrial/Commercial facilities > Others 				
	Volume 1, Executive Summary, Page ES-34, Table ES-4, "Summary of Significant Impact of the Preferred Alternative", Volume 6 Chapter 9			Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation has not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views. X
	Volume2, Chapter 6, page 64 through page 67, Table 6.1-4 "Sample of Construction Noise Equipment" and Table 6.1-5 "Guam Loudest Hourly Noise Standards for Transportation Noise and Land Use Activity"			
2. Biological Conditions				
a. Wildlife and vegetation				
<ul style="list-style-type: none"> > description and listing of aquatic, wetland, and terrestrial flora and fauna > description and listing of native species of wildlife and vegetation present > description and listing of particularly invasive exotic species of wildlife and vegetation > description and listing of rare and threatened species 				

- b. **Community and Habitat Characterizations**
 - > maps and description of the aquatic, wetland, and terrestrial communities found in and around the project site
- c. **Ecologically Significant Features**
 - > support of broader ecosystems by the project site (e.g. if located along a flyway or other biological corridor)
 - > important ecological functions of the project site (e.g. nutrient source through flooding, stormwater retention)
 - > Characterization of relevant disturbance regimes, natural and project-induced (e.g. floods, fire, etc)
 - > description of hydrologic process (e.g. ground and surface water flows and durations)
 - > description of important biotic interactions (e.g. interdependence of plants and animals at the site and with other sites)
- 3. **Waste Management and Pollution Prevention**
 - a. Location of reported waste disposal or discharge
 - b. Description of waste management techniques
 - c. Projected waste characteristics
- 4. **Socioeconomic Environment**
 - a. **Land Use**
 - > description of present and historic land use
 - > maps of present and historic land use
 - b. **Population and Housing**
 - > demographic information (e.g., average household size, age, age/sex distribution, ethnic composition, and community cohesion)
 - c. **Economic Activity**
 - > description of present economic activity (e.g., number and type of business, annual revenues, ownership)
 - > description of unique features of business community (e.g., highly seasonal or trade, high outflow of profit, declining trade, or downtown revitalization)
 - > consideration of interplay among economic activity, capacity of public services, and fiscal ability of community to respond to capacity needs
 - d. **Community Services and Public Finance**
 - > description of existing public facilities and services within the vicinity of project, including existing level of use and remaining capacity to accommodate growth
 - e. **Transportation**
 - > description of all relevant forms of transportation facilities

J-021-138

There are no discussion or information regarding "rights of way" acquisition for road widening projects associated with road structures for the customer or training areas. Recommend identifying associated properties that would be considered for "rights of way" acquisition and provide a proposed funding source to the mitigation.

J-021-138

Thank you for your comment. Land acquisition for off-base roadways projects are discussed in Volume 6, Chapter 10. The off-base roadway projects may be funded through the Defense Access Road (DAR) Program and annual allocations through the U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA). The DAR Program provides the means for the Department of Defense (DoD) to pay a fair share for the public highway improvements required as a result of a sudden or unusual defense-generated traffic impact or unique defense-related public highway requirement. Volume 6, Chapter 1 has been updated to include a list of potential DAR projects. The DoD commits to seeking funding for these projects.

The DoD, Guam Department of Public Works and FHWA are continuing to work together to identify projects eligible for funding under the DAR Program. The DoD will lead an interagency council which includes the USDOT to seek solutions to island-wide traffic issues.

<ul style="list-style-type: none"> > current traffic volumes > current traffic capacity > provisions of public transportation 	<p>Volume 2, Chapter 15 (Refers to Volume 6); Volume 8, Chapter 4 Volume 6, Chapter 4 Volume 6, Chapter 4</p>	<p>X X X</p>
<ul style="list-style-type: none"> > assessment of the adequacy of the systems for meeting peak demands during construction and operation <p>1. Health and Safety</p> <ul style="list-style-type: none"> > description of present health and safety issues (e.g. statistics of industrial accidents, emissions data from prior and existing facilities, present levels of noise) > identification of special population or areas more likely to be exposed to adverse impacts <p>5. Cultural Resources</p> <ul style="list-style-type: none"> a. Archeological sites relating to the project b. Paleontological sites in relation to the project c. Historical sites in relation to the project d. Educational, religious, scientific, or cultural sites in relation to the project 	<p>Volume 11, Chapter 4, page 4-2</p>	<p>X</p>

"according to the 2020 Guam Transportation Plan it is recommended that, All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to alleviate additional LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1 Delay Thresholds for Level of Service.

"according to the 2020 Guam Transportation Plan it is recommended that, All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to alleviate additional LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1 Delay Thresholds for Level of Service.

Issue and Findings	Other Reference Information	Priority/Severity	Net Mitigation/Compensation	Comments
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1. Assessment of Potential Environmental Impacts

The Environmental Impact Assessment focuses on primary, secondary, and cumulative impacts during all stages, including initial site preparation and construction, facility operation, and post facility or site closure.

1. Pollutants Generation, Transport, and Receptors

a. Air Resources

- > Identification of emission sources and project emissions rates and comparisons to previous data sets
- > comparison of predicted atmospheric levels with national, state, or local ambient levels
- > description of stack emissions during operation and maintenance activities and comparison with existing national, state, and local standards
- > identification of best mitigation measures to avoid or minimize adverse impacts

b. Water Resources

- > address potential for water quality to be degraded by various factors
- > prediction of pollutant concentrations in water bodies and comparison with existing data sets

c. Geological Resources

- > determination of potential soil losses and mitigation measures
- > identification of potential contamination sources and mitigation measures

d. Biological Resources

- > consideration of potential losses of biological resources within site boundaries
- > description of effluent and emission concentration and their potential effects to the environment
- > discussion of bioaccumulative effects from facility emissions and discharges

Volume 7 refers to the Mitigation Plan Summaries for all areas of concern.

J-021-139

Thank you for your comment. The rights-of-way discussions are presented in Volume 6, Chapter 10, Land and Submerged Land Use.

Issue and Evaluation	Other Relevant Information	Acquity Score	Net Adversity Score	Comments
<p>> identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>2. Habitat Alterations</p> <p>> address potential for construction and site preparation activities to alter critical habitats</p> <p>> consideration of potential for secondary changes in habitats following construction and site preparation activities</p> <p>> assessment of possible permanent loss or displacement of vegetation habitat due to construction</p> <p>> identification of changes in local species composition, diversity, and abundances resulting from loss of specific habitats</p> <p>> identify best mitigation measures to avoid or minimize adverse impacts.</p> <p>></p> <p>3. Waste Management and Pollution</p> <p>a. Description of facility waste management plan with procedures for treatment, handling, and disposition</p> <p>b. Discussion of projected facility waste characteristics</p> <p>c. Identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>4. Socioeconomic Impacts</p> <p>a. Land Use</p> <p>> identification of the existing or planned land use areas lost due to site preparation and construction activities</p>	<p>Volume 6, Chapter 4</p>			
<p>> determination of conflicting zoning requirements and land uses with site preparations</p> <p>> description of anticipated changes in near by land use as a result of the facility and site preparations</p> <p>> identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>b. Economic Activities</p>				<p>X</p> <p>X</p> <p>X</p> <p>X</p>
				<p>There are no discussion or information regarding "rights of way" acquisition for road widening projects associated with road structures for the interchange or banking areas. Recommend identifying associated properties that would be considered for "rights of way" acquisition" and provide a proposed funding source to the mitigation</p> <p>There are no discussion or information regarding "rights of way" acquisition for road widening projects associated with road structures for the interchange or banking areas. Recommend identifying associated properties that would be considered for "rights of way" acquisition" and provide a proposed funding source to the mitigation</p> <p>There are no discussion or information regarding "rights of way" acquisition for road widening projects associated with road structures for the interchange or banking areas. Recommend identifying associated properties that would be considered for "rights of way" acquisition" and provide a proposed funding source to the mitigation</p>

J-021-139

J-021-140

Thank you for your comment. Soundwalls have been identified as mitigation measures for traffic noise in the North and Central regions of Guam. The sound walls would be designed not to infringe on roadway intersections or to block driveways with direct access to the road. Soundwalls would also be located at areas between the road and residential backyards. During the design phase, other factors such as views of impacted residence or recreational areas would be taken into consideration.

J-021-140

Issue and Title Reference	Cross Reference Information	Advisory Opinion	AEI/Alternative Considered	Comments
<ul style="list-style-type: none"> > address changes in employment patterns > address ability of available labor pool to meet project-related employment needs > identification of economic multipliers used in analysis and their source > discussion of potential change in overall economic activity in region > identification of best mitigation measures to avoid or minimize adverse impacts e. Population and Housing <ul style="list-style-type: none"> > Address the relationship between employment increases and population increases > identification of deficiencies in available housing for the potential increased workforce > identification of best mitigation measures to avoid or minimize adverse impacts d. Community Services and Public <ul style="list-style-type: none"> > identification of deficiencies in community services and infrastructure during project and post project > identification of shortfall in transportation capacity due to either primary or secondary impacts of the project > identification of best mitigation measures to avoid or minimize adverse impacts e. Transportation <ul style="list-style-type: none"> > assessment of proposed project's consistency with local and/or regional transportation plans > evaluation of changes in LOS resulting from the proposed project > evaluation of the effect of heavy vehicle traffic on affected pavement and bridges > discussion of mitigation to offset adverse impacts to structural integrity and public safety 	<ul style="list-style-type: none"> Volume 1, Executive Summary, Pages ES-29 through ES-31; Volume 1, Chapter 5, Section 5.5.5, Page 3-26 through 3-27 Volume 6, Chapter 4, page 4-2 Volume 6, Chapter 8 Volume 1, Executive Summary, Page ES 34, Table ES-4, Summary of Significant Impact of the Preferred Alternatives' 8 	<ul style="list-style-type: none"> X X X X 	<ul style="list-style-type: none"> X X X X 	<ul style="list-style-type: none"> Roadway construction projects, to include bridges and reconstruction upgrades, are subject to which alternative is selected. According to the 2020 Guam Transportation Plan it is recommended that, All interchanges and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to allocate substandard LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1 Delay Thresholds for Level of Service. Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation has not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views.

J-021-141

Thank you for your comment. Please see response to J-022-137.

Findings and Recommendations	Consistency Determination	Mitigation Condition	No. of Comments Received	Consistent
<ul style="list-style-type: none"> > evaluation of whether construction operation, and maintenance activities present health and safety hazards to humans working or living at or near the project site > discussion of potential effects of facility noise levels on workers, local communities, and local flora and fauna > analysis of potential long-term contamination bioaccumulation with the food chain > identification of best mitigation measures to avoid or minimize adverse impacts 				
<ul style="list-style-type: none"> g. Noise <ul style="list-style-type: none"> > identification of existing level of noise in the community > identification of major sources of noise; Example: <ul style="list-style-type: none"> - Airports - Highways - Industrial/Commercial Facilities - Firing Ranges 	Volume 2, Chapter 6		X	
<ul style="list-style-type: none"> h. Environmental Equity <ul style="list-style-type: none"> > determine the equity of changes in employment patterns attributable to site preparations and construction activities. > determine the equity of community structure changes caused by project construction and operation. 	Volume 2; Volume 6, Volume 7	X	Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".	

J-021-141

EIS/EA Title/Reference	EIS/EA Reference/Revision	Agencies		Comments
		Overseas	Continental	

a. Identification of best mitigation measure to avoid or minimize adverse impacts
5. Cultural Resources
 a. Identification of historical or cultural
 b. Description of mitigation measures
 c. Determine whether the facility components are designed with consideration

J-021-142

Thank you for your comment. Soundwalls have been identified as mitigation measures for traffic noise in the North and Central regions of Guam. They would be designed not to infringe on roadway intersections or to block driveways with direct access to the road. Soundwalls would also be located in areas between the road and residential backyards. During the design phase, other factors such as views of impacted residences or recreational areas would be taken into consideration.

Volume 7 has been updated to include sound walls as the mitigation measure for traffic noise, where determined to be feasible and reasonable in accordance with Guam's Traffic Noise Abatement Policy (refer to Table 2.2-1, Volume 7). In addition, best management practices for addressing noise generated during roadway construction have been included in Table 2.1-1 of Volume 7.

Issue and Text Reference	Cross-Reference Information	Adequately Covered	Not Adequately Covered	Comments
III. MITIGATION MEASURES				
1. Description of mitigation activities for all significant impacts to both the natural and human (socioeconomic) environment				
A. Pollutants Generation, Transport, and				
J-021-142				
NOISE	Volume 1, Executive Summary, Page ES-34, Table ES-4, "Summary of Significant Impact of the Preferred Alternatives" & Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".		X	Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation has not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views.
			X	Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".
2. Description of mitigation measures with adequate information to evaluate environmental consequences and residual impacts				
TRANSPORTATION	Volume 6, Chapter 4, page 4-2	X		"according to the 2030 Guam Transportation Plan it is recommended that, 'All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to alleviate substandard LOS conditions to the extent feasible, with due consideration to physical and environmental constraints.'" Refer to Table 4.1-1 Delay Thresholds for Level of Service.
3. Identification of best mitigation measures to avoid or minimize potential impacts during all stages of project, including siting and design, facility operation, and post facility closure.				
A. Pollutants Generation, Transport, and Receptors	Volume 1, Executive Summary, Page ES-29 through ES-31			Road improvement project are subject to alternative selected.
B. Habitat Alterations				

Issue and Text Reference	Cross Reference Information	Adequately Covered	Not Adequately Covered	Comments
<p>4. Support of the following types of mitigation measures in the following decreasing order of preference:</p> <ul style="list-style-type: none"> > Avoidance or prevention > Minimization > Reduction or elimination over time > Correction > Compensation 	<p>Rights of way acquisition on road widening projects</p>			<p>Refer to "Assessment of Potential Impacts" Tab;</p> <p>"Guam DPW would also identify noise receptors on undeveloped land for which development is planned, provided such development includes activity sites of the types described in the NAC and provided that local permits for the development have been acquired or applied for on or before commencement of the noise analysis. Guam DPW would furnish the results of highway traffic noise analyses to local government officials and would encourage local communities and developers to practice noise compatible development. Local government coordination would be accomplished through the distribution". However, this is not summarized in Volume 7, of Mitigation strategy through Guam DPW. Recommend re-iterating Volume 6, Chapter 8 Noise Abatement Information for "Mitigation". Also, what will be the discussion on Noise walls in Volume 7, Refer to Volume 1, Executive Summary, page ES-34, Table ES-4.</p>
<p>5. Implementation plan (Schedule) and criteria for performance for all mitigation measures</p>	<p>Volume 6, Chapter 8, page 8-6</p>	<p>X</p>		
<p>6. Responsible entity assigned to carrying out each mitigation measure 7. Measures are socially and culturally acceptable 8. Adequate financial and non-financial resources to implement the measure</p>		<p>X</p>		<p>Refer to item #5 above.</p>



Arleen Pierce <arleen.pierce@dpw.guam.gov>

Draft Sheet

Mario Garcia <mario.garcia@dpw.guam.gov>
To: Arleen Pierce <arleen.pierce@dpw.guam.gov>

Tue, Feb 9, 2010 at 5:08 PM

Ms. Pierce,

Attached is my document that I am using to finalize my findings (perceptions) on the DEIS. For the most part, I have used the NEPA document that I had provided in addressing issues along the way. However, if I felt that there was some "speculative" language within the DEIS that warranted further information or investigation, I entered those comments. Because of the voluminous information, I had chosen to focus on a couple critical issues and not all. My hope was that the other divisions and agencies would be able to provide the coverage in their frudiciary capacity's.

When we meet, I will discuss how my document works.

v/r
Mario Garcia

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 DEIS EA Framework.xls
111K

Issue and Text Reference	Cross Reference Information	Appropriateness Scored	Not Adequately Covered	Comments
Description of Environmental Setting				
Region of concern defined, including boundary areas				
1. Physical-Chemical Environment				
A. Air Resources				
Fairly Discussed				
> meteorological data				
> ambient air quality				
> Stationary sources of emissions				
B. Surface Water				
Volume 2, Chapter 4				
X				
Fairly Discussed				
> Location and type				
> Water quality information (dissolved oxygen, temperature, nutrients, pH, solids)				
> Existing pollutant sources				
> Future uses				
Volume 2, Chapter 4 (page 4-8) and Chapter 12				
X				
There are no discussion of "flooding events", however, there is discussion of "Flood zones" and the relationship to the 100 year and 500 year Flood Zone. Although there are discussions of ground water in most of the areas, there is no discussion of how ground water will flow on the Firing Ranges and how the ground water will flow with the geological structures. Recommend doing hydrological, geological study for stormwater flow as to mitigate any "constituents" from the firing range entering the northern aquifer.				
J-021-143				
> Ground water (Description of key factors)				
Volume 2, Chapter 3				
X				
Fairly Discussed				
C. Soils and Geology				
Volume 2, Chapter 3				
X				
Fairly Discussed				
> Topography				
> Soil Structure				
X				
There appears no true explanation of storm water movements in firing range in relation to boundaries of northern aquifer. Refer to Figure 3-1-3, Volume 2, Chapter 3, page 3-6. There is no discussion of soils and permeable structures in the Andersen South Area (Firing Range etc). However, there are discussions of soil structure and permeability material for other site consideration. This will maybe a concern if storm water in the Firing Range areas move "constituents" from the range into the aquifer.				
> Ground water movement				
Volume 2, Chapter 3, page 3-6				
X				
X				
Karst discussion. Although not written as "Subsidence", literature provides discussion of Karst Geology (Sink Holes, Caves and Karst cavities).				
> Erosion potential				
Volume 2, Chapter 3, page 3-6				
X				
X				
Seismic activity (faults, fix of earthquake activity, volcanic eruptions)				
X				
d. Noise emissions				
X				
J-021-144				
> Airports				
Volume 1, Executive Summary, page ES-34				
X				
Not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views.				
> Highways				
Volume 1, Executive Summary, page ES-35, Table ES-4, "Environmental Justice and the Protection of Children"				
X				
"Noise Mitigation for noise is proposed, but has visual impacts to consider". This statement is not consistent with the section on "Noise" of this Table. "Mitigation has not been determined"				

J-021-143

Thank you for your comment. The DoD and regulatory agencies are equally concerned about preventing contamination of surface waters and groundwater (particularly drinking water aquifers). The Final EIS describes numerous programs and actions that will be taken to protect surface waters and groundwater from potential contaminants. Refer to Volume 9, Appendix D, Project Description Technical Appendix, Munitions, for a discussion of the munitions and constituents of concern associated with the proposed ranges. Range designs include targets with physical barriers behind the target, such as an earthen berm, that are designed to stop and contain the spent rounds. Best Management Practices (BMPs) are used to further contain spent rounds, fragments and materials from weapons firing, and reduce any impacts to the environment. The proposed ranges will be designed and maintained in accordance with all applicable federal and Government of Guam regulations. Specifically, Military Handbook 1027/3B contains procedures for reducing potential impacts from ranges through the implementation of BMPs. These include introducing soil amendments, vegetation management, engineering controls, instituting contaminant monitoring, reclaiming, and recycling. With ranges, lead is the primary leaching contaminant of concern and best management practices can minimize or prevent leaching of this constituent. Impact rounds from pistol rounds generally stay intact and impact rounds from rifle rounds often fragment. Intact rounds and rounds fragmented into relatively large pieces are not easily transported by natural transport mechanisms (such as groundwater) and are largely contained within the berm or physical barrier where they can be recovered and disposed. Through the proper design of ranges, application of BMPs, and monitoring, the potential for groundwater contamination would be minimized. BMPs can reduce or eliminate the leaching of lead to the environment. These procedures include controlling soil pH to between 6 to 8 to prevent dissolution of lead, mining of lead from back stop berms, implementing a soil leaching monitoring program, and adding phosphate containing soil

> Industrial/Commercial facilities

> Others

2. Biological Conditions

a. Wildlife and vegetation

> description and listing of aquatic, wetland, and terrestrial flora and fauna

> description and listing of native species of wildlife and vegetation present

> description and listing of particularly invasive exotic species of wildlife and vegetation

> description and listing of rare and threatened species

b. Community and Habitat Characteristics

> maps and description of the aquatic, wetland, and terrestrial communities found in and around the project site

c. Ecologically Significant Features

> support of broader ecosystems by the project site (e.g., if located along a flyway or other biological corridor)

> important ecological functions of the project site (e.g., nutrient source through flooding, stormwater retention)

> characterization of relevant disturbance regimes, natural and project-induced (e.g., fires, fire, etc.)

> description of hydrologic process (e.g. ground and surface water flows and durations)

> description of important biotic interactions (e.g., interdependence of plants and animals at the site and with other sites)

3. Waste Management and Pollution Prevention

a. Locations of expected water disposal or discharge

b. Description of waste management techniques

c. Projected waste characteristics

4. Socioeconomic Environment

a. Land use

Volume 2, Volume 6, Volume 7

Volume 2, Chapter 8, Section 8.1.2.1, page 6
16

X

X

Deferred

X

Refer to Physical and Chemical Section for comments

Deferred

Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures". There is no discussion of how noise from construction (vertical or horizontal) will be mitigated during construction or post construction. Inclusive, there is no discussion of how noise from the "Aircraft flight paths will increase over populated areas. Recommend providing "low" information of flight information over the island, frequency in the areas of operations (i.e. Andersen South Area, Andersen AFB, and NVP). Also recommend providing noise analysis for all aircraft, weapons and munitions proposed in the Andersen South training areas and Firing Ranges, with noise contours. Does not discuss noise generation post construction. Operations maintenance of landing facilities will have increased in noise. Series of helicopters performing operations in the Andersen South area. Recommend performing noise analysis of current sound structure and incorporate sound contours using sound data from Mariana Air Field for helicopter operations, munitions operations and firing range operations.
1st Sentence: "The most intensive use at Andersen South..." This is only a discussion of "blanks" used during training exercises and not "live ammunition" from Firing ranges across the IS. Where is the "noise" information for "Small arms, machine guns, hand grenades, mines and mortars; support logistic vehicles, 60-80 Caliber Heavy Barbed Machine Gun, M203 40mm Grenade Launcher and Expeditionary Fighting Vehicles"? What are the noise contours for these type of "noise" operating equipment?
Deferred

amendments to bind dissolved lead to the soil. Prior to building the ranges, an engineering study would determine the minimum depth of soil cover to ensure sufficient soil cover of the limestone, and to assess the suitability and optimum technique to add soil amendments such as phosphate to prevent lead leaching. In addition, when percolating water reaches the porous limestone the pH will increase, encouraging the precipitation of lead out of solution. The DoD will monitor for selected contaminants of concern. If monitoring identifies significant impacts, such as indications that chemicals of concern may exceed regulatory standards, reduce beneficial uses, result in adverse human or environmental health effects, or conflict with federal or Government of Guam regulations, then additional action would be taken to address these impacts. Furthermore, the Final EIS has been revised to explain how volcanic basement rock protrudes up through the limestone of the Northern Guam Lens Aquifer (NGLA), thus separating nearly all of the proposed ranges from groundwater supply wells. The low permeability of the volcanic rock acts as a barrier to groundwater movement. A figure in the Final EIS supports this text description.

J-021-144

Thank you for your comment. Soundwalls have been identified as mitigation measures for traffic noise in the North and Central regions of Guam. They would be designed not to infringe on roadway intersections or to block driveways with direct access to the road. Soundwalls would also be located in areas between the road and residential backyards. During the design phase, other factors such as views of impacted residences or recreational areas would be taken into consideration.

Volume 7 has been updated to include sound walls as a mitigation measure for traffic noise, where determined to be feasible and reasonable in accordance with Guam's Traffic Noise Abatement Policy (refer to Table 2.2-1, Volume 7). In addition, best management practices

J-021-145

> description of present and historic land use
> map of present and historic land use

Volume 1, ES-8;
Volume 1, ES-15, "There was an extensive
Screening analysis for firing ranges, and non
firing ranges that examined various
geographical alternatives on Guam. Based
on the Analysis, ...

Volume 1, ES-15, "Core Competency"
Volume 1, ES-15, 2nd to last paragraph: "The
Marine Corps ultimately desires to conduct..."
Volume 1, 2-17, 2nd to last paragraph: "The
Marine Corps ultimately desires to
conduct..."

Volume 1, ES-15, "The QDR will specifically
evaluate the need for additional Marine Corps
training facilities..."

Volume 1, Chapter 1, page 1-24; "...Tinian
provided the best opportunities for training
groups of 200 Marines or larger due to
greater land availability. It provide reliable
access and maximum opportunity to
realistically train with their weapons and
equipment while minimizing "down time" lost
when traveling to training locations... The
Land, however, could be developed to
accommodate live fire ranges.

Volume 1, Chapter 2, page 2-15, 1st Bullet
Point

Volume 1, Chapter 2, page 2-15, 2nd Bullet

Volume 1, Chapter 2, page 2-15, 3rd Bullet

(Firing Range Issues)

Firing Ranges

Where is the analysis?

What are the "Core Competency" Training requirements? How were these training requirements
maintained in Japan? What were the present training environment that needs to be established on
Guam? Where are the "Core Competency" noise training data conducted that occurred in Japan (to
show relevance)? Where is the discussion of current training facilities in Japan for "Core
Competency" (to show relevance for Guam structures)?

Repetitious paragraphs.

Where is the 2005 QDR (for reference)? How is the 2005 QDR relevant to the current "firing ranges"
used in Japan? How is this relevant to the current "firing ranges" on Guam? What analysis was
conducted to develop "proposed firing ranges"? What are the "Core Competency" training and the
list of equipment and exercises associated with it? What is the Marine reference associated with
"Core Competency" training?

- X The dimensions noted of the small range complex meets the requirements on Andersen AFB Firing Range
- X The dimensions of 3,820 FT does not meet the Anderson nor the proposed firing ranges capabilities. There are no "60 level" noted in Volume 2 for the .50 Caliber and MK19 40 mm Training Projectiles. The Firing Range requirements on Route 15 does not have the 3520 ft. of land clearance. The end of the firing range fall off the end of the island. There is will be no natural or man-made barrier to assist in "safety protection" (burn requirement). Also the vegetation clearance for the Anderson Firing Range is about 20 acre of clearance versus the proposed 900+ acres "acquisition". Also there are current control measures on the Anderson Firing Range.
- X The training requirement was not discussed in Volume 2, "Noise" requirements.

for addressing noise generated during roadway construction have been included in Table 2.1-1 of Volume 7.

J-021-145

Thank you for your comments. The comment inquires as to the relevance of the 2005 QDR to specific training ranges. This document was not a justification for specific training or training ranges and therefore is not referenced in those sections. The specific training needs and discussion of the associated alternatives criteria for training ranges is discussed in Volume 2.

As discussed in the EIS, the Quadrennial Defense Review for 2010 is evaluating future joint training need, to include Marine Corps training and the suitability of CNMI to meet these future requirements. It has not been published at this time. Please see Section 2.2.4.5. of Volume 1.

There would be sufficient room for 3,820 ft lanes for a Machine gun Multi-Purpose Range for both alternatives at the Route 15 lands and have room for a collection berm at the end of the lane. Please refer to Volume 2, Chapter 6.2.2.2 for the noise analyses for this range. Additional analyses have been added as a result of foliage attenuation and barrier attenuation in Volume 2, Chapter 6.2.8. The parent report prepared by USCHPPM can be found in Appendix K.

Hand grenade training range noise analyses are also found in the aforementioned chapters.

Mariana Island Range Complex (MIRC)

Volume 1, Chapter 2, page 2-15, 4th Bullet	X	This training requirement was not discussed in Volume 2, "noise" requirements. Air Force and Navy has an "explosive ordnance" area for disposition of unexploded munitions. There are no discussion of other of their "explosive ordnance" structures in this DEIS.
Volume 1, Chapter 1, page 1-11, section 1.2.5, second paragraph Volume 1, Chapter 1, page 1-11, Section 1.2.5, third bullet. "... NCIS small arms ranges support small arms and machine gun training up to 7.62-mm and sniper training out to a distance of 600 yards.	X	Reference map does not show the land parcels associated with the current training facilities.
Volume 1, Chapter 1, page 1-14, 2nd para.	X	There is no discussion of the capabilities and distance of the Anderson AFB Firing Range which is part of the MIRC structures. Why was the Anderson AFB Firing Range omitted?
Volume 1, Chapter 1, Page 1-44, last para. Volume 1, Chapter 1, page 1-45, Table 1.11-1: "Documents to be Incorporated by Reference" (Refer to MIRC/DoD) Volume 1, Chapter 2, 2nd para: "Training areas take the form of... Thus, required construction would include the facilities and infrastructure."	X	The MIRC EIS/OEIS is assessing the potential impact of continuing and proposed military training activities on existing ranges within the complex. The assessment will include increased training frequency and improvements of existing ranges based on all anticipated joint military service training requirements between the years 2010 and 2015. The MIRC EIS/OEIS proposes to "...accommodate force structure changes (i.e. changes in weapons systems, new classes of homedropped ships...). The MIRC EIS/OEIS is critical in the review of the proposed ranges within this DEIS. There is not enough information for proposed new weapons system, noise factors, and weapons systems range of influence as analyzed the "safety distance zones" that are currently proposed in this DEIS. Inclusive, there are no "noise" analysis information on new weapons systems or any mitigation measures. Impact can be "significantly adverse" without the appropriate information. Also, substrates for the new weapons systems are not noted nor analyzed for possible streamwater impacts to the northern equifer.
Volume 1, Chapter 1, last bullet point Volume 1, Chapter 1, page 2-7, 2nd Bullet point: "...operations require proximity to ranges and training areas, as well as traditional base facilities"	X	"The Guam and CNMI Military Relocation EIS/OEIS then cover the additional, projected training requirements from the provision that where not anticipated... Volumes 2 and 3 analyze these additional requirements and propose changes to the MIRC..."
	X	The reference comments provided in this table are not consistent with Section 1.6, 1st para. 1st Sentence "This EIS/OEIS addresses the potential direct, indirect, and cumulative short-term and long term impacts of the proposed guidance that recommends integration of the environmental process at the earliest possible time..."
	X	There is no analysis to this "statement" or reference to the MIRC requirements since the MIRC does not have any "proposed training structures" other than those proposed in this DEIS. Statement is misleading.
	X	There is no analysis for the proposed Firing ranges nor are they identified in the MIRC, or QDR, but only proposed ranges in this DEIS.
	X	This statement appears that the proposed ranges are for a matter of convenience not necessarily of using of the current MIRC structures and possible uses of Tinton developed range requirements.

J-021-145

b. Population and Housing

> demographic information (e.g., average household size, age, sex, ethnic distribution, ethnic composition, and community cohesion)

c. Economic Activity

> description of present economic activity (e.g., number and type of businesses, annual revenues, ownership)

> description of unique features of business community (e.g., highly seasonal of trade, high outflow of profits, declining trade, or downtown revitalization)

> consideration of interplay among economic activity, capacity of public services, and fiscal ability of community to respond to capacity needs

d. Community Services and Public Finance

> description of existing public facilities and services within the vicinity of project, including existing level of use and remaining capacity to accommodate growth

e. Transportation

J-021-146

> description of all relevant forms of transportation facilities
> current traffic volumes
> current traffic capacity
> provision of public transportation

> assessment of the adequacy of the systems for meeting peak demands during construction and operation

f. Health and Safety

Volume 1, Chapter 2, page 2-16, 1st Bullet Point

Volume 1, Chapter 2, page 2-16, 2nd Bullet Point
Volume 1, Chapter 2, page 2-16, 3rd Bullet Point

Volume 1, Chapter 2, page 2-16, 4th Bullet Point

Volume 1, Executive Summary, page ES-20 through 26, Roadway Projects
Volume 1, Chapter 3, page 3-26, Preferred Alternative

Volume 6, Chapter 4
Volume 6, Chapter 4
Volume 6, Chapter 4

Volume 6, Chapter 4, page 4-2

X There is no analysis for the proposed Firing ranges nor are they identified in the MIRC, or GDR, but only proposed ranges in this DEIS.

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X There is no analysis for the proposed Firing ranges nor are they identified in the MIRC, or GDR, but only proposed ranges in this DEIS. However, for the dimensions noted (218 yds W X 647 yds L or approximately 6.4 acres, the Andersen Firing Range Complex can be expanded to the south side (170 ft W X 1627.74 ft L).

Deferred

Internal Analysis

Internal Analysis

X The GDR was reference to the 2030 Guam Transportation Plan. There are no associated Routes, Bridges, or project numbers associated with this DEIS.

X

"According to the 2030 Guam Transportation Plan it is recommended that, "All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to always maintain LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1 Delay Thresholds for Level of Service."

J-021-146

Thank you for your comment. Volume 1 is an overview of the proposed action and alternatives, and as such, only provides a summary. Details of the proposed actions and alternatives for roadways such as affected routes and bridges and associated project numbers are presented in Volume 6, Chapters 1 and 2. The relationship of the 2030 Guam Transportation Plan to the proposed roadway projects is also discussed in Volume 6, Chapters 1, 2 and 4.

J-021-147

> description of present health and safety issues (e.g., statistics of industrial accidents, emissions data from prior and existing facilities, present levels of noise)

> identification of special population or areas more likely to be exposed to adverse impacts
5. Cultural Resources

J-021-148

(Archeological Issues)

b. Paleontological sites in relation to the project
c. Historical sites in relation to the project
d. Educational, religious, scientific, or cultural sites in relation to the project

J-021-149

6. Miscellaneous

Volume 1, Executive Summary, page ES-35, Table ES-4

X

Volume 1, Chapter 1, page 1-21, second to last para. "These countries... were unwilling to allow permanent basing of U.S. Forces on their soil."
Volume 1, Chapter 1, page 1-35, Table 1.8-1-"Public Comments"

X

Noise contours not just for construction, but for all training requirements (small arms, grenades, specialized, air-craft) for all areas. Need approved flight corridors from FAA for further analysis for aircraft entering LZC in Andersen South Area (Bodie requirements). Inclusive of all other support aircraft for region (not enough information). This information will provide the community a better understanding of flight paths all aircraft (commercial and military) current and projected to analyze noise contours and dB levels for opinion.

Noise contours not just for construction, but for all training requirements (small arms, grenades, specialized, air-craft) for all areas. Need approved flight corridors from FAA for further analysis. This information will provide the community a better understanding of flight paths all aircraft (commercial and military) current and projected to analyze noise contours and dB levels for opinion.

Need to discuss about caves in East of Andersen South.

"Mitigation would be conducted in accordance with Programmatic Agreement with State Historic Preservation Office that would require avoidance, survey, monitoring, during construction, data recovery, building documents, public education, and training of military personnel." Rating of 5-4. This is presumptuous that archeological sites (Mario Cave) will be adversely impacted for access from the general public. This has been significant archeological structure that has many tourists, transit visitor, hikers, etc utilizing the Mario Cave.

Need to discuss about caves in East of Andersen South.

Need to discuss about caves in East of Andersen South.

How come Guam was not on the talking table when this discussion for the relocation was on the talking tables with the Philippines, Singapore, Australia, Korea, or Thailand?

J-021-147

Thank you for your comment. Helicopter flights expected from the proposed USMC Relocation would use flight paths from Andersen AFB to the training areas over water and would not use overland routes currently used by Andersen AFB aircraft. Since the paths do not involve establishing Special Use Airspace, FAA approval for these paths are not required.

J-021-148

Thank you for your comment.

J-021-149

Thank you for your comment, which focused on how Guam was chosen for the military relocation, rather than other places within the Pacific region. Volume 1 at Section 1.4 in the Draft EIS provides a Global Perspective Background, which explains the various international and military capability requirements that were considered for the realignment of military forces. Because this section of the Draft EIS explains the background analysis of strategic military capability locations within the Pacific, it will remain the same for the Final EIS. For instance, this section describes how several locations were considered throughout the Pacific region for the military relocation based upon 1) response times, 2) freedom of action (the ability of the U.S. to use bases and training facilities freely and without restriction at a particular locale), and 3) international treaties and agreements with Japan and other Western Pacific allies. The U.S. locations in the Pacific region considered for the military relocation were Hawaii, Alaska, California, and Guam. Non-U.S. locations considered included Korea, the Philippines, Singapore, Thailand, and Australia, because they are allies to the U.S. and are well situated for strategic force deployment. After analyzing the international and military capability requirements for each locale mentioned above, Guam was the only location for the relocation that met all the criteria. DoD recognizes the importance of managing efforts in implementing the

Recommendations

proposed military relocation to reduce adverse effects on the people of Guam, its natural resources and infrastructure. The EIS process identifies ways to implement the proposed relocation while minimizing adverse impacts. DoD will continue to work with the people and Government of Guam to ensure that the short term impacts of construction are managed effectively and that the long term effects of the military relocation reflect DoD policies to be good neighbors and responsible citizens on Guam.

This is not consistent with the comments on Tab "Overall Review - Consideration of all relevant alternatives (Roadway Structures), page ES-32, referencing "Best Management Practices".

Need to also cross-reference with Volume 7, Mitigation Summary before making final comment

J-021-149

Small arms, machine guns, hand grenades, mines and mortars; support logistic vehicles, m2 .50-Caliber Heavy Barreled Machine Gun, M203 40mm Grenade Launcher and Expeditionary Fighting Vehicles.

Recommend the utilization of the Andersen AFB Firing Range

Recommend that the MIRC structures on Andersen AFB Firing range be adjusted to accommodate the Marine Training Requirements. Also recommend adding the Army National Guards training requirements of equipment to the training facilities.
Recommend incorporating this training requirement on the current MIRC structures, Andersen AFB Firing Range

Recommend further research with the Navy and Air Force "explosive ordnance" structures for the Detachment Ranges. There should be proper "command controls" in place for structures. Also recommend "cross-service" training for this mission requirement (when applicable) for joint range use.

Recommend providing maps with land parcels for current MIRC structures. Also recommend providing maps for proposed MIRC Structures.

Recommend not moving forward proposed range complex until all training requirements (new weapons systems) are identified, inclusive of joint services requirements (Army, Air Force, etc.)

What are the reference points in Volume 2 and 3 that refers to the "additional, projected training requirements"? If training requirements are "additional" then how does this affect the proposed "OCEB Competency training referred to in the Executive Summary" in this Volume? How come these requirements are not reflective of a discussion in the Executive Summary?

Recommend completing an analysis of current MIRC structures, completing the DEIS/OEIS for the proposed MIRC structures, and providing proposed "new training equipment package" for a comprehensive analysis. It would be prudent for the Government of Guam's review for all requirements for "all training range structures" and not before hand. No acquisition of lands!

Need to reference Volume 3 and moving ranges to Tinian

J-021-149

Recommend completing an analysis of current MRC structures, completing the DEIS/OEIS for the proposed MRC structure, and providing proposed "new training equipment package" for a comprehensive analysis. It should be provided for the Government of Guam's review for all requirements for "all training range structures" and not before hand. No acquisition of lands!

This training requirement can be incorporated into the current MRC structure on Andersen AFB Firing Range. Recommend incorporating into Andersen AFB Firing Range for joint operational use.

Need to reference Volume 3 and moving ranges to Tinian

This training requirement can be incorporated into the current MRC structure on Andersen AFB Firing Range. Recommend incorporating into Andersen AFB Firing Range for joint operational use.

J-021-150

Recommend incorporating the following: 1. 2030 Guam Transportation Plans Routes that will be affected; 2. Bridges; 3. and Project Numbers. Also recommend providing "maps" of the proposed road projects to show relationships to the associated "cantonment areas", and other project sites.

J-021-150

Thank you for your comment. Volume 6, Chapter 2 describes the roadway projects in detail. Affected routes and corresponding projects in those routes are illustrated in Figure 2.5-8. Bridge projects are shown on Figure 2.5-1 and described in Table 2.5-3 (GRN #35). Figures 2.5-9 to 2.5-12 show the cantonment areas and adjacent routes and road projects in the vicinity of the cantonment areas and are described in Table 2.5-3 (North Region).

J-021-151

Recommend moving the firing range to another location without disrupting access to this natural archaeological site. Refer also to comments on Firing Range

J-021-152

This maybe best described in Volume 1, Chapter 1, page 1-23, recognizing "...Guam, which is US Sovereign soil that meets the freedom of action operational requirements for permanent basing." However, the decision was made without the "approval" for Guam government, its people, regardless of "sovereignty".

Refer to how these issues were address through the DEIS>

J-021-151

Thank you for your comment. The DEIS describes the intensive selection process that the DoD went through to select alternatives for the location of the firing range on Guam in Section 2.3.1. No other locations met the purpose and need of the proposed action.

J-021-152

Thank you for your comment.

Issues and Text Reference	Cross Reference Information	Adequacy Covered	Adequacy Covered	Comments
<p>8. Assessment of Potential Environmental Impacts</p> <p>The Environmental Impact Assessment discusses primary, secondary, and cumulative impacts during all stages, including initial site preparation and construction, facility operation, and post facility or site closure.</p> <p>f. Pollutants Generation, Transport, and Receptors</p> <p>a. Air Resources</p> <ul style="list-style-type: none"> > identification of emission sources and project emissions rates and comparisons to previous data sets > comparison of predicted atmospheric levels with national, state, or local ambient levels > description of stack emissions during operation and maintenance activities and comparison with existing national, state, and local standards > identification of best mitigation measures to avoid or minimize adverse impacts <p>b. Water Resources</p> <ul style="list-style-type: none"> > address potential for water quality to be degraded by various factors > prediction of pollutant concentrations in water bodies and comparison with existing data sets > identification of best mitigation measures to avoid or minimize adverse impacts <p>c. Geological Resources</p> <ul style="list-style-type: none"> > determination of potential soil loss and mitigation measures > identification of potential contamination sources and mitigation measures <p>d. Biological Resources</p> <ul style="list-style-type: none"> > consideration of potential losses of biological resources within site boundaries > description of effluent and emission concentration and their potential effects to the environment > discussion of bioaccumulative effects from facility emissions and discharges 				<p>Volume 7 refers to the Mitigation Plan Summaries for all areas of concern.</p>

J-021-153

Issue and Text Reference	Cross Reference Information	Adequately Covered	Not Adequately Covered	Comments
<p>> identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>2. Habitat Alterations</p> <p>> address potential for construction and site preparation activities to alter critical habitats</p> <p>> consideration of potential for secondary changes in habitats following construction and site preparation activities</p> <p>> assessment of possible permanent loss or displacement of vegetation habitat due to construction</p> <p>> identification of changes in local species composition, diversity, and abundances resulting from loss of specific habitats</p> <p>> identify best mitigation measures to avoid or minimize adverse impacts.</p> <p>3. Waste Management and Pollution</p> <p>a. Description of facility waste management plan with procedures for treatment, handling, and disposition</p> <p>b. Discussion of projected facility waste characteristics</p> <p>c. Identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>4. Socioeconomic Impacts</p> <p>a. Land Use</p> <p>> identification of the existing or planned land use areas lost due to site preparations and construction activities</p>	Volume 6, Chapter 4		X	
<p>> determination of conflicting zoning requirements and land use with site preparations</p> <p>> description of anticipated changes in near by land use as a result of the facility and site preparations</p>				<p>There are no discussion or information regarding "rights of way" acquisition for road widening projects associated with road structures for the environment or training areas. Recommend identifying associated properties that would be considered for "rights of way" acquisition" and provide a proposed funding source to the mitigation</p> <p>There are no discussion or information regarding "rights of way" acquisition for road widening projects associated with road structures for the environment or training areas. Recommend identifying associated properties that would be considered for "rights of way" acquisition" and provide a proposed funding source to the mitigation</p>
<p>> identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>b. Economic Activities</p>				<p>There are no discussion or information regarding "rights of way" acquisition for road widening projects associated with road structures for the environment or training areas. Recommend identifying associated properties that would be considered for "rights of way" acquisition" and provide a proposed funding source to the mitigation</p>

J-021-153

Thank you for your comment. Potential right-of-way (ROW) acquisitions are discussed in Chapters 10 and 17 of Volume 6. Because design of these roadway improvements is not yet complete, it is premature to identify with certainty in the FEIS the parcels that could be affected. The DoD and FHWA will work cooperatively with the Guam DPW to identify funding sources for necessary property acquisitions for ROWs.

J-021-154

Issue and Text Reference	Cross Reference Information	Adequately Covered	Not Adequately Covered	Comments
<p>> address changes in employment patterns</p> <p>> address ability of available labor pool to meet project-related employment needs</p> <p>> identification of economic multipliers used in analysis and their source</p> <p>> discussion of potential change in overall economic activity in region</p> <p>> identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>c. Population and Housing</p> <p>> Address the relationship between employment increases and population increases</p> <p>> identification of deficiencies in available housing for the potential increased workforce</p> <p>> identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>d. Community Services and Public</p> <p>> Identification of deficiencies in community services and infrastructure during project and post project</p> <p>> identification of shortfall in transportation capacity due to either primary or secondary impacts of the project</p> <p>> identification of best mitigation measures to avoid or minimize adverse impacts</p> <p>a. Transportation</p> <p>> assessment of proposed project's consistency with local and/or regional transportation plans</p>	<p>Volume 1, Executive Summary, Page ES-29 through ES-31; Volume 1, Chapter 3, Section 3.6.5, Page 3-29 through 3-37</p>	X		<p>Roadway construction projects, to include bridges and intersection upgrades, are subject to which alternative is selected.</p> <p>"According to the 2050 Guam Transportation Plan it is recommended that, "All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DFW would be designed to provide substantial LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1, Duty Thresholds for Level of Service.</p>
<p>> evaluation of changes in LOS resulting from the proposed project</p>	<p>Volume 6, Chapter 4, page 4-2</p>	X		
<p>> evaluation of the effect of heavy vehicle traffic on affected personnel and bridges</p> <p>> description of mitigation to offset adverse impacts to structural integrity and public safety</p> <p>4. Health and Safety</p>	<p>Volume 6, Chapter 6</p> <p>Volume 1, Executive Summary, Page ES-34</p> <p>Table ES-4, "Summary of Significant Impact of the Preferred Alternatives" &</p>	X	X	<p>Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation has not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views.</p>

J-021-154

Thank you for your comment. Soundwalls have been identified as mitigation measures for traffic noise in the North and Central regions of Guam. They would be designed not to infringe on roadway intersections or to block driveways with direct access to the road. Soundwalls would also be located in areas between the road and residential backyards. During the design phase, other factors such as views of impacted residences or recreational areas would be taken into consideration.

J-021-155

Issue and Text Reference	Cross Reference Information	Adequately Covered	Not Adequately Covered	Comments
<ul style="list-style-type: none"> - > analysis of whether construction operation, and maintenance activities present health and safety hazards to humans working or living at or near the project site <ul style="list-style-type: none"> - > discussion of potential effects on nearby noise levels on workers, local communities, and local social and fauna - > analysis of potential long-term cumulative bioaccumulation with the food chain - > identification of best mitigation measures to avoid or minimize adverse impacts 				
<p>g. Noise Volume 2, Chapter 6</p> <ul style="list-style-type: none"> - > identification of existing level of noise in the community X - > identification of major sources of noise; Example: <ul style="list-style-type: none"> - Airports X - Highways X - Industrial/Commercial Facilities - Firing Ranges - Aircrafts 	Volume 2, Volume 6, Volume 7			Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".
<p>h. Environmental Equity</p> <ul style="list-style-type: none"> - > determine of the equity of changes in employment patterns attributable to site preparations and construction activities. - > determine of the equity of community structure changes caused by project construction and operation. - > identification of best mitigation measures to avoid or minimize adverse impacts 				

J-021-155

Thank you for your comment. Volume 7 has been updated to include sound walls as a mitigation measure for traffic noise, where determined to be feasible and reasonable in accordance with Guam's Traffic Noise Abatement Policy (refer to Table 2.2-1, Volume 7). In addition, best management practices for addressing noise generated during roadway construction have been included in Table 2.1-1 of Volume 7.

Issue and Reference	Cross Reference Information	Adequately Covered	Not Adequately Covered	Comments
5. Cultural Resources a. Identification of historical or cultural b. Discussion of mitigation measures c. Determine if whether the facility components are designed with consideration				

Issue and Text Reference	Cross Reference Information	Adequately Covered	Not Adequately Covered	Comments
III. MITIGATION MEASURES				
1. Description of mitigation activities for all significant impacts to both the natural and human (social/economic) environment)				
A. Pollutants Generation, Transport, and Receptors				
NOISE	Volume 1, Executive Summary, Page ES 34, Table ES-4, "Summary of Significant Impact of the Preferred Alternatives" & Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures".		X	Volume 7 Refers to the Mitigation Plan Summaries for all areas of concern Roadway noise would be a significant impact in the north and central areas of Guam. Mitigation has not been determined. Noise walls are a potential mitigation, but they have adverse impacts on views. Volume 7, Chapter 2, Page 2-21, Table 2.2-1 "Noise (Human Receptors) - No Mitigation measures". Recommend identifying mitigation measurements for road construction noise and identify funding source.
2. Description of mitigation measures with adequate information to evaluate environmental consequences and residual impacts				
TRANSPORTATION	Volume 6, Chapter 4, page 4-2	X		"according to the 2030 Guam Transportation Plan it is recommended that, "All intersections and roadway segments should operate at LOS E during peak periods. Improvements undertaken by Guam DPW would be designed to alleviate substandard LOS conditions to the extent feasible, with due consideration to physical and environmental constraints." Refer to Table 4.1-1 Delay Thresholds for Level of Service.
3. Identification of best mitigation measures to avoid or minimize potential impacts during all stages of project, including siting and design, facility operation, and post facility closure.				
A. Pollutants Generation, Transport, and Receptors B. Habitat Alterations	Volume 1, Executive Summary, Page ES-29 through ES-31			Road improvement project are subject to alternative selected.

Issue and Text Reference	Cross Reference Information	Adequately Covered	Not Adequately Covered	Comments
<p>4. Support of the following types of mitigation measures in the following decreasing order of preference:</p> <ul style="list-style-type: none"> > Avoidance or prevention > Minimization > Reduction or elimination over time > Correction > Compensation 	<p>Rights of way acquisition on road widening projects</p>			<p>Refer to "Assessment of Potential Impacts" Tab;</p> <p>"Guam DPW would also identify noise receptors on undeveloped land for which development is planned, provided such development includes activity sites of the types described in the NAC and provided that local permits for the development have been acquired or applied for on or before commencement of the noise analysis. Guam DPW would furnish the results of highway traffic noise analyses to local government officials and would encourage local communities and developers to practice noise compatible development. Local government coordination would be accomplished through the distribution." However, this is not summarized in Volume 7, of Mitigation strategy through Guam DPW. Recommend re-literring Volume 6, Chapter 8 Noise Abatement information for "mitigation". Also, what will be the discussion on Noise walls in Volume 7, Refer to Volume 1, Executive Summary, page ES-34, Table ES-4.</p>
<p>5. Implementation plan (Schedule) and criteria for performance for all mitigation measures</p>	<p>Volume 6, Chapter 8, page 8-6</p>	<p>X</p>		
<p>6. Responsible entity assigned to carrying out each mitigation measure 7. Measures are socially and culturally acceptable 8. Adequate financial and non-financial resources to implement the measure</p>		<p>X</p>		<p>Refer to item #5 above.</p>



DEPARTMENT OF
LABOR

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FELIX P. CAMACHO
Governor
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Lieutenant Governor

February 17, 2010

From: Guam Department of Labor (GDOL)
414 West Soledad Avenue, GCIC Bldg., Suite 400
Hagåtña, Guam 96910

To: JGPO, c/o NAVFAC Pacific
258 Makalapa Drive Suite 100
Pearl Harbor, HI 96860-3134
Attention: GMPO

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Ref: (a) Draft Environmental Impact Statement (DEIS)

Enclosure (1): DEIS Comments submitted
Enclosure (2): DEIS Formatted Comments submitted
Enclosure (3): Guam's Workforce Strategic Plan 2005-2007
Enclosure (4): Letter to Jane Oates dated October 30, 2009
Enclosure (5): Pacific Workforce Director's Workgroup Resolution
Enclosure (6): Charter for Regional Workforce Development Council (RWDC)
Enclosure (7): Regional Innovations Grant Submission
Enclosure (8): GDOL Director's Testimony to DOI Office of Insular Affairs
Enclosure (9): Letter of Understanding between GDOL and Pacific Island Forum and Secretariat of the Pacific
Enclosure (10): Briefing with Major General David Bice
Enclosure (11): Briefing with USDOL Officials
Enclosure (12): Civilian Military Task Force (CMTF) Brochure
Enclosure (13): CMTF Labor Subcommittee Budget 2011 submittal
Enclosure (14): CMTF Comprehensive Plan
Enclosure (15): CMTF Labor Subcommittee Reports – 2007
Enclosure (16): CMTF Labor Subcommittee Reports – 2008
Enclosure (17): CMTF Labor Subcommittee Reports – 2009
Enclosure (18): Plans of Work (POWs) 2007-2009
Enclosure (19): RWDC Strategic Plan
Enclosure (20): RWDC Resolutions
Enclosure (21): Micronesian Chief Executives Summit (MCES) Joint Communiqués

1. In accordance with reference (a) enclosures (1) through (21) are forwarded. The collated responses to the DEIS, enclosures (1) through (2) address our issues, concerns, challenges and recommendations regarding the Guam buildup and how it will impact the lives of the people of Guam. Enclosures (3) through (21) reflect transformation efforts on workforce development for Guam and surrounding insular areas in Micronesia.

2. In 2005, Guam Governor Felix Camacho's vision provided the leadership and strategic guidance, in enclosures (3) thru (17), beneficial to the workforce system. The commitment provided the program elements and services to improve the quality of life of the citizens of Guam and maximizes their potential for employment in a competitive

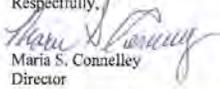
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economy. In 2007, Governor Camacho and the Guam Workforce Investment Board (GWTB) modified the workforce investment system strategic plans to reflect transformation efforts and incorporated the Workforce Innovation in Regional Economic Development (WIRED) framework. The WIRED framework supports the development and education involving Guam, the Commonwealth of the Northern Mariana Islands, Republic of Palau, and the Federated States of Micronesia.

3. By adapting the new directives, the Micronesian Chief Executives endorsed the establishment of the Regional Workforce Development Council (RWDC) and began building on the strengths and assets as a unified region, preparing Micronesia's human capital for training opportunities (enclosures (18) through (21).

4. It is with a strong conviction that the GDOL stands committed to assist employers and job seekers with marketable skills address demand driven occupations in what will change the future of the economy of Guam. Applying the power of e3, education, employment and economic development, GDOL helps all who come through the One Stop Career Center looking for job placement for workforce readiness.

Respectfully,



Maria S. Connolly
Director

January 22, 2010

J-030-001 DEIS Comments submitted by the Guam Department of Labor

The top socioeconomic issues and concerns of the department are such that the approach must quantitatively measure where the island is now in terms of human capital, and forecast what it will look like incrementally by 2020; to identify what resources are available as well as what resources are lacking, and provide practical alternatives on how best to address these shortfalls in workforce development.

The plan for labor growth will specify all supporting data and assumptions used in making the recommendations. Some of these recommendations are the outcome of the Regional Workforce Development Council (RWDC) Strategic Plan for 2010-2015 as outlined at the 12th Workforce Summit held November 30-December 2, 2009.

The result of this process represents a coherent and practical framework aligned through the three overarching strategic Plan focus areas:

1. Workforce Demand Initiatives;
2. Workforce Supply Initiatives;
3. Comprehensive local/regional based training systems

It is recognized that the effectiveness of the strategic planning efforts is dependent upon the accuracy of the forecasts and on the ability of planning efforts to anticipate and adjust to the changes in the forecast.

Preliminary indications of the scope, magnitude, and duration of the military buildup strongly suggest for an immediate need for a comprehensive economic plan with specific focus on human resources, training, employment, and employment support (i.e. transportation, housing, child care, etc.).

Guam's labor market and the results of on-going military buildup discussions include concerns about workforce sustainability, long-term employment and the impact of foreign workers (H2B) to the local and regional community. This presents challenges for workforce related and socioeconomic issues.

The impacts of Service and Technical Capacity at Guam Department of Labor are:

- Compliance and Enforcement
 - Needs for Alien Labor Processing & Certification Division (ALPCD) enforcement and compliance – considering all budget categories (personnel, equipment, supplies, rental, capital outlay, etc.)
 - Funding associated with H-2B compliance and fraud/abuse prevention for ALPCD (Note: Recent amendments/changes were made to rules and regulations)

J-030-001

Thank you for your comment. Estimated impacts on Guam Department of Labor, Alien Labor Processing and Certification Division, workload and employment requirements are presented in Section 4.4 of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS).

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J-030-001

- o Technology and Systems
- o Personnel and Administrative Services
- o Needs of GDOL to support an increased department workload as a result of the increased H-2B population to include:

1. Labor market testing within the Guam Employment Service (Wagner Peyser Act)
2. Support for Workman's Compensation & OSHA due to increase in construction activity and the injuries associated with this type of work
3. Support for Wage & Hour division to prevent wage abuses

An evaluation of manpower and staffing needs is also being developed to support the delivery of service at the One Stop Career Center and partners. Youth programs are also being expanded and developed to be available to our youth.

Based upon the work that has been undertaken by the Labor Subcommittee, they have identified the following to be included in the Guam military buildup EIS/OEIS:

- An assessment and projection of wages by skills sets as well as other job desirability factors, including the potential for upward mobility, and a projection by age cohort from both Guam, Northern Marianas, and insular areas in the Pacific jurisdiction to measure potential labor supply alternatives, including attracting those considered non-employed away from continued dependence on public assistance programs is needed in the EIS.
- Identification and assessment of the sustained job increase after construction, including the sustained job increases in the military and public/private sectors is required to insure the island is not negatively impacted by meeting immediate short term needs and failing to provide for sustained requirements that could have negative implications for Guam's private sector and its military sector.
- A listing of training requirements to take the current workforce skill to the next level to meet as many of the skill levels anticipated well into 2025. Current training resources need to be evaluated for its current effectiveness in meeting present and anticipated future training needs as well as the capacity to provide specialized training to meet anticipated needs. The evaluation should include partners in the public sector providers such as the Guam Public School System (GPSS), Guam Community College (GSS), University of Guam (UOG), as well as private, non-profit training

Enclosure 1

providers such as the Guam Contractors Association Trades Academy (GCATA), Guam Hotel and Restaurant Association (GHRA), and other civic and private for-profit training providers. This is the concept of the power of 3: education, employment and economic development +1, ethics.

- The EIS must address the impact upon the availability of teachers and other specialty services the DODEA system will have upon Guam's public and private school systems. Inclusive within this assessment is not only the additional demand that will be created by an expanded DODEA system but also those military dependents that would be able to provide services to the civilian school systems.
- The EIS should provide a monetary quantification of the cost of training to be incurred by the civilian sector and the Government of Guam to meet DoD's labor requirements and an evaluation of all potential funding sources that may be available to address the training costs. Funding sources must be identified.
- An evaluation of potential workforce availability, including sources of labor, current and anticipated market for industrial skilled labors, and the barriers for attracting, recruiting, and retaining these labor forces to 2020.
- The EIS should address the impact the inclusion of military dependents will have upon federal dollars and training slots that would otherwise be available for Guam's residents who are displaced workers as military dependents also qualify under federal displaced worker programs. The EIS should identify mechanisms to mitigate any negative impacts.

Enclosure 1

Table ES-1, page iii - Off-island construction workers for Direct DoD projects and Off-island workers for Indirect /Induced Jobs:

COMMENT: DOD should consider the availability of applicants from the local labor market (Guam and Micronesia) before expanding its area of consideration to attract applicants from national wide.

RECOMMENDATION:

- Ensure DOD Recruitment Plan, Navy's Merit Promotion Plan (Appropriated and Non-Appropriated), policies and procedures define the Area of Consideration to be as small as Guam and Micronesia before expanding the area of search to include nation wide; and
- Commitment to restructure civilian positions and recruit at the entry level with known promotion opportunity. This recruitment strategy would allow jobs to be filled by local applicants; and
- Special consideration should be given and the right of "first refusal" to employees (appropriated and non-appropriated) when there is a change of charge on the contract; and

Table ES-5. Summary of Public Services Agency Key Staffing Requirements
Page ix – Guam Alien Labor Processing & Certification Division (ALPCD) within the Guam Department of Labor (GDOL)

COMMENT: In addition to ALPCD, the Guam Employment Service (GES) will also be influenced by the growth in permit requests (applications to recruit for H-2B temporary foreign workers). One of the federal mandates is the 30-day labor testing. GES is responsible for this recruitment strategy. GES is 100% federally funded (Wagner-Peyser) and with the anticipated increase in population, we also anticipate an increase of the formula grant.

RECOMMENDATION:

- DEIS to include in Table ES-5: GES staffing requirements for peak year to show 5 for both areas: unconstrained and constrained; and 0 in Year 2020. All additional staffing requirements for ALPCD and GES will be recruited on a Limited Term Appointment (LTA). Thus, LTA employees will be terminated gradually as the workload decreases.

Socioeconomic Impact Assessment Study – page 3-20: 3.4.4.4 Guam Department of Labor:

Eric

17 February 2010

J-030-001 | Volume 9, Appendix F, page 147, table 4.3-3

It is proposed that there will be 238 civilian military employees in 2010, and 522 in 2011, 2012 and 2013. That number jumps to 3,511 civilian military employees in 2014 and 3,743 every year from 2015 to 2020. It is projected that 50% of these jobs will be taken up by Okinawa transfers while 25% would be absorbed by military spouses (page 4-6) leaving only 25% available for local residents.

COMMENT: It is understood that civilian military employees who are going to be adversely impacted by the realignment of Marines from Okinawa to Guam will be afforded due process and provided transition and placement assistance. This target group may include military spouses who will be transferring on a permanent change of duty station due to the transfer of function.

RECOMMENDATION: It is recommended that transition and placement assistance services be made available to U.S. citizens ONLY (civilian military employees and military spouses) for jobs that are going to be created as a result of the realignment. Local nationals (foreign citizens) should not be given special VISA status to work on Guam. Every effort should be made to fill job vacancies with U.S. citizens from Okinawa who are going to be displaced and from the local labor market applicants.

Maria S. Connelley
Director, Guam Department of Labor
414 West Soledad Avenue
GCIC Building, Suite 400
Hagatna, Guam 96910

Enclosure 1

J-030-002

COMMENT:

The military expansion in the Mariana Islands poses many potential socio-economic changes that are best addressed with proper economic modeling to generate a range of data projections and produce forecasts for demographics, gross regional product, output (sales), wages and salaries, personnel income, employment and labor force to provide the basis for the analysis related to housing, retail, schools, and social services, and local government impacts.

The approach must quantitatively measure where the island is now in terms of human capital, forecast what it will look like incrementally over the next 10 years, identify what resources are available and what resources are lacking, and provide practical alternatives on how best to address these shortfalls.

The plan for labor growth will specify all supporting data and assumptions used in making the recommendations. While the plan can be phased to address resource availability, the complete plan needs to include the following elements:

- A database of current available workers in terms of skills sets and trends that have occurred in these skills sets over the past decade.
-

J-030-002

Thank you for your comment. Please see section 4.3 of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS) for estimated impacts that would be associated with the proposed action.

Enclosure 1

Human Resources

1 The Guam Department of Labor (GDOL) provides support to meet the labor demands and impact for the Guam military buildup in preparing and collaborating with partners such as Guam Community College (GCC), the University of Guam (UOG) and Guam Trades Academy (GTA). The department also partners with the Guam Marianas Training Center (GMTC) in the medical ancillary professional certification program and with the Marianas IT (Information Technology) for the certification program. The plan for labor growth will also specify all supporting data and assumptions used in making recommendations, some of which are the outcome of the Regional Workforce Development Council (RWDC) 5-year workforce regional Strategic Plan. The result of this process represents a coherent and practical framework aligned through the three (3) overarching strategic plan focus areas which are:

1. Workforce Demand Initiatives
2. Workforce Supply Initiatives
3. Comprehensive local/regional based training systems

Background

The anticipated military buildup on Guam has brought about tremendous challenges to address the needs for demand driven occupations and construction related projects.

Enclosure 1

What does the Draft EIS state?

Figure ES-1 compares total labor force demand on Guam with and without the proposed action. At the 2014 peak, civilian labor force demand under the proposed action would be 75% higher than it would be without the project. By 2020, the difference declines to 12%. Section 4-3 of the SIAS describes in detail the projected distribution of increased jobs among on-and-off island labor sources.

Reference including Volume, Pages and more
Volume 9, page v, vi

What do GovGuam Professionals Have to say?

Average and total gross income paid to Guam civilian workers would increase because of the proposed military relocation. The estimated average full-time equivalent (FTE) salary for jobs related to the construction phase (\$33,500) and the military operational phase (\$40,000) would be considerably higher than the 2007 Guam average FTE salary of \$28,150. With a rapid increase in economic activity and a limited pool of on-island labor, there would likely be competition for labor and thus upward pressure on wage rates. Total civilian labor force income is projected to increase by an estimated \$1.5 billion during the peak-year, according to the unconstrained scenario (Table ES-3).

Department: Guam Department of Labor

Enclosure 1

2 The Guam Department of Labor (GDOL) Alien Labor Processing and Certification Division (ALPCD) reported an increase in H-2B workers.

The number of H-2B workers is now expected to increase due to new construction projects with the military buildup.

Background The Guam Department of Labor (GDOL) and the Agency for Human Resources Development (AHRD) continues to implement workforce initiatives for training and education. It is anticipated that there will be an increase in on-site labor during the construction phases for military projects and labor will be from local and Micronesia region first and before expanding the recruitment area of consideration to nationwide workforce.

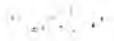
What does The Draft EIS state?

Agencies Affected by Increased Construction and Development. Analysis was conducted for additional agencies that would be influenced not be a growth in population, but b a growth in permit requests for construction and development. These agencies included:

- Guam Department of Public Works
- Guam Department of Land Management
- Guam Environmental Protection Agency
- Guam Coastal Mgmt Program within Bureau of Statistics and Plans
- Guam Power Authority
- Guam Waterworks Authority
- Guam Fire Department, Permitting Staff
- Historic Preservation Office within GDPR
- Guam Division of Environmental Health with CDPHSS
- Guam Alien Labor Processing and Certification Division within the Guam Department of Labor (GDOL)

*Reference including Volume, Pages and more
Volume 9, page viii, ix*

Enclosure 1



What do
GovGuam
Professionals
Have to say?

Analysis of the proposed action indicated the approximate number of construction and development permits that would be needed to complete the planned activities.

Department: Guam Department of Labor

Enclosure 1



DEPARTMENT OF
LABOR

DEPARTMENTON HUMOTNÁT MARIA S. CONNELLEY, Director · ERICA U. PEREZ, Deputy Director

FELIX P. CAMACHO
Governor
MICHAEL W. CRUZ, M.D.
Lieutenant Governor

RESPONSE – MILITARY BUILDUP TRAINING SIAS

1. Does the Guam Dept. of Labor provide support to programs aimed at improving the supply of professional (non-construction) labor?

The Guam Department of Labor in its effort to meet its mission provides support to programs aimed at improving the supply of professional (non-construction) labor. It has contracted with a pool of training providers in the post education secondary education areas such as the Guam Community College and the University of Guam. The department also partners with the Guam Marianas Training Center in the Medical Ancillary Professional's Certification programs and with the Marianas IT supporting the IT Cabling Certification Program.

2. Does GDOL sponsor professional training programs at the University of Guam or adult education?

Yes, the Guam Department of Labor partners with and supports various career development programs at the University of Guam and the Guam Community College. The University of Guam provides professional certification programs as well as degree programs. The Guam Community College offers Adult Education programs and provides professional certification as well as degree programs. Additionally, the GDOL provides direct support for the court Interpreters Program with the Superior Court of Guam.

3. Has GDOL considered contributing funds to the Guam Contractors Association Trades Academy or any other professional development organization?

The Guam Department of Labor through various mandates (PL 18-48, PL 23-106, PL 29-002) indirectly provides funding to the Guam Community College for the purpose of job development programs in varied fields. Additionally, direct funding is provided to the Guam Contractors Association Trades Academy as a service provider for professional development in the construction industry as well as various programs in the community through non-profit organizations.

Are there any groups on Guam currently seeking Federal Funding for professional development programs?

Various entities such as the Guam Community College, the University of Guam, the Guam Trades Academy and the superior Court of Guam are currently seeking Federal funds to supplant, enhance and initiate training programs within their respective institution.

4. Has the US Department of Labor provided any Regional Innovation Grants (RIG)?

Currently, The Guam Department of Labor is in the process of completing the required documents for submittal to apply for the apportioned funds under the Regional Innovation Grant.

If so, for construction trades or for other professional development?

The application is a planning application, when approved; the implementation segment will include funding for construction and professional development.

Enclosure 1

5. Are there published materials we can access, or contact person we can interview, to get a sense of professional development programs on Guam, CNMI, FSM?

The contact persons for the respective entities are as follows:

The Guam Community College
Mrs. Mary Okada, President
Guam Community College
P.O. Box 23069 GMF
Barrigada, Guam 96921
(671) 735-5522
Okada.mary@guamcc.edu

Mr. Ray Somera
Guam Community College
P.O. Box 23069 GMF
Barrigada, Guam 96921
(671) 735-5522
Reneray.somera@guamcc.edu

The University of Guam
Mr. Peter Barcinas
University of Guam, Cooperative Extension Services
ALF Bldg, Room 228
UOG Station
Mangilao, Guam 96923
(671) 735-2055
pbarcinas@uguam.uog.edu

The Guam Marianas Training Center
Mrs. Fe Ovales,
President
414 West Soledad Ave, Suite 501A, GCIC Bldg.
Hagatna, Guam 96910

The GCA Trades Academy
Mr. Herbert Johnston, Jr.
President
718 North Marine Drive, Suite 203
Tamuning, Guam 96913

Enclosure I



Request for Information

Labor Training on Guam for the Military Buildup SIAS

Requested by David Clark of Economic Planning Resources, subcontractor for John M. Knox and Associates who is identifying existing and potential workforce on Guam to accommodate future labor demand both with and without the military buildup. Specifically Mr. Clark reviewing training programs (existing and planned) on Guam in both the construction, and non-construction labor forces, and related programs, presenting the following questions:

The following represents existing AHRD Programs, it is suggested that planning include those programs and are being planned in the RIG, Demonstration Grant, CMTF, and at RWDC.

1. Does GDOL provide support to programs aimed at improving the supply of professional (non-construction) labor?

Yes, it has contracted with a pool of training providers

Guam Community College – Post Secondary

University of Guam – Post Secondary

Guam Marianas Training Center – Medical Ancillary Professional's Certification programs

Marianas IT – IT Cabling Certification Program

2. Does GDOL sponsor professional training programs at University of Guam or adult education?

Yes,

University of Guam provides professional certification programs as well as degreed programs

Guam Community College offers adult education programs and provides professional certification programs as well as degreed programs

3. Has GDOL considered contributing funds to the Guam Contractors Association Trades Academy or any other professional development organizations?

Yes, funding is provided to GCA Trades Academy as a service provider for professional development in the construction industry

Are any groups on Guam currently seeking Federal funding for professional development programs?

Yes,

Enclosure 1

Guam Community College

University of Guam

Guam Trades Academy

4. Has the US Department of labor provided any Regional Innovation Grants (RIGs)?

No, Guam is has submitted an application, this was returned for edits, it will resubmit the application by December 31, 2008.

If so, for construction trades or for other professional development?

The application is a planning application, when approved; the implementation segment will include funding for construction and professional development

5. Are there published materials we can access, or contact person we can interview, to get a sense of professional development programs on Guam , CNMI, FAS?

Yes,

Guam Community College:

Mary Okada and Ray Somera

University of Guam:

Peter Barcinas

Guam Marinas Training Center:

Fe Ovaes, President

Sulte 601A, GCIC Building

414 West Soledad Avenue, Hagatna, Guam 96910

GCA Trades Academy:

Herbert J. Johnston, Jr., Education Director

Suite 203, East West Business Center

718 N. Marine Drive, Tamuning, Guam 96913

Enclosure 1

Review of Realignment Funding and Labor Requirements (GAO 351302/351319)

GAO is currently reviewing the military buildup on Guam due to the planned realignment of DOD personnel from Okinawa, Japan. Our emphasis is on evaluating the process used to develop and validate cost estimates for non-defense projects and programs ("outside the fence") and labor requirements that will affect or are related to the military buildup. We have met with Pacific Command, JGPO-Forward, Naval Facilities Engineering Command, the Office of Insular Affairs and Government of Guam officials, and have started developing our reports. However, we still need to collect additional information to confirm our understanding of the roles and responsibilities related to the efforts of the federal government. Below are questions we have for FRC that should help us with our reviews. Please provide a response via e-mail by August 6, 2009.

If you have any questions, please contact Richard Meeks at 202-512-8470 or meeksrw@gao.gov, or Josh Margraf at 206-287-4837 or margraf@gao.gov.

1. During discussions with officials from the Government of Guam's Civilian-Military Task Force, we were told that federal agencies budgets did not include the Government of Guam's its fiscal year 2010 budget request of \$238 million.
 - Can FRC comment on whether the Government of Guam's funding requests, as detailed in its fiscal year 2010 budget request, have been incorporated into FRC member agency budgets? If the Government of Guam's requests have not been included, why?

2. Many cost estimates developed by the Government of Guam for inclusion in its fiscal year 2010 budget request were developed "in-house" by Civilian-Military Task Force subcommittees. However, for non-defense items considered "long-lead" or critical/top-priority to the buildup by federal agencies, such as the port and roadways, Guam received more detailed information regarding buildup requirements and secured funding to hire consultants to develop the cost estimates.
 - Have FRC members provided assistance to the Government of Guam specifically with regard to the development of cost estimates for the fiscal year 2010 request? If so, what type of assistance have members provided?
 - What types of assistance have FRC members provided to the Government of Guam in developing cost estimates, such as identifying critical needs, reviewing and validating cost estimates, and/or funding for outside consultants?
 - What types of non-defense items/projects/programs have been designated as critical/top priority or long-lead by FRC members? To what extent will designating items/projects/programs as top priority or long-lead help the Government of Guam secure funding support from federal agencies?

3. The Government of Guam has not released its fiscal year 2011 budget request, though many federal agencies may have already developed and prioritized their 2011 budgets.
- Given these timeframes, what is the likelihood that Guam's fiscal year 2011 funding requests will be incorporated into agency budgets?
 - Have FRC members provided assistance to the Government of Guam specifically with regard to the development cost estimates for its fiscal year 2011 request?
4. The Government of Guam's Office of the Public Auditor noted in its 2008 annual report that there is a lack of understanding among Guam's government managers of the importance of internal controls, or checks and balances, such as monitoring, separation of duties, establishing a control environment, and ensuring accurate and timely recording of transactions.
- What types of poor internal controls have FRC members experienced?
 - What impact impacts, if any, in your opinion would weak internal controls have on Guam's ability to secure funding support from federal agencies?
 - Have FRC members provided any assistance to the Government of Guam to help improve internal controls? Please provide examples.
5. The Guam Department of Labor, University of Guam, and Guam Community College have all been trying to assess potential labor needs following the construction phase of the buildup. However, information regarding the number and type of civilian positions appears to be preliminary until DOD releases its Environmental Impact Statement and Master Plan.
- To what extent have FRC member agencies been assisting the Government of Guam to identify potential post-buildup/non-construction labor needs? What types of positions have been identified?
 - Guam Community College has established a training program for individuals to gain skills for construction and electrical careers in an effort to prepare them for the buildup using a Department of Labor Earmark Congressional Grant. To what extent has the Department of Labor's FRC representative been involved in this effort? What is the total amount of the earmark grant?
 - Guam Department of Labor has applied for a Regional Innovation Grant through the US Department of Labor. Is the FRC Department of Labor representative aware of the application, and if so, are you able to provide us information on its status?

- What is FRC's opinion regarding the quality of the Government of Guam's cost estimates? What could be done to improve the estimates?

LABOR

The military expansion in the Mariana Islands poses many potential socio-economic changes that are best addressed with proper economic modeling to generate a range of data projections and produce forecasts for demographics, gross regional product, output (sales), wages and salaries, personnel income, employment and labor force to provide the basis for the analysis related to housing, retail, schools, social services, and local government impacts.

The approach must quantitatively measure where the island is now in terms of human capital, forecast what it will look like incrementally over the next 10 years, identify what resources are available and what resources are lacking, and provide practical alternatives on how best to address these shortfalls.

The plan for labor growth will specify all supporting data and assumptions used in making the recommendations. While the plan can be phased to address resources availability, the complete plan needs to include the following elements:

- A database of current available workers in terms of skills sets and trends that have occurred in these skills sets over the past decade.
- A listing of all potential military projects with as much definition as practically possible over the next 15 years.
- A forecast of the demand for skilled labors by skills sets, including the primary construction industry, the secondary service industry (support service) and the tertiary maintenance and repair industry over the next 10 years.
- A projection of certain significant aspects of the future Guam economy and, in particular, changes to Guam's cost of living in terms of housing, food, utilities, taxes, etc.
- An evaluation of manpower and staffing needs to support the delivery of service at the One Stop Career Center and partners.

It is recognized that the effectiveness of the strategic planning efforts is dependent upon the accuracy of the forecasts and on the ability of planning efforts to anticipate and adjust to the changes in the forecast. Preliminary indications of the scope, magnitude, and duration of the increase in military activity strongly suggest for an immediate need for a comprehensive economic plan with specific focus on human resources, training, employment, and employment support (i.e. transportation, housing, child care, etc.).

The situational context of Guam's labor market and the results of on-going military growth discussions pose concerns with regard to workforce sustainability and impact of Alien

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Labor Force (H2B) to the local and regional community. The recent U.S. Congress approval to remove the restriction of the H2B on military related construction poses several challenges for an island economy and all workforce related issues and the ancillary social economic issues.

Impact of Service and Technical Capacity at Guam Department of Labor

- Compliance and Enforcement
 - Needs for Alien Labor Processing & Certification Division (ALPCD) enforcement and compliance – considering all budget categories (personnel, equipment, supplies, rental, capital outlay, etc.)
 - Funding associated with H-2B compliance and fraud/abuse prevention for ALPCD
 - Technology and Systems
 - Personnel and Administrative Services
 - Needs of GDOL to support an increased department workload as a result of the increased H-2B population to include:
 - Labor market testing within the Guam Employment Service (Wagner Peyser Act)
 - Support for Workman's Compensation & OSHA due to increase in construction activity and the injuries associated with this type of work
 - Support for Wage & Hour division to prevent wage abuses

J-030-003

Based upon the work that has been undertaken by the Labor Subcommittee, they have identified the following to be included in the Guam military build-up EIS/OEIS:

- An assessment and projection of wages by skills sets as well as other job desirability factors, including the potential for upward mobility, and a projection by age cohort from both Guam, Northern Marianas, and insular areas in the Pacific jurisdiction to measure potential labor supply alternatives, including attracting those considered non-employed away from continued dependence on public assistance programs is needed in the EIS.
- Identification and assessment of the sustained job increase after construction, including the sustained job increases in the military and public/private sectors is required to insure the Island is not negatively impacted by meeting immediate short term needs and failing to provide for sustained requirements that could have negative implications for Guam's private sector and its military sector.
- A listing of training requirements to take the current workforce skill level to meet as many of the skill levels anticipated over the next 15 years. Current training resources need to be evaluated for its current effectiveness in meeting present and anticipated training needs as well as the capacity to provide specialized training to meet anticipated needs. The evaluation should include public sector providers such as the Guam Public School System (GPSS), Guam Community

J-030-003

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

Enclosure 1

J-030-003

College (GSS), University of Guam (UOG), as well as private, non-profit training providers such as the Guam Contractors Association Trades Academy (GCATA), Guam Hotel and Restaurant Association (GHRA), and other civic and private for-profit training providers.

- The EIS must address the impact upon the availability of teachers and other specialty services the DODEA system will have upon Guam's public and private school systems. Inclusive within this assessment is not only the additional demand that will be created by an expanded DODEA system but also those military dependents that would be able to provide services to the civilian school systems.
- The EIS should provide a monetary quantification of the cost of training to be incurred by the civilian sector and the Government of Guam to meet DoD's labor requirements and an evaluation of all potential funding sources that may be available to address the training costs.
- An evaluation of potential workforce availability, including sources of labor, current and anticipated market for industrial skilled labors, and the barriers for attracting, recruiting, and retaining these labor forces over the next 10 years.
- The EIS should address the impact the inclusion of military dependents will have upon federal dollars and training slots that would otherwise be available for Guam's residents who are displaced workers as military dependents also qualify under federal displaced worker programs. The EIS should identify mechanisms to mitigate any negative impacts.

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Jessica Cate <jcate.gdol@gmail.com>

Final - Labor Subcommittee Report for EIS

1 message

Maria C <connent@ite.net>

Wed, May 23, 2007 at 8:16 PM

Reply-To: connent@ite.net

To: Anthony Anderson <daryla2000@yahoo.com>, Cathy Cruz <catcruz40@yahoo.com>, David Dell'Isola <ddell@guam.net>, Dorothy Gutierrez <dotg_52@yahoo.com>, Elaine Aguon <Elainem_aguon@yahoo.com>, Erica Perez <ericaperez@yahoo.com>, Francis Susulco <sweek00411@yahoo.com>, Gary Hiles <blshiles@ite.net>, George San Nicolas <geovsn@yahoo.com>, Greg Massey <alpcd-greg@hotmail.com>, Helen Mafnas <helen_mafnas@yahoo.com>, Jaime Rodriguez <xiosormd@guam.net>, Jessica Cate <jcate.gdol@gmail.com>, Joe San Agustín <joesanagustin@gmail.com>, Lani Baza <laniebaza@yahoo.com>, Larry Gamboa <lgamboa.ahrd@yahoo.com>, Roman Quinata <guwagehr@ite.net>, Ruth Laon Guerrero <onestopcareer@gmail.com>, Vera Topasna <vtopasna@gmail.com>

Good Morning

Attaching a copy of what was submitted to the Civilian Military Task Force and Joint Guam Program Office on the impact of the global repositioning and military growth.

Each of the 11 subcommittees had a submit an environmental impact statement, etc. The Labor Technical team prepared the attached from discussions and inputs from private and public sector representatives, etc.

Have a great morning! ...later...maria

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DIPÄTTMENTON HUMOTNÁT MARIA S. CONNELLEY, Director * ERICA H. UNPINGCO, Deputy Director

FELIX P. CAMACHO
Governor
MICHAEL W. CRUZ, M.D.
Lieutenant Governor

**GUAM DEPARTMENT OF LABOR/AGENCY FOR HUMAN RESOURCES
DEVELOPMENT**

The Guam Department of Labor is responsible for promoting, developing and improving the welfare of wage earners on Guam. The department provides training and education, job placement assistance, outreach and consultation to increase the awareness of employment practices, senior employment programs and alien labor certification. The department also enforces the prevailing wage schedule, Fair Labor Standards Act, Employment Service Law, Occupational Safety and Health standards and administers workers compensation. Additionally it oversees labor market and occupational information systems as well as provides statistical information regarding Guam's manpower and labor situation. It houses and supervises the Agency for Human Resources Development and the AmeriCorps program.

Labor Sub-Committee:

As a Sub-committee of the Civilian Military Taskforce (CMTF), the group has adopted the following guiding principles as the island begins its transformation process for growth:

Vision Statement: To provide leadership, strategic guidance, and resources that are valuable to the Workforce Investment System.

Mission Statement: To provide program services to improve the quality of life of Guam's citizens by maximizing their potential for employment in a competitive economy.

SITUATION:

One of the most critical challenges facing our island is the need for additional labor. Limitations of the labor pool and the cost to develop specialized skills to meet the needs of the impending growth, have prompted the workgroup to adopt several strategies to address the labor issues. Within that context the Labor Sub-committee continue to meet with civilian, military and federal officials to discuss options for developing an analysis and provide a draft report.

Enclosure 1

The requirement for a skilled labor force in construction-related occupations is estimated to be from 10,000 (Joint Guam Program Office) to 20,000 (Guam Contractors Association). Other in-house estimates reach as high as 25,000 workers, which looks closer at all H2B job categories for both military and non-military. After a detailed description by the Director of the Guam Department of Labor (GDOL), Guam's current labor workforce, as well as Guam's projected labor workforce within the next decade, will not meet the demand for workers during the construction phase of the military build-up. At best, Guam can probably meet only 10%-15% of this demand. These factors are of paramount concern of local, federal and military officials.

STRATEGIC APPROACH – HUMAN CAPITAL:

In February 2007, the Labor subcommittee created a technical team consisting of private sector, education, and local government representatives. The technical team is tasked to prepare a Guam 2008-2014 socio-economic plan that quantifies the anticipated growth of Guam's economy over the next 10 years. The approach is to quantitatively measure where the island is now in terms of human capital, forecast what it will look like incrementally over the next 10 years, identify what resources are available and what resources are lacking, and provide practical alternatives on how best to address these shortfalls. The opportunity for smart growth (or right growth) requires that we establish or develop new initiatives capitalizing on community strengths. To do this we recommend to establish emphasis areas specific to Military/Community Impact Emphasis Areas.

The situational context of Guam's labor market and the results of on-going military growth discussions pose concerns for the group and leadership. Two important issues common in these discussions include but not limited to the following: Workforce Sustainability and impact of Alien Labor Force (H2B) to the local and regional community. The recent U.S. Congress approval to remove the restriction of the H2B on military related construction poses several challenges for an island economy and all workforce related issues and the ancillary social economic issues.

I. IMPACT OF SERVICE AND TECHNICAL CAPACITY AT GUAM DEPARTMENT OF LABOR (GDOL)

- **Compliance and Enforcement**
 - Needs for Alien Labor Processing & Certification Division (ALPCD) enforcement and compliance – considering all budget categories (personnel, equipment, supplies, rental, capital outlay, etc.)
 - Funding associated with H-2B compliance and fraud/abuse prevention for ALPCD
 - Technology and Systems
 - Personnel and Administrative Services
 - Needs of GDOL to support an increased department workload as a result of the increased H-2B population to include:

Enclosure 1

- Labor market testing within the Guam Employment Service (Wagner Peyser Act)
- Support for Workman's Compensation & OSHA due to increase in construction activity and the injuries associated with this type of work
- Support for Wage & Hour division to prevent wage abuses
- **Socio-Economic spill over effect**
 - Health
 - Emergency Care
 - Immunization Compliance
 - Family Well-Being
 - Housing/Barracks
 - Infrastructure
 - Power
 - Transportation
 - Water
- **Labor Training**
 - Post-Construction Workforce Sustainability
 - Secondary job demands
 - Operation/maintenance-workforce needs for post construction phase (Sustainability)
 - Training needs for workforce demand and sustaining occupations after construction build-up.
 - Determine training programs needed to sustain labor during and after construction
 - Secondary market occupations will be beyond the construction demand.
 - Funding for training Programs
 - Personnel
 - All items associated with increased demand of programs
 - Data gathering and assessments
 - Funding levels for training

II. CURRENT DATA AND FUTURE DATA NEEDS

- Workforce Evaluation and Analysis
 - **Level I: Workforce Planning**
 1. Baseline Data and Programs
 - Workforce Database
 - Current Labor Capacity
 - Current listing of training requirements and providers.
 - List of all current and potential military projects over the next 15 years.
 - Econometrics Forecasting
 - Models (Population, Regional Economy, Social)

Enclosure 1

- Current training resources need to be evaluated for its current effectiveness in meeting present and anticipated training needs as well as the capacity to provide specialized training to meet anticipated needs.
- 2. Budget Cost associated with all aspects of impact related to all training and an evaluation of all potential funding sources.
- 3. Forecasting
 - A forecast of the demand for skilled labors by skills sets, including the primary construction industry, the secondary service industry (support service) and the tertiary maintenance and repair industry over the next 10 years.
 - Forecast current workforce skill level to meet as many of the skill levels anticipated over the next 10 years.
- 4. Workforce Planning: 6- Forces Diagram (Strategic Planning)
 - Project impact:
 - wages by skills sets;
 - job desirability factors;
 - potential for upward mobility;
 - measure potential labor supply by projecting age cohort local and regional;
 - measure potential labor supply coming from:
 - Underemployed
 - Non-employed
 - Entitlement programs
 - **LEVEL II: WORKFORCE & ECONOMIC ASSETS AND LEAKAGES**
 1. Survey Industry Needs for Hiring
 2. Determine Capacity Support Needs
 3. Survey Training Needs
 - Internal - Training, Staffing Development
 - External - Service Providers (apprentice providers and future providers)
 4. Assess and Evaluate impact of quality and standard of living.
 - **LEVEL III: SYSTEMS AND STRUCTURES**
 1. Performance Audit (model after One-Stop Career Center performance audit)
 2. Impact of Governance Structures & Relationships (cross planning assurances) Apply Collaboration Framework.
 - **LEVEL IV: EXTERNAL AND REGIONAL ISSUES**

Other issues related to growth are wages, increase in construction trades training. The group will continue to address the labor impact through several workforce strategies.

DEIS
REVIEW COMMENTS SHEET

No.	Date	VC	CV	TR	LCM	TRC	TRD	Comment	Recommendation / Mitigation / Proposed Solution	Comments (date)	Agency Org.
J-030-004								Off-island construction workers for Direct DoD projects and Off-island workers for Indirect /Induced Jobs: DOD should consider the availability of applicants from the local labor market (Guam and Micronesia) before expanding its area of consideration to attract applicants from nationwide. Although Guam has an unemployment rate, the buildup will bring new jobs to Guam (Source: GDOL 2007, 8.3%)	Ensure DOD Recruitment Plan, Navy's Merit Promotion Plan (Appropriated and Non-Appropriated), policies and procedures define the Area of Consideration to be as small as Guam and Micronesia before expanding the area of search to include nationwide and Commitment to restructure civilian positions and recruit at the entry level with known promotion capersorship. This recruitment strategy would allow jobs to be filled by local applicants and Special consideration should be given and the right of "first refusal" to employees (Appropriated and non-appropriated) when there is a change of charge on the contract.	Connellley, Maria	GDOL
1	12/18/09	5									
J-030-005								Summary of Public Services Agency Key Staffing Requirements Guam: Alien Labor Processing & Certification Division (ALPCD) within the Guam Department of Labor (GDOL). In addition to ALPCD, the Guam Employment Service (GES) will also be influenced by the growth in permit requests (applications to recruit for H-2B temporary foreign workers). One of the federal mandates is the 30-day labor testing. GES is responsible for this recruitment strategy. GES is 100% federally funded (Wagner Pinyon) and with the anticipated increase in population, we also anticipate an increase of the foreign born.	DEIS to include in Table ES-5: GES staffing requirements for peak year to show 5 for both areas: unconsolidated and consolidated, and 0 in Year 2002. All additional staffing requirements for ALPCD and GES will be recruited on a limited term appointment (LTA). Thus, LTA employees will be terminated gradually as the workload decreases.	Connellley, Maria	GDOL
2		9									
J-030-006								Lack of socioeconomic data pertaining to Guam and tracking of such data	Federal funding should be made available to Guam Department of Labor to hire additional staff to generate their socioeconomic reports and data	Rubic, Martha	GDOL
3	12/11/09										

Enrollment?

J-030-004

Thank you for your comment. On-island residents would be hired if they are qualified for the positions during the construction and operations periods. Because the number of qualified on-island residents would likely be exhausted, especially in the anticipated years of construction (2010 through 2016), thousands of H2B visa foreign workers are anticipated. See the detailed discussion on workers in Section 4.3 of the SIAS.

Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-030-005

Thank you for your comment. Expected impacts to GDOL, ALPCD, workload and employment requirements are presented in Section 4.4 of the Socioeconomic Impact Assessment Study (Appendix F of the DEIS).

Your recommendation has been taken under consideration for inclusion in the FEIS.

J-030-006

Thank you for your comment. Please see the Socioeconomic Impact Assessment Study (Appendix F of the DEIS) for the expected socioeconomic impacts related to the proposed action.

Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-030-007

Thank you for your comment. Please see Volume 7, Chapter 3 for a summary of socioeconomic impacts.

Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

As documented in this EIS, DoD acknowledges the existing sub-standard conditions of key public infrastructure systems and social services on Guam and the interest to have DoD fund improvements to these systems and services. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam.

Encl...?

DEIS
REVIEW COMMENTS SHEET

NO.	Ref	Vol	Chpt	Pg	Line No.	Comment	Recommendation / Mitigation / Proposed Solution	Commenter (last name)	Agency Org
J-030-006	4	12/31/09	9	1	14-0	2016 is preferred year to physically relocate Marines and their families; the buildup is projected to take at least 5 years to get infrastructure in place and the construction (housing) needed for this development only limited amount of personnel to arrive in Guam in 2010. Development of system to track accurate population is dire when it comes to population count of those foreign H2B workers who have decided to make Guam their home; Gov/Guam agencies must keep diligent records instead of confusing documents.	The DOD must publish demographic information to be made available to the general public, especially on the increase of the population of Guam even after the 2010 Census is taken.	Rubic, Martha	
						Projections for population and employment impacts are included in SRS; how population sources are categorically HQ workers/Micronesians/military and dependents. Cycle of life is a measurement of population growth with young people having families. Population changes and trends on Guam started taking place since 1920 to 2000, including household characteristics in the Northern/Central/Southern demographics.	Population impact of an increase of 70,178 more people coming to live on Guam is severely intense for short 5 yr period. It should be listened on the amount of time in terms of years for this type of demographics should be intended to 20 years with incremental addition, but certainly not 5 years.	Rubic, Martha	
J-030-007	5	12/31/09	9	1	14-1	There will be tremendous adverse impact from the buildup affecting major categories of socioeconomic resources, economic activity, population, and public services; shock and growth unlike the 80s boom, Guam itself will be transformed	The DOD must ensure that the impact from this buildup does not disrupt the livelihood of the people who call Guam their home and that resources are made readily available in times of emergency; resources for the very basic fundamental right to survive, especially jobs, to be made available to the local population.	Rubic, Martha	
	6	12/31/09	9	1	14-1	Loss of Chamorro culture, identity and heritage and especially loss of land are grave issues for most Chamorros	DoD must commit to the indefinite preservation and protection of the Chamorro culture, language, heritage and nature of Guam. Grants, when applied for, must be given priority for the indigenous preservation of the Chamorro culture, heritage, artifacts, sacred grounds (a'ltan ma'ya'nutai) and teaching of the Chamorro language.	Rubic, Martha	
	7	12/31/09	9	1	14-1			Rubic, Martha	

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REVIEW COMMENTS SHEET

No.	Date	Vc	Dist	Pr	Line Tr. No.	Comment	Recommendation / Mitigation / Proposed Solution	Comments (Date, Name)	Agency Org.
J-030-008						There is no guarantee the unemployment rate would decline because foreign and off-island hire take on jobs the locals did not fill. Economic activity and related aspects discussed such as labor supply, water supply, housing, construction materials availability, commerce, transportation (congestion) and government processing. Types of jobs available are not in demand driven industries and are low-paying minimum wage. The same economic indicators are used: employment, income, housing, Government revenues and Gross Island Product (GIP). Economic characteristics show that GovGuam is the major employer on Guam; furthermore, the amount of people employed by GovGuam is high compared to the U.S. overall. Peak impact years are stated as years that construction and operational phases are scheduled to overlap. In the future, it is predicted that more women will occupy the workforce.	DoD should provide funding to GDOL to continue with labor market testing for the assessment and projection of wages and skills, including other job market factors to identify sustainable demand driven jobs and occupations needed before, during and post Guam Buildup phases. For the buildup period, Federally contracted businesses may want to refurbish/renovate/renew old, abandoned, commercial buildings for workforce housing for IDB construction workers as barracks and living facilities.		
	8 12/31/07							Rubic, Martha	
J-030-009						Public services will be heavily impacted as seen already	DoD must be a financial partner with Guam Power Authority and Guam Water Works Authority and other public services departments and agencies of the government of Guam.		
	9 12/31/09								

Enclosure 2

J-030-008

Thank you for your comment. As you note, projected impacts on the unemployment rate are not guaranteed. It should be noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received, provide information to the decision makers on the anticipated impacts of the proposed action. It is also noted that the Socioeconomic Impact Assessment Study (SIAS) discussed an unconstrained (maximal) scenario and a constrained scenario. The two scenarios represent a range of impacts that could occur should the proposed project be implemented under the current schedule. The SIAS is provided as Appendix F, Volume 9 of the DEIS.

Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-030-009

Thank you for your comment. The Guam Waterworks Authority (GWA) and DoD are cooperatively working together to plan for the expected increase in population on Guam. DoD has agreed to drill the 22 new DoD water supply wells early, and provide this water to GWA, along with excess water from DoD's Fena Reservoir and other current sources, to meet the near-term increase in water demand that is expected to occur off-base during the construction phase of the buildup. During this time, GWA would begin to drill new wells of their own and make improvements to their system to meet the long-term water needs of off-base communities. Concrete plans to resolve the projected shortfalls in the GWA water system must be in place prior to commencement of the DoD buildup. DoD and GWA have worked on these solutions and they have been included in the final EIS. DoD is an advocate for grants and low cost loans that GWA may be

seeking to accelerate repair of their water systems.

Subsequent to issuing the DEIS, DoD and Guam Waterworks Authority (GWA) reached agreement in principle to establish a private entity (PE). This PE would obtain a loan arranged by DoD to upgrade the North District Wastewater Treatment Plant (NDWWTP). The PE would also operate the plant and pay back the loan with user fees. The DoD would pay user fees established by a customer service agreement with GWA that would enable the PE to repay the loan. Future upgrades to add secondary treatment to the NDWWTP, if required, would be funded by the users based on their percentage of demand. The DoD would be one of the highest users and would bear their fair share of that upgrade. This has been stated in the final EIS.

Subsequent to publishing the DEIS, DoD and Guam Power Authority (GPA) have agreed in principle to establish a private entity under contract with GPA that would obtain a DoD arranged loan to recondition the required combustion turbines currently owned by GPA and the transmission and distribution system. The customer service agreement between DoD and GPA would be revised to reflect fees that would pay for this reconditioning and allow the private entity to repay the loans. This agreement will be discussed in the final EIS.

DoD is legally limited in how it can spend its budget. Those limitations restrict budget expenditures on things required for their personnel and facilities. DoD would be a customer of the new landfill and would pay tipping fees. Guam needs to arrange the tipping fees such that they will sustain the landfill for all aspects, including operations, maintenance, closure, financing for future expansion or replacement, etc.

From the above discussions of the four utilities, it is apparent that DoD is attempting to partner with the Guam utilities as much as their legal restraints allow.

DEIS REVIEW COMMENTS SHEET					
No.	Date	By	How	Area	Comments
J-030-010				1.4.2.4	<p>SIAS - Guam Department of Labor: The military expansion in the Mariana Islands poses many potential socio-economic changes that are best addressed with proper economic modeling to generate a range of data projections and produce forecasts for demographics, gross regional product, output (sales), wages and salaries, personnel income, employment and labor force to provide the basis for the analysis related to housing, retail, schools, social services, and local government impacts.</p> <p>The approach must eventually measure where the island is now in terms of human capital, forecast what it will look like incrementally over the next 10 years, identify what resources are available and what resources are lacking, and provide practical alternatives on how best to address these shortfalls.</p>

Evaluation?

DEIS
REVIEW COMMENTS SHEET

No.	Date	Ver.	Disc.	By	Comments	Recommendation / Mitigation / Proposed Solution	Comments (last name)	Agency Org.
J-030-010						<p>It is recognized that the effectiveness of the strategic planning efforts is dependent upon the accuracy of the forecasts and on the ability of planning efforts to anticipate and adjust to the changes in the forecast. Preliminary indications of the scope, magnitude, and duration of the increase in military activity strongly suggest an immediate need for a comprehensive economic plan with specific focus on human resources, training, employment, and employment support (i.e. transportation, housing, child care, etc.).</p> <p>The situational context of Guam's labor market and the results of ongoing military growth discussions pose concerns with regard to workforce sustainability and impact of Alien Labor Force (ALF) to the local and regional economy. The recent U.S. Congress approval to remove the restriction of the H-2B on military related construction poses several challenges for an island economy and all workforce related issues and the ancillary social economic issues.</p>		
J-030-011						<p>Impact of Service and Technical Capacity at Guam Department of Labor Compliance and Enforcement</p> <ul style="list-style-type: none"> o Needs for Alien Labor Processing & Certification Division (ALPCD) enforcement and compliance – considering all budget categories (personnel, equipment, supplies, rental, capital outlay, etc.) o Funding associated with H-2B compliance and fraud/abuse prevention for ALPCD o Technology and Systems o Personnel and Administrative Services o Needs of GDCL to support an increased department workload as a result of the increased H-2B population to include: Labor market testing within the Guam Employment Service (Wagner Peyer Act) Support for Workman's Compensation & OSHA due to increase in 		

Enclosure?

J-030-010

Thank you for your comment. Public comments on the DEIS are an important part of the decision-making process. This information becomes part of the FEIS and is evaluated when DoD prepares the FEIS and issues a Record of Decision at the end of the NEPA process.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-030-011

Thank you for your comment. Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

DEIS
REVIEW COMMENTS SHEET

No.	Date	Vol	Dist	Re	Line No., Pg	Comment	Recommendation / Mitigation / Proposed Solution	Comments (Revised)	Agency	
							<p>Based upon the work that has been undertaken by the Labor Subcommittee, they have identified the following to be included in the Guam military build-up EIS/OEIS:</p> <p>An assessment and projection of wages by skills sets as well as other job desirability factors, including the potential for upward mobility, and a projection by age cohort from both Guam, Northern Marianas, and insular areas in the Pacific.</p> <p>Jurisdiction to measure potential labor supply alternatives, including attracting those considered non-employed away from continued dependence on public assistance programs is needed in the EIS.</p> <p>Identification and assessment of the sustained job increase after construction, including the sustained job increases in the military and public/private sectors is required to insure the island is not negatively impacted by meeting immediate short term needs and failing to provide for sustained requirements that could have negative implications for Guam's private sector and its military sector.</p> <p>A listing of training requirements to take the current workforce skill level to meet as many of the skill levels anticipated over the next 15 years. Current train</p>			

Table 1

DEIS
REVIEW COMMENTS SHEET

No.	DEIS	REV	FORM	DATE	LINK TO FILE	Comments	Recommendation / Mitigation / Proposed Solution	Commenter (Name)	Address
							<p>The EIS must address the impact upon the availability of teachers and other specialty services the DODEA system will have upon Guam's public and private school systems. Inclusion within this assessment is not only the additional demand that will be created by an expanded DODEA system but also those military dependents that would be able to provide services to the civilian school systems.</p> <p>The EIS should provide a monetary quantification of the cost of training to be incurred by the civilian sector and the Government of Guam to meet DoD's labor requirements and an evaluation of all potential funding sources that may be available to address the training costs.</p> <p>An evaluation of potential workforce availability, including sources of labor, current and anticipated market for industrial skilled labor, and the barriers for attracting, recruiting, and retaining those labor forces over the next 30 years.</p> <p>The EIS should address the impact the inclusion of military dependents will have upon federal dollars and training slots that would otherwise be available for Guam's residents who are displaced workers as military dependents also out</p>		
J-030-012						Employees who live and work in Guam will probably have higher income as the buildup will bring higher paying jobs, the Government of Guam is in the process of approving another implementation of a Pay Study for wage increase and to help improve the standard of living.			
J-030-013						Estimated total population increase of 33,008 from off-island	This is not an accurate projection of population increase due to the buildup project. DoD won't calculate and show true count of those people coming to Guam now in 2010 and projected to 2020.		Rubbie, Marika

Do I...?

J-030-012

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

J-030-013

Thank you for your comment. It should be noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action. It is also noted that the Socioeconomic Impact Assessment Study (SIAS) discussed an unconstrained (maximal) scenario and a constrained scenario. The two scenarios represent a range of impacts that could occur should the proposed project be implemented under the current schedule. The SIAS is provided as Appendix F, Volume 9 of the DEIS.

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REVIEW COMMENTS SHEET

ID	DATE	NO.	TYPE	LINK TO FILE	COMMENT	RECOMMENDATION / MITIGATION / PROPOSED SOLUTION	COMMENTS (DATE / NAME)	APPROV. ORG.
J-030-013	37 12/31/09	3	4	TBL 4.2-3	Additional new population will have adverse effect on island's demographic composition. At the time this information was provided, it showed that males have a higher number for the employment component at 74.2% compared to females at 25.8% (see Table 4.2-7); ethnically, this population will consist of Asian/Other Micronesian group including the Philippines and consequently will enlarge the Chamorro population and/or individuals born in Guam [Source: U.S. Census Guam 2000]. Military component incoming population will have a higher ratio of males to females and that of a younger generation. Economic impacts include civilian labor force demand, H-1B immigrants, temporary foreign workers (H2Bs), and the Philippines (same information given in earlier chapters).	Population impact severely intense for 5 yr period and should be lessened from projected 79,178 additional people coming to live on Guam. Population impact of an increase of 79,178 more people coming to live on Guam is severely intense for short 5 yr period. It should be lessened on the amount of time in terms of years for this type of demographics should be extended to 20 years with incremental addition, but certainly not 5 years.		
J-030-014	38 12/31/09	3	4		The education system needs improvement to accommodate the incoming population. On education, public schools in all levels, primary, secondary, and high school education is provided via GPS (40 total) when this document was prepared at the time, as well as various other private schools (27 total) on Guam. Education for dependents of active military personnel is provided through DODES (Domestic Dependent Elementary and Secondary Schools) in Guam, DODES was just created, but referred as DODCA) which has a total of 2 elementary, 2 middle, and 1 high school on Guam. Higher education is provided by GCC and UOG, both of which are fully accredited educational institutions.	GDOL continues to work with our educational partners for initiatives in training and education for workforce readiness. GDOL is working with Education Subcommittee on the Civilian Military Task Force to assist with efforts to establish an educational framework to achieve successful transitions for all of Guam's students in the education system as we partner with GDOE, CCC, UOG for workforce readiness.	Rubic, Martha	
J-030-015	39 12/31/09	3	4		Estimates are given for the number of skilled workers needed for the construction industry ranging from 15,000 to 30,000.	Philippine recruitment have had a more positive impact historically on Guam contractors from past experience versus other workers from Asian countries.		
J-030-016	40 12/31/09	3	7		CNMI has related economic role this time around with buildup	This is related to the Strategic Plan with the Regional Workforce Development Council for workforce development	Rubic, Martha	

En...?

J-030-014

Thank you for your comment. The impacts on the Guam public school system are discussed in subsection 4.4.2, page 4-42 of the SIAS. Table 4.4-4 in the SIAS provides the potential increase (maximal) of student population in the Guam Public School System from 2010 to 2020. Providing a brief summary, at the peak population year (2014), a total of 7,937 students could attend the public school system; by 2017, when the operational (long-term) conditions occur, the students generated could be 909. This is based on the direct and indirect (induced) populations resulting from the military relocation. The military dependents would be educated in the DoD school system and should not affect the public school system. Money generated through taxes from the increased population and federal payments to schools (based on student populations) should provide revenue to fund resources for the public schools.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-030-015

Thank you for your comment. Please see Section 4.3.1.1 of the Socioeconomic Impact Assessment Study (Appendix F of the EIS) for the expected impacts on Civilian Labor Force Demand and Section 4.3.1.2 for Probable Sources of Labor Supply (expected place of origin for construction workers).

J-030-016

Thank you for your comment. Please see Volume 3, Chapter 16, for socioeconomic impacts related to Marine Corps training on Tinian.

DEIS REVIEW COMMENTS SHEET						
No.	Date	By	Dept.	File No.	Comments	Response/Action / Mitigation / Proposed Solution
J-030-017					SIAS (Socioeconomic Impact Assessment Study) to support socioeconomic of the military relocation in the EIS. SIAS will provide foundation for Fiscal Impact as well.	The EIS must address the impact upon the availability of teachers and other specialty services the INDSEA system will have upon Guam's public and private school systems. Included within this assessment is not only the additional demand that will be created by an expanded DODEA system but also those military dependents that would be able to provide services to the civilian school systems. The EIS should provide a monetary quantification of the cost of training to be incurred by the civilian sector and the Government of Guam to meet DoD's labor requirements and an evaluation of all potential funding sources that may be available to address the training costs. An evaluation of potential workforce availability, including sources of labor, current and anticipated market for industrial skilled labor, and the barriers for attracting, recruiting, and retaining these labor forces over the next 30 years. The EIS should address the impact the inclusion of military dependents will have upon federal dollars and training costs that would otherwise be available for Guam's residents who are displaced workers as military dependents also go
J-030-018	23	1/13/10	045 B	SIAS	Preliminary dates given for DEIS 45-day review was April 2009 DEIS released November 20, 2009, seven months later	Rubic, Marthe
	23	1/13/10	045 B	SIAS		
	24	1/13/10	045 B	SIAS	Record of Decision also set at January 2010 but won't be published till July or August 2010	
	25	1/13/10	045 B	SIAS	Final SIAS also was supposed to be released in Sept/Oct 2009 but not yet done	

Don't know?

J-030-017

Thank you for your comment. Please see Section 4.4.1 of the Socioeconomic Impact Assessment Study (SIAS), which is Appendix F, Volume 9 of the EIS for information on the expected impacts the proposed action would have on the government of Guam's (agencies) staffing requirements. The analysis in the SIAS includes both direct and indirect impacts including those who move to Guam for work related to the proposed action. Another study, funded by DoD's Office of Economic Adjustment, is underway. This is the Fiscal Impact Assessment that identifies the needs of the government of Guam and where the money to fund the needs could come from.

Another study, funded by DoD, the Fiscal Impact Assessment Study will provide more detail on the fiscal situation of GovGuam in terms of government revenues and expenditures as related to the proposed action.

J-030-018

Thank you for your comment.

J-030-019

Thank you for your comments. Our data will be checked per your comments and the appropriate edits made in the FEIS.

It is noted that the EIS process provides information on environmental impacts (this includes the human environment); however, there is a limit to the specific details of the impacts because the information used is based on the continuation of existing trends and behaviors. While it is not an exact science, the EIS process along with the comments received provide information to the decision makers on the anticipated impacts of the proposed action. It is also noted that the Socioeconomic Impact Assessment Study (SIAS) discussed an unconstrained (maximal) scenario and a constrained scenario. The two scenarios represent a range of impacts that could occur should the proposed project be implemented under the current schedule. The SIAS is provided as Appendix F, Volume 9 of the DEIS.

Please see Section 4.4.1 of the Socioeconomic Impact Assessment Study (SIAS), which is Appendix F, Volume 9 of the DEIS for information on the expected impacts the proposed action would have on the government of Guam's (agencies) staffing requirements. The analysis in the SIAS includes both direct and indirect impacts including those who move to Guam for work related to the proposed action. Another study, funded by DoD's Office of Economic Adjustment is underway, this is the Fiscal Impact Assessment that identifies the needs of the government of Guam and where the money to fund the needs could come from.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

DEIS REVIEW COMMENTS SHEET							
No.	Date	By	For	Comments	Recommendation / Mitigation / Proposed Solution	Comments (List name)	Agency Org.
J-030-019				Gary Kinabara spoke at Workforce Summit/12th International Chief Executives Summit just recently held in Guam, Dec 2009 sponsored by GDOL.	The plan for labor growth will specify all supporting data and assumptions used in making the recommendations. Some of these recommendations are the outcome of the Regional Workforce Development Council (RWDC) Strategic Plan for 2010-2015 as outlined at the 12th Workforce Summit held November 30-December 2, 2009. The result of this process represents a coherent and practical framework aligned through the three overarching strategic Plan focus areas: 1. Workforce Demand Initiatives; 2. Workforce Supply Initiatives; 3. Comprehensive local/regional based training systems.		
26	1/13/10	VAI 9 B	SIAS				
27	1/13/10	VAI 9 B	SIAS	Federal Regional Council (FRC) held several meetings regarding Guam Buildup	GDOL Director attended these meetings		
28	1/13/10	VAI 9 B	SIAS	Notes indicate that 'data was suspicious', manner in which it was collected? Data not accurate?	GDOL must be provided with funding for research and data collection		
29	1/13/10	VAI 9 B	SIAS	Worth of information available in summaries of meetings held before and during DEIS phases of buildup	GDOL has been planning for this buildup		
30	1/13/10	VAI 9 B	SIAS	Other Federal department/agencies involved in data analysis for DEIS document			
31	1/13/10	VAI 9 B	SIAS	GDOL NOT in Appx. C list of questions for Gov/Guam departments/agencies SIAS (Socioeconomic Impact Assessment Study) to support socioeconomic of the military relocation in the FEIS. SIAS will provide foundation for Fiscal Impact as well.	DoD should include GDOL in this particular or any other forthcoming DEIS discussion. GDOL should be included in analysis and participation. The top socioeconomic issues and concerns of the department are such that the approach must quantitatively measure where the island is now in terms of human capital, and forecast what it will look like incrementally by 2020; to identify what resources are available as well as what resources are lacking, and provide practical alternatives on how best to address these shortfalls in workforce development. Rubio, Martha		
32							
J-030-020							
33	1/22/10						

From ... ?

DEIS
REVIEW COMMENTS SHEET

No.	Date	By	Org.	Issue Title	Comment	Response/Action / Mitigation / Proposed Solution	Commenter (Last, Initial)	Agency
J-030-021						Guam's labor market and the results of on-going military buildup discussions include concerns about workforce sustainability, long-term employment, and the impact of foreign workers (DIB) to the local and regional community. This presents challenges for workforce related and socioeconomic issues.		
	34 12/22/10					An evaluation of manpower and staffing needs is also being developed to support the delivery of service at the One Stop Career Center and partners. Youth programs are also being expanded and developed to be available to our youth.	Rubic, Martha	
	35 1/22/13					Based upon the work that has been undertaken by the Labor Subcommittee, they have identified the following to be included in the Guam military buildup EIS/OEIS: <ul style="list-style-type: none"> An assessment and projection of wages by skills sets as well as other job desirability factors, including the potential for upward mobility, and a projection by age cohort from both Guam, Northern Mariana, and insular areas in the Pacific jurisdictions to measure potential labor supply alternatives, including attracting those considered non-employed away from continued dependence on public assistance programs is needed in the EIS. Identification and assessment of the sustained job increase after construction, including the sustained job increases in the military and public/private sectors is required to insure the island is not negatively impacted by meeting immediate short term needs and failing to provide for sustained requirements that could have negative implications for Guam's private sector and the military contractor. 	Rubic, Martha	
J-030-022								
	36 1/22/10							

From [unclear] ?

J-030-020

Thank you for your comment. Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-030-021

Thank you for your comment. Projections of Labor Force Demand extend to the year 2020; at 2020 the proposed action is considered to be in a 'steady state' in which the impacts would not foreseeably change. Employment impacts from the proposed action, at that point in time, are considered long-term as they extend indefinitely into the future.

Your recommended mitigation measure has been taken under consideration. Expanded mitigation discussion is available in the FEIS.

J-030-022

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. This information becomes part of the Final EIS and is evaluated when DoD prepares the Final EIS and issues a Record of Decision at the end of the National Environmental Policy Act (NEPA) process.

DEIS
REVIEW COMMENTS SHEET

No.	Date	By	Agency	Page	Section	Comment	Response/Action / Proposed Solution	Commentor (last name)	Agency Org.
J-030-022							<p>A listing of training requirements to take the current workforce skill to the next level to meet as many of the skill levels anticipated well into 2025. Current training resources need to be evaluated for its current effectiveness in meeting present and anticipated future training needs as well as the capacity to provide specialized training to meet anticipated needs. The evaluation should include partners in the public sector providers such as the Guam Public School System (GPSS), Guam Community College (GCC), University of Guam (UOG), as well as private, non-profit training providers such as the Guam Contractors Association Trades Academy (GCATA), Guam Hotel and Restaurant Association (GHRA), and other civic and private for-profit training providers.</p> <p>This is the concept of the power of e3: education, employment and economic development +1, ethics.</p>	Rubic, Martha	
J-030-023	37 1/22/10 38 1/24/10					<p>Figure ES-1 compares total labor force demand on Guam with and without the proposed action. At the 2014 peak, civilian labor force demand under the proposed action would be 75% higher than it would be without the project. By 2020, the difference declines to 12%. Section 4-3 of the SIAS describes in detail the projected distribution of increased jobs among on and off island labor sources.</p> <p>Reference including Volume, Pages and more Volume 9, page v, vi</p>	<p>Average and total gross income paid to Guam civilian workers would increase because of the proposed military relocation. The estimated average full-time equivalent (FTE) salary for jobs related to the construction phase (\$93,500) and the military operational phase (\$10,000) would be considerably higher than the 2007 Guam average FTE salary of \$28,150. With a rapid increase in economic activity and a limited pool of on-island labor, there would likely be competition for labor and thus upward pressure on wage rates. Total civilian labor force income is projected to increase by an estimated \$1.5 billion during the peak year, according to the unconstrained scenario (Table ES-3).</p>	Rubic, Martha	
J-030-024	39 1/26/10	5	vi		Fig. ES-1	<p>The Guam Department of Labor (GDL) Alien Labor Processing and Certification Division (ALPCD) reported an increase in H-2B workers. The number of H-2B workers is now expected to increase due to new construction projects with the military buildup.</p>	<p>Background: The Guam Department of Labor (GDL) and the Agency for Human Resources Development (AHRD) continues to implement workforce initiatives for training and education. It is anticipated that there will be an increase in on-site labor during the construction phases for military projects and labor will be from local and Micronesia region first and before expanding the recruitment area of consideration to nationwide workforce.</p>	Rubic, Martha	
	40 1/25/10	9	vi		Tbl. G-3				

Final³² ?

J-030-023

Thank you for your comment.

J-030-024

Thank you for your comment. As you note, there is expected to be an increase in the number of H2B workers on Guam as a result of the proposed actions.

J-030-025

Thank you for your comment.

Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.

DEIS REVIEW COMMENTS SHEET					
No.	Date	By	Comments	Response/Action / Mitigation / Proposed Solution	Comments (Date, Agency, Org)
J-030-024			<p>What does the Draft EIS State? Agencies Affected by Increased Construction and Development?</p> <p>Analysis was conducted for additional agencies that would be affected not be a growth in population, but by a growth in permit requests for construction and development. These agencies included:</p> <ul style="list-style-type: none"> • Guam Department of Public Works • Guam Department of Land Management • Guam Environmental Protection Agency • Guam Coastal Mgmt Program within Bureau of Statistics and Plans • Guam Power Authority • Guam Waterworks Authority • Guam Fire Department, Permitting Staff • Historic Preservation Office within GEPR • Guam Division of Environmental Health with GDEPHS • Guam Alien Labor Processing and Certification Division within the Guam Department of Labor (GDDL) <p>Reference including Volume, Pages and more Volume 5, page vii, ix</p>	<p>Analysis of the proposed action indicated the approximate number of construction and development permits that would be needed to complete the planned activities.</p>	Rubio, Martha
41, 1/26/10					
J-030-025			<p>With the anticipated construction projects in the federal, local government and private sectors associated with the impending Marianas relocation, it is my opinion that manpower and equipment resources need to be immediately provided to the Guam DOL's Alien Labor Processing & Certification Division (ALPCD).</p>	<p>This additional funding may be provided to Guam through existing grant agreements with the US Department of Labor who provides an Alien Certification grant through Wagner Peyser Act funding via the office of Foreign Labor Certification. The funding through this grant is minimal right now as the mainland process for alien certification has recently undergone changes and has nationalized as opposed to being done by the state DOL offices. The funding levels need to be drastically increased for the duration of the build up to compensate for the increased caseload that will be a direct result of the Marianas relocation.</p>	Mosey, Greg
42					GDDL

13
Enclosure?

DEIS
REVIEW COMMENTS SHEET

No.	DEIS Ref.	Doc. No.	Date Rec'd.	Comment	Recommendation / Mitigation / Proposed Solution	Commenter (M/I/Army)	Agency (M/I/Army)
J-030-025				It is my opinion that lack of resources in this area may result in a bottleneck which would be as serious as lack of capacity at the Port of Guam and with adequate Haul Roads. Without quick and accurate action by ALPCED, contractors will not be able to secure necessary approvals for the importation of foreign workers which will be vital to the timely completion of all projects and activities associated with the build up.		Massey, Greg	
43						Massey, Greg	
J-030-026				A possible negative impact of the importation of a large foreign workforce is the possibility of massive numbers of workers overstaying their H-2B visas and working illegally. This will have a definite negative impact on US workers and aliens who are authorized to work in the U.S. These illegal workers will likely find jobs with smaller contractors and will take jobs that should be filled by those Guam residents who are work authorized. Traditionally INS ICE does not find these workers to be of high importance as they are not considered criminal aliens. Adequate resources need to be given to US ICE Office of Investigations and the Deportation and Removal Office. Along with those manpower resources, greater funding for bed space for persons being held by immigration at the Guam Department of Corrections needs to be given. This increased funding will allow for the prompt and proper deportation of illegal workers who will certainly overstay.		Massey, Greg	
44						Massey, Greg	
45				With proper supplemental funding from the federal government to support the labor certification and immigration enforcement efforts associated with the presence of 15,000 to 25,000 H-2B workers, the local and federal government agencies on Guam will be able to handle the marines relocation and associated build up projects. Without the needed resources, we will likely see drastic delays on projects, widespread fraud and abuse and huge numbers of visa overstays taking jobs from local residents.			

14
Final review?

J-030-026

Thank you for your comment. Public comments on the Draft EIS are an important part of the decision-making process. Comments received from the public allow DoD to make changes to the EIS before the document is finalized. This information becomes part of the Final EIS and is evaluated when DoD issues a Record of Decision at the end of the NEPA process. Stay behind workers are addressed in the Socioeconomic Impact Assessment Study (Appendix F of the DEIS). Your recommended mitigation measures have been taken under consideration. Expanded mitigation discussion is available in the FEIS.



FELIX P. CAMACHO
Governor of Guam

MICHAEL W. CRUZ
Lieutenant Governor

PORT AUTHORITY OF GUAM
ATURIDAT I PUETTON GUAHAN
Jose D. Leon Guerrero Commercial Port
GOVERNMENT OF GUAM

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February 18, 2010

JPGO c/o NAVFAC Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134

Attention: GPMO

The Port has reviewed the draft DEIS and transmitted comments previously to be assimilated among the various comments submitted through the Governor's Office. Subsequent to that earlier transmittal, the Port has been informed that the first phase of Federal Funding required to modernize the Port will not be awarded to the Port.

As mentioned in our earlier comments, the Port's Phase IA Port Improvement Project depended upon receipt of \$ 49.7 Million in Federal Funding and \$ 50M in low interest loans that are dependent on the Federal Funding to support debt service.

J-031-001 In the absence of funding, the Port cannot begin modernizing its facilities in order to handle the cargo for constructing and supporting the facilities described in the DEIS. It finds itself in the following position:

- The Port will not be able to move forward with:
 - The Phase IA uplands project to create yard expansion and gate and terminal operating improvements, storm water improvements, and needed buildings reconfiguration, i.e. the improvements/efficiencies needed to handle the increased cargo at the same time as it moves toward executing the Phase I B project
 - The Phase 1B in-water project to repair its dilapidated wharf bulkheads, increase berth depths, and usher in security and supplemental systems improvements. This project to be completed in the 2012/2013 timeframe is also dependent on future Federal funding to the extent of \$104.5 Million. This funding also has not been identified.
- The Port will be severely impacted by huge cargo increases at its Commercial Port as a result of the military buildup described in the DEIS
 - These cargo increases will place increased pressure on wharf facilities that are in critical need of maintenance and repair
 - These cargo increases will also place increased pressure on the Port's aging cargo handling facilities and equipment

The Port Authority of Guam, Jose D. Leon Guerrero Commercial Port is an Equal Employment Opportunity Employer.
Complaints of Discrimination should be sent to the Human Resources Division.

J-031-001

Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of the Port of Guam and the interest to have DoD fund improvements to this facility. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that could benefit the people of Guam. While DoD is not directing the Port improvements, an amendment to the 2010 Defense Appropriations Bill is proposed in Congress which calls for the transfer of \$50M of DoD FY10 funds to the Department of Transportation to fund Phase I of the port improvements.

J-031-001

• The current cargo handling capacity will be substantially below that needed to meet expected demands and will result in long truck queues, congestion within the Port facility, increased traffic on Route 11, and vessel queues in Apra Harbor

J-031-002

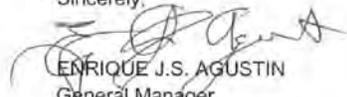
• Attempting to handle the cargo necessary to construct the facilities described in the DEIS will result in considerable emissions within the Port's air shed. The additional levels of pollutants that will be emitted have been assessed by the Port. The emissions of CO2, NOx, SOx and DPM for each hour of port operation have been calculated and are presented in Table 4 of the attached document titled "Port Improvement Project Sponsored by the Port Authority of Guam, Evaluation of Expected Costs and Benefits".

• Without the environmental and efficiency improvements in the modernization program it is anticipated that emissions will greatly impact and exceed permissible levels in the Port air shed which is in a non-attainment zone.

• With the announcement of the lack of funding for the modernization program the Port is required by regulation to halt any modernization work and report to the legislature with a plan for approval of slow, incremental improvements to the Port infrastructure. These slow incremental improvements will not be able to handle the cargo necessary to construct the facilities described in the DEIS.

J-031-003

With the aforementioned developments, the Port now believes that it falls to JGPO and DOD to both quantify and mitigate the impacts that their project will have on the Port. It also requires identifying funding to mitigate these impacts as part of the overall military program described in the DEIS.

Sincerely,

ENRIQUE J.S. AGUSTIN
General Manager

Enclosure: Evaluation of Expected Project Costs and Benefits

J-031-002

Thank you for your comment.

As shown in Table 4 of the Guam Port Authority's Port Improvement Project - Evaluation of Expected Project Costs and Benefits, emissions of CO2, NOX, SOX, and DPM are expected to be reduced after the modernization improvements. The FEIS includes a qualitative analysis of air emissions during the peak construction years of the buildup, assuming that the port improvements are not made. This assessment is in Volume 2 Chapter 14 (Marine Transportation).

Air emissions in the Port air shed were not considered in Volume 4, Chapter 5 of the FEIS, as the analysis focused on air emissions during aircraft carrier berthing. However, the analysis showed no significant impacts indicating that air emissions generated as part of the proposed action would be less significant with or without the Port modernization project.

J-031-003

Thank you for your comment. The Jose D. Leon Guerrero Commercial Port (also known as the Port of Guam [Port] is administered by the Port Authority. The Port Authority is part of GovGuam and operates as a public corporation and autonomous instrumentality. Since its construction in 1969, the Port has remained largely unchanged. With many areas near capacity or unusable, expansion of the Port's facilities and equipment upgrades would create operational efficiencies and maximize Port capacity. Prior to the announcement of the proposed military relocation, Port improvements and expansion were under consideration; however, the military relocation created an additional impetus to implement planning studies and improvements to service the anticipated construction work and additional population.

In August 2007, work began to update the Port's master plan. The

Port Improvement Project

Sponsored by

The Port Authority of Guam

EVALUATION OF EXPECTED PROJECT COSTS AND BENEFITS

BST Associates
August 2009



Supporting Material for the TIGER Discretionary
Grant Application Submitted by the Port Authority
of Guam

recommendations and updates address future expansion and development based on typical commercial growth, as well as the impending military buildup. A final draft Port master plan was completed in April 2008 which updated the existing master plan and set the road map for upgrading the facilities. The Port master plan was approved by the Guam Legislature in December 2009. The master plan calls for nearly \$200 million in capital improvement upgrades to the Port facilities. The modernization program would address both Guam's expected growth without the proposed action and the anticipated increase in cargo volume resulting from the proposed action.

The initial upgrades to the Port, which would largely deal with demolition of older facilities, reconfiguration of laydown areas, and traffic/security improvements to increase cargo flow, were scheduled to start in the near term. However, the recent denial of grant funding from the U.S. Department of Transportation is forcing the Port to reevaluate its planned modernization. Longer term improvements, including pier refurbishment, construction of new deep draft piers, and dredging to support such construction, have yet to be programmed. Any planned improvements would be required to comply with both Guam and federal environmental protection laws, including, but not limited to, the Endangered Species Act (ESA), Clean Water Act (CWA), and the National Environmental Policy Act (NEPA) to the extent applicable. The modernization plan would increase demand capacity to ensure that Guam's only commercial port is developed and managed to adequately accommodate and capitalize on the expansion (including the military relocation) expected to occur over the next few decades.

Funding for the Port's improvements (modernization) and expansion is anticipated to come from various federal agencies, GovGuam, and private sources. The funds for capital improvements would likely be repaid through user fees that would then be passed on to consumers, businesses, and other entities (i.e., DoD).

J-031-004

Port of Guam Port Improvement Project - Evaluation of Expected Project Costs and Benefits

This report provides a benefit cost evaluation of the Port Improvement Project (the project) of the Port of Guam (PAG) marine terminal. It is based upon the U.S. Department of Transportation's (USDOT) benefit-cost analysis guidelines for TIGER projects focusing on operational cost savings, reduced inventory carrying costs and the benefits of reduced air emissions.

Benefit Cost Evaluation

The net present value (NPV) of benefits (operational cost savings, reduced inventory carrying costs and benefits from emission reduction) were divided by the cost of the project. The project provides a Benefit/ Cost (B/C) ratio significantly greater than 1 under both real discount rates:

- Under the 7% discount rate, the B/C ratio is 2.37.
- Under the 3% discount rate, the B/C ratio is 4.59.

Table 1: Summary of Benefit Cost Analysis Results, 2011 – 2041 2009 \$Millions

Component	NPV (2011-2041 in 1,000s of 2009\$)	
	7.0%	3.0%
Benefits		
Operational Cost Savings	\$143,239	\$260,030
Reduced Inventory Carrying Costs	\$39,303	\$73,184
Benefits from Emission Reduction	\$41,394	\$73,171
Total Benefits	\$223,936	\$406,385
Project Cost	\$94,460	\$88,511
B/C Ratio	2.37	4.59

Source: FBI, BST Associates

It was assumed that the same volume of cargo would be handled each year with and without the improvements. Benefits were estimated to begin in mid-2011 (after construction is partially completed) and extend through the expected 30-year life of the facility (to mid-2041).

Operational Cost Savings

The project will greatly improve the efficiency of the terminal. A detailed model of port operations was developed to assess how cargo operations (containerized and breakbulk) utilize key components of the marine terminal under current conditions as compared with improved conditions. The improvements will facilitate cost savings as follows:

- Reduced Truck Delays within the yard and at the gates – Trucks will be processed faster and will require substantially less service time inside the yard. Important sub-components include:

The master plan calls for development of new facilities to handle increased customs and agriculture inspection requirements. It is anticipated that increased customs and agricultural inspection requirements will be coordinated through both Guam and relevant federal officials, including the U.S. Department of Agriculture. DoD will work with the Port and relevant Guam and federal inspection authorities to address required inspection of military cargoes that pass through the Port. Relative to shipment of materials through the Port to support the military realignment, DoD will also work with the same entities to develop plans to ensure that required inspections are conducted prior to release of materials to DoD construction sites. The increased inspection needs associated with civilian population growth will be a function of Port planning, implementation, and coordination with relevant Guam and federal customs and inspection authorities. In any instance, it is not anticipated that DoD will conduct the required inspections. As noted above, funding for Port improvements, including increased customs and agricultural inspection requirements, will be funded from federal agencies, GovGuam, and private sources. DoD will work with the Port to identify possible increased sources of federal funds. Relative to shipment of DoD cargoes, DoD anticipates reaching agreements with the Port and relevant Guam and federal officials to handle the costs of customs and agricultural inspections.

J-031-004

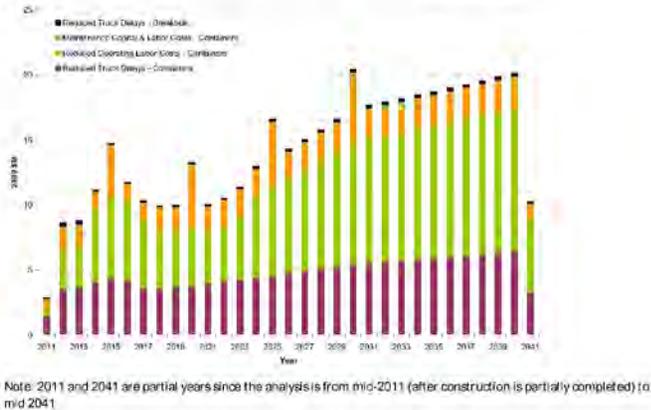
Thank you for your comment. As documented in this EIS, DoD acknowledges the existing sub-standard conditions of the Port of Guam. DoD is aware of the Port Authority of Guam's Port Improvement Program and the anticipated benefits that may be obtained. The Port Authority of Guam has expressed an interest to have DoD fund improvements to this facility. DoD's ability to fund actions is limited by Federal law. However, to minimize adverse impacts associated with the proposed military relocation program, DoD is leading a federal inter-agency effort to identify other Federal programs and funding sources that

J-031-004

- Gate Queuing Time,
- Gate Processing Time,
- Yard Service Time.
- Reduced Operating labor Costs— improved gates and computer systems will likewise improve (decrease) the Port's cost of performing the gate functions. Important sub-components include:
 - Truck Gate Operating hours
 - Container Yard Grounding Service
 - Vessel/ Stevedoring Service
- Maintenance Labor and Capital Costs— reductions in equipment operating hours will also lower maintenance costs. Without the proposed Port Improvement Project, increased capital and labor will be required to handle projected cargo volumes.

Figure 1 illustrates the annual flow of operational cost savings by major category.

Figure 1: Port of Guam Operational Cost Savings by Calendar Year, 2011 – 2041, 2009 \$Millions



Annual real net cost savings were estimated based on the costs associated with existing operations less the cost associated with improved operations. Table 2 summarizes the results of this analysis.

Under the 7% discount rate, the NPV of operational cost savings are estimated to be \$140.8 million and \$2.4 million, for container and breakbulk operations respectively. The combined operational cost savings are estimated at \$143.2 million.

could benefit the people of Guam. While DoD is not directing the Port improvements, an amendment to the 2010 Defense Appropriations Bill is proposed in Congress which calls for the transfer of \$50M of DoD FY10 funds to the Department of Transportation to fund Phase I of the port improvements.

J-031-004

Under the 3% discount rate, the NPV of operational cost savings are estimated to be \$255.9 million and \$4.1 million, for container and breakbulk operations respectively. The combined operational cost savings are estimated at \$260.0 million.

Table 2: Net Present Value of Cost Savings from Operations, 2011 – 2041, 2009 \$Millions

Type	Description	Net Present Value	
		7.0%	3.0%
Discount Rate			
Container operations - cost savings			
Reduced Truck Delays			
	Gate Queuing Time	\$15.15	\$26.75
	Gate Processing Time	\$7.54	\$13.44
	Yard Service Time	\$25.89	\$46.01
Reduced Operating labor Costs			
	Truck Gate Operating hours	\$7.04	\$12.45
	Container Yard Grounding Service	\$4.18	\$7.38
	Vessel/Stevedoring Service	\$55.25	\$105.20
Maintenance Labor Costs		\$20.34	\$34.21
Maintenance Labor Costs		\$5.47	\$10.52
	SUBTOTAL	\$140.87	\$255.95
Breakbulk operations - cost savings			
Reduced Truck Delays			
	Gate Queuing Time	\$7.21	\$1.21
	Gate Processing Time	\$5.51	\$0.93
	Yard Service Time	\$1.10	\$1.94
	SUBTOTAL	\$2.37	\$4.08
Total – Container & Breakbulk		\$143.24	\$260.03

Note: Totals may not add due to rounding
 Source: PBL, BST Associates

Reduced Inventory Carrying Costs

The project will also reduce the inventory carrying costs of shippers in Guam by reducing the time that cargo remains in the marine terminal prior to arriving at the shipper’s warehouse or retail store.

Inventory carrying costs were estimated using the following factors:

- The estimated average value of cargo moving through the Port of Guam was estimated at \$150,000 per loaded inbound container and \$1,500 per revenue ton for breakbulk cargo. These estimates are based on a review of Government of Guam data (Customs and retail sales data) and review of cargo values in other port regions.
- Interest rate for carrying inventory was estimated at 15% per year.
- Additional net hours that cargo remains in the terminal under current conditions relative to improved conditions was an output of the marine terminal model.

J-031-004

Under the 7% discount rate, the NPV of reduced inventory carrying costs is estimated to be \$38.9 million and \$0.4 million, for container and breakbulk respectively. The combined cost savings are estimated at \$39.3 million. Under the 3% discount rate, the NPV of reduced inventory carrying costs is estimated to be \$72.7 million and \$0.5 million, for container and breakbulk respectively. The combined cost savings are estimated at \$73.1 million.

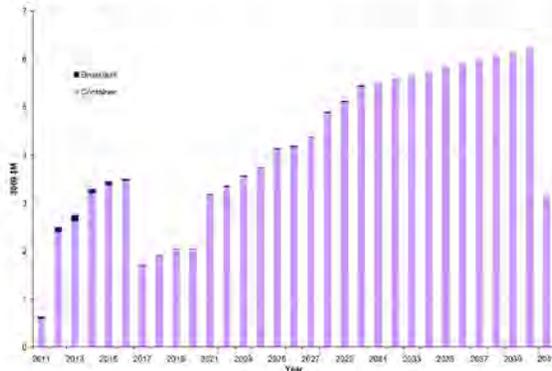
Table 3: Net Present Value of Reduced Inventory Carrying Costs, 2011 – 2041, 2009 \$Millions

Description	Net Present Value	
	7.0%	3.0%
Container Operations	\$38.92	\$72.70
Breakbulk Operations	\$0.38	\$0.49
SUBTOTAL	\$39.30	\$73.18

Note: Totals may not add due to rounding
Source: FBI, BST Associates

Figure 2 illustrates the annual flow of inventory carrying cost savings.

Figure 2: Port of Guam Reduced Inventory Carrying Costs by Calendar Year, 2011 – 2041, 2009 \$Millions



Note: 2011 and 2041 are partial years since the analysis is from mid-2011 (after construction is partially completed) to mid-2041

J-031-005

Benefits from Emission Reductions

The Port Improvement Project will also reduce emission of pollutants by reducing the hours of operations by vessels at berth (on all trade routes) and reduction in hours of use of terminal operating equipment (i.e., crane and top-pick operating hours).

J-031-005

Thank you for your comment. We concur that modernization of the Port can result in a reduction of air emissions. We appreciate the documents you have shared with this comment.

J-031-005

A spreadsheet model was developed to assess the benefits associated with reductions in CO₂, NO_x, SO_x and DPM. The hours of operation came from the marine terminal operation model (net hours of existing less improved operations). The hourly rate of emissions was based upon recent Emissions Inventories for the Port of Los Angeles (2006 and 2007). As shown in the attached table, emissions in tons per hour of operation are reported for vessels while at berth (hotelling) by type and size and equipment under standard terminal operations. The estimated benefit per ton of emission by type came from Office of Regulatory Analysis and Evaluation, National Center for Statistics and Analysis.

Table 4: Benefit inputs from Emission Reduction, Tons of Emissions per Hour while at Berth

Category	CO ₂	NO _x	SO _x	DPM
Container Vessel (1)				
USWC	1.32	0.0176	0.0176	0.00195
CNMI	0.54	0.0047	0.0079	0.00054
FSM	1.08	0.0094	0.0157	0.00107
Asia	1.08	0.0094	0.0157	0.00107
Breakbulk Vessel (1)	1.14	0.0119	0.0180	0.00152
Equipment (1)				
Cranes	0.35	0.000	0.000	0.000
Top picks	0.14	0.001	0.000	0.000
Yard Trucks	0.06	0.000	0.000	0.000
Benefits per ton (2)	\$33¹	\$4,000	\$16,000	\$168,000

Sources: (1) Port of Los Angeles Inventory of Air Emissions 2006 and 2007; (2) Office of Regulatory Analysis and Evaluation, National Center for Statistics and Analysis

As with other benefits, the benefit from emission reductions was estimated annually and estimated net present value based upon the two discount rates. Table 5 shows a summary of these benefits, while Table 6 shows these benefits broken down in more detail by category.

Table 5: Present Value of Emission Reductions, 2011 – 2041, 2009 \$Millions

	7% Discount Rate	3% Discount Rate
CO ₂	\$6.8	\$12.8
NO _x	\$3.6	\$6.3
SO _x	\$15.8	\$27.4
DPM	\$15.3	\$26.7
Total	\$41.4	\$73.2

¹ The benefit from CO₂ reductions were increased at 2.4% per year, as per guidance. Benefit values per tons were not done for the other pollutants.

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Table 6: Net Present Value of Emission Reductions, 2011 – 2041, 2009 \$Millions

		Net Present Value	
		7.0% discount	3.0% discount
Reduction of CO2 Emissions			
Ocean Vessels	Container	\$2.52	\$4.85
	Breakbulk	\$3.11	\$5.74
	Total	\$5.63	\$10.59
Equipment	Cranes	\$1.14	\$2.19
	Top picks	\$0.04	\$0.07
	Yard Equipment	\$0	\$0
	Total	\$1.15	\$2.20
Total (Ocean Vessels and Equipment)		\$6.78	\$12.79
Reduction of NOX Emissions			
Ocean Vessels	Container	\$2.47	\$4.56
	Breakbulk	\$0.62	\$0.87
	Total	\$3.09	\$5.43
Equipment	Cranes	\$0.12	\$0.22
	Top picks	\$0.36	\$0.63
	Yard Equipment	\$0	\$0
	Total	\$0.47	\$0.84
Total (Ocean Vessels and Equipment)		\$3.56	\$6.27
Reduction of SOX Emissions			
Ocean Vessels	Container	\$12.04	\$22.11
	Breakbulk	\$3.73	\$5.28
	Total	\$15.77	\$27.38
Equipment	Cranes	\$0	\$0
	Top picks	\$0.02	\$0.03
	Yard Equipment	\$0	\$0
	Total	\$0.02	\$0.03
Total (Ocean Vessels and Equipment)		\$15.77	\$27.39
Reduction of DPM Emissions			
Ocean Vessels	Container	\$11.61	\$21.389
	Breakbulk	\$3.31	\$4.69
	Total	\$14.92	\$26.08
Equipment	Cranes	\$0	\$0
	Top picks	\$0.36	\$0.64
	Yard Equipment	\$0	\$0
	Total	\$0.36	\$0.64
Total (Ocean Vessels and Equipment)		\$15.29	\$26.72

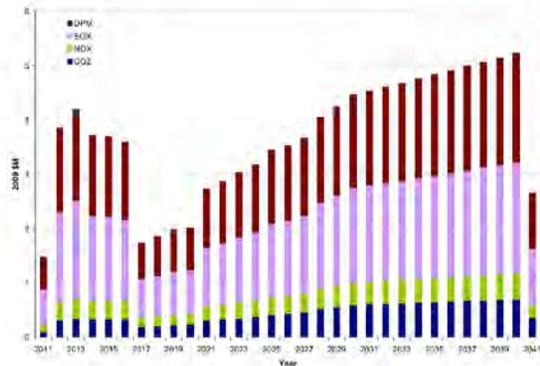
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Total Emissions Benefits		Net Present Value	
		7.0% discount	3.0% discount
Ocean Vessels	Container	\$28.64	\$52.90
	Breakbulk	\$10.77	\$16.58
	Total	\$39.41	\$69.48
Equipment	Cranes	\$1.26	\$2.41
	Top picks	\$0.72	\$1.28
	Yard Equipment	\$0	\$0
	Total	\$1.99	\$3.69
Total (Ocean Vessels and Equipment)		\$41.39	\$73.17

Note: Totals may not add due to rounding

Figure 3 illustrates the annual flow of benefits from reduced emissions.

Figure 3 – Port of Guam Reduced Inventory Carrying Costs by Calendar Year, 2011 – 2041, 2009 \$Millions



Note: 2011 and 2041 are partial years since the analysis is from mid-2011 (after construction is partially completed) to mid 2041