



Final

## Environmental Impact Statement

### GUAM AND CNMI MILITARY RELOCATION

Relocating Marines from Okinawa,  
Visiting Aircraft Carrier Berthing, and  
Army Air and Missile Defense Task Force

**Volume 10: Public Comments on the Draft EIS**

July 2010

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# Guam and CNMI Military Relocation EIS

## Volume 10: Public Comments on the Draft EIS

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## 1.0 OVERVIEW

Volume 10 presents the Department of Defense (DoD) responses to all substantive comments received on the Draft Environmental Impact Statement (EIS) for the Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation during the Draft EIS public comment period from November 20, 2009 through February 17, 2010. Comments were received by mail, via the EIS website [www.guambuildupeis.us](http://www.guambuildupeis.us), and at public hearings held from January 7-15, 2010 on Guam, Tinian, and Saipan. Also, Volume 10 includes a summary of significant comments received and how those comments have been addressed in the Final EIS.

### 1.1 PUBLIC COMMENT PERIOD

The DoD provided a 90-day public comment period (twice the minimum duration required by regulation). The public comment period provided an opportunity for government agencies, interest groups, and the general public to comment on findings presented in the Draft EIS. Comments received during the public comment period have been assessed and considered both individually and collectively to guide development of this Final EIS.

All comments received during the public comment period are consolidated in this Volume. Comments postmarked after February 17, 2010 or, if not postmarked, received more than 2 days after the end of the public comment period are included at the end of this Volume. These “late” comments were reviewed for any new issues not previously identified in comments received during the public comment period. No new issues were identified after the comment period closed.

All comments received on the Draft EIS were categorized to ensure that common themes were addressed appropriately.

### 1.2 COMMENT SUBMISSION METHODS

Comment items (i.e., a comment-containing source such as a letter, a web form, a person’s verbal testimony) were received several ways: via web form from the official EIS website: [www.guambuildupeis.us](http://www.guambuildupeis.us); regular United States (U.S.) mail, and written comment, and oral testimony submitted during public hearings. A single comment item may contain multiple comments. Table 1.2-1. shows a breakdown of the comment method, the number of comment items, and the number of comments received during the public comment period.

**Table 1.2-1. Comment Method and Number of Comments Received**

<i>Comment Method</i>	<i>Number of Comment Items</i>	<i>Number of Comments</i>
Website	1,864	2,873
U.S. Mail	1,348	6,610
Written submitted at Public Hearing	107	311
Oral submitted at Public Hearing	198	529
<b>TOTAL</b>	<b>3,517</b>	<b>10,323</b>

*Note:* Refers to actual delineated comments within comment items.

*Legend:* U.S. = United States.

### 1.3 PUBLIC HEARING NOTIFICATION

The public comment period and public hearings were advertised extensively, using multiple methods to notify the public. In particular, the Navy used five main methods to disseminate notices, which are listed below and discussed in further detail in Sections 1.3.1 to 1.3.4.

- Publication of a notice of availability (NOA) in the Federal Register (FR)
- Publication of a NOA and notice of public hearings (NOPH) in the FR
- Advertisements of the NOA and NOPH in local newspapers
- Mass mailing
- Other public media

#### 1.3.1 Notices of Availability

The DoD began the public comment period for the Draft EIS with the publication of a combined NOA/NOPH in the FR on November 20, 2009 (Volume 74, Number 223, Pages 60244-60246). The notice announced the availability of the Draft EIS and time, dates, and locations of public hearings. The notice also gave an overview of the proposed action and potential environmental impacts as presented in the Draft EIS.

The U.S. Environmental Protection Agency (USEPA) published a separate NOA of the Draft EIS on November 20, 2009 (Volume 74, Number 223, Page 60260) that contained an incorrect date for the conclusion of the public comment period. USEPA published a correction in the FR on November 27, 2009 (Volume 74, Number 227, Page 62306) with the correct end date for the public comment period (February 17, 2010 Eastern Standard Time).

#### 1.3.2 Newspaper Notification Advertisements

The public comment period and NOPH were announced in three local newspapers: *Pacific Daily News*, Guam; *Marianas Variety*, Saipan and Guam; and *Saipan Tribune*, Saipan. These notices were published on 20 November 2009, approximately 1 month later (21 December 2009), and the weekends prior to the public hearings. This timing ensured that readers would be alerted to the hearings immediately prior to their occurrence. The dates of each advertisement are listed in Table 1.3-1.

**Table 1.3-1. Dates of Newspaper Notification Advertisements for Public Hearings**

<i>Island(s)</i>	<i>Newspaper</i>	<i>Dates of Advertisement</i>
Guam	Pacific Daily News	November 21, 2009
		December 21, 2009
		January 1 to January 3, 2010
Saipan/Guam	Marianas Variety	November 23, 2009
		December 21, 2009
		January 4 to January 6, 2010
Saipan	Saipan Tribune	November 21, 2009
		December 21, 2009
		January 1, January 4, and January 5, 2010

### 1.3.3 Mass Mailing

Elected officials, federal, state, and local government agencies; non-governmental organization representatives; and other persons anticipated to be interested in the Draft EIS were sent mailers that described the proposed action and the public comment process, and presented the scheduled public hearing dates and locations.

### 1.3.4 Other Public Media

In addition to the NOA, newspaper announcements and mailer; the public hearings were advertised via short news advisories including radio and television; press releases; and public service announcements that were developed by the Joint Guam Program Office and e-mailed or faxed to local print, television, and radio media venues. Public service interviews with key Navy personnel were also conducted. Local newspapers, *Pacific Daily News* and *Saipan Tribune*, also published their own announcements and articles throughout the public comment period.

## 1.4 PUBLIC HEARING DATES AND LOCATIONS

Public hearings are an important part of the EIS process. The Navy held four public hearings on Guam, one on Tinian, and one on Saipan to provide information on the Draft EIS, answer questions, receive comments from the public, and document verbal testimonies. An open house took place during the first 2 hours of each hearing, followed by a scheduled 2-hour formal public hearing. Most hearings lasted longer than 2 hours and remained open until all who wanted to give verbal testimony had a chance to do so. Informational posters were displayed and DoD subject matter experts were available during the open house to answer questions on the Draft EIS.

The public hearings took place from January 7–15, 2010. Date, scheduled time, and location information of the public hearings held is provided as follows:

- Thursday, January 7, 2010 at Southern High School in Santa Rita, Guam from 5:00 p.m. to 7:00 p.m. (Open House) and 7:00 p.m. to 9:00 p.m. (Formal Hearing).
- Saturday January 9, 2010 at the Field House, University of Guam (UoG) in Mangilao, Guam from 1:00 p.m. to 3:00 p.m. (Open House) and 3:00 p.m. to 5:00 p.m. (Formal Hearing).
- Monday January 11, 2010 at Yigo Gymnasium in Yigo, Guam from 5:00 p.m. to 7:00 p.m. (Open House) and 7:00 p.m. to 9:00 p.m. (Formal Hearing).
- Tuesday January 12, 2010 at Okkodo High School in Dededo, Guam from 5:00 p.m. to 7:00 p.m. (Open House) and 7:00 p.m. to 9:00 p.m. (Formal Hearing).
- Thursday January 14, 2010 at Tinian Elementary School in San Jose, Tinian from 5:00 p.m. to 7:00 p.m. (Open House) and 7:00 p.m. to 9:00 p.m. (Formal Hearing).
- Friday January 15, 2010 at Multi Purpose Center in Susupe, Saipan from 5:00 p.m. to 7:00 p.m. (Open House) and 7:00 p.m. to 9:00 p.m. (Formal Hearing).

## 1.5 PUBLIC HEARING ATTENDANCE

Table 1.5-1. summarizes the number of meeting attendees and number of verbal comments received at the public hearing.

**Table 1.5-1. Summary of Meeting Attendants and Verbal/Written Statements Received**

	<i>Meeting 1 Guam Southern High School</i>	<i>Meeting 2 Guam University of Guam</i>	<i>Meeting 3 Guam Yigo Gym</i>	<i>Meeting 4 Guam Okkodo High School</i>	<i>Meeting 5 Tinian San Jose</i>	<i>Meeting 6 Saipan Susupe</i>	<i>Total</i>
Estimated Attendance	324	512	418	583	78	62	1,977
Number of Verbal Statements <sup>1</sup>	32	60	66	68	7	13	246
Number of Written Statements <sup>1</sup>	30	26	17	27	4	3	107

*Note:* <sup>1</sup> Refers to a comment-containing source (e.g., a letter, a web form, a person's verbal testimony). A statement may contain multiple comments.

## 2.0 OVERVIEW OF COMMENTS AND RESPONSES

### 2.1 INTRODUCTION

The public comment period for the Draft EIS generated 10,323 delineated comments (all or a portion of a comment item that is identified through the delineation process as a statement about a specific category/subject area), excluding spam. All comments received were uploaded to a database, read, and processed into delineated comments. Comment responses were developed and reviewed by DoD experts. Comments were tracked in two ways: by category and by source.

Table 2.1-1 shows the comments delineated into 45 subject areas (categories) and Table 2.2-1 shows the comment items by source.

**Table 2.1-1. Comment Counts by Category**

<i>Comment Category</i>	<i>Number of Comments<sup>a</sup></i>
Access	170
Air quality	109
Airspace	25
Community relations – Guam	233
Community relations – Tinian	19
Cultural resources	349
Cumulative impacts	164
Environmental justice and the protection of children	71
Geological and soil resources	63
Hazardous materials and hazardous waste	176
Land acquisition	394
Land and submerged land use	201
Marine biological resources	1,190
Mitigation of off-base impacts	177
NEPA requirements – public involvement	300
NEPA requirements – all other	192
Noise	177
Other category	370
Proposed action – overall	286
Proposed alternatives – AMDTF	38
Proposed alternatives – aircraft carrier	223
Proposed alternatives – Tinian	75
Proposed alternatives – Marine Corps	248
Protected species – general	94
Public health and safety	263
Public safety – crime	274
Recreational resources	179
Socioeconomic – military/civilian equality	74
Socioeconomic – Chamorro interests	305
Socioeconomic and community services	1,306
Stormwater or surface water	295
Terrestrial biological resources	315

<i>Comment Category</i>	<i>Number of Comments<sup>a</sup></i>
Terrestrial biology – invasive species	125
Transportation – marine	51
Transportation – on-base roads	268
Transportation – off-base roads	13
Uncategorized	667
Utilities – potable water	193
Utilities – potable water-aquifer	108
Utilities – power generation	72
Utilities – solid waste	146
Utilities – wastewater	220
Visual resources	32
Wetlands – LEDPA	73
<b>TOTAL</b>	<b>10,323</b>

*Legend:* AMDTF = Army Air and Missile Defense Task Force; LEDPA = Least Environmentally Damaging Practicable Alternative; NEPA = National Environmental Policy Act.

<sup>a</sup> These counts are current as of May 24, 2010.

## 2.2 COMMENT COUNTS BY SOURCE

**Table 2.2-1. Comment Counts by Source**

<i>Source Group</i>	<i>Number of comments<sup>a</sup></i>
Federal Elected Officials	24
Federal Agencies	817
Guam Territory Officials	1,163
CNMI Territory Officials	44
Other Territory Officials	0
Guam Territory Agencies	1,213
CNMI Territory Agencies	13
Other Territory Agencies	0
Guam Local Officials	6
CNMI Local Officials	0
Other Local Officials	0
Interest Groups	1,504
Individuals	5,232
Business/Commercial Entities	243
Spam	61
Late Comments	3
<b>TOTAL</b>	<b>10,323</b>

*Legend:* CNMI = Commonwealth of the Northern Mariana Islands.

<sup>a</sup> These counts are current as of May 24, 2010.

### 3.0 SUMMARY OF DRAFT EIS PUBLIC COMMENTS

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The following discussion summarizes the most frequent, common themes from comments received during the public comment period and actions taken to address those common themes in the Final EIS. Every comment submitted during the 90-day public comment period was thoroughly reviewed. In response to comments, the Final EIS was either revised or the existing analysis/approach was reaffirmed.

Where numerous similar concerns/comments were submitted, DoD prepared a common response to address those concerns/comments. As a result, many responses are repeated for similar comments in Section 4.0 of this Volume.

Weapon platform siting (Volume 5 – Air and Missile Defense Task Force) is classified and is assessed in a Classified Appendix to this public Final EIS. At the time of the Draft EIS, this appendix was made available to resource agency personnel with the appropriate security clearance. Only one set of comments was received (from the USFWS). These comments did not include classified material. Therefore, the comments and comment responses are presented in the unclassified Appendix L of Volume 9.

Because of the extremely large number of comments received on the Draft EIS (10,323), DoD began developing responses to comments in Section 4.0 of this Volume immediately following the close of the public comment period on February 17, 2010. As noted in numerous places throughout this Final EIS, since that time, the DoD has worked closely with the federal and Government of Guam (GovGuam) agencies to identify ways to mitigate impacts. Therefore, some of the responses to comments in Section 4.0 of this Volume may not contain the latest information/developments. If available, updated information is provided below.

In general, the DoD received a significant number of comments that highlighted a concern that adding thousands of new citizens to Guam's population would overwhelm existing infrastructure and social and health services. These comments also identified existing shortfalls in Guam's infrastructure and social and health services. Additionally, significant numbers of comments were received concerning Chamorro socio-cultural issues, access to cultural and recreational sites, impacts on coral and other marine resources, land acquisition, and general National Environmental Policy Act (NEPA) concerns.

#### **A. One Guam – Infrastructure, Socioeconomics, and Community Services**

**Issue:** The term “One Guam” represents the issue of addressing existing islandwide utility, roads, social service, port, transportation, and other deficiencies. A common concern was that the military relocation would worsen these deficiencies. Many comments expressed concern that Guam would be overwhelmed by a foreseeable increase in the island's population. The challenge of identifying and assessing impacts of indirect/induced growth caused by the military relocation (from the construction workforce, businesses, services, etc.) was highlighted in many comments. Several comments indicated that existing sub-standard services on Guam would decline even further unless the federal government agrees to fund needed improvements to utility systems, roads, the commercial port, health care facilities, and social services/programs.

**Response:** As documented in this Final 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 interagency effort to identify other federal programs and funding sources that could benefit the people of Guam.

The Final EIS includes a more robust discussion that clearly differentiates between direct and indirect impacts on utility systems and social services, the status of port improvements, and more information on the Guam airport. The Final EIS provides more detail on the compliance status of utility systems and results of negotiations between DoD, Guam Waterworks Authority (GWA), Guam Power Authority (GPA), Guam Environmental Protection Agency, and USEPA Region 9 that have focused on cooperatively identifying utility solutions. The Final EIS also discusses the status of the workgroup managing the Northern Guam Lens Aquifer (NGLA), GWA capital improvements planning, and the status of Memorandum of Understanding with GWA and GPA to formalize long-term partnerships. More detail has also been added on the funding strategy to upgrade utility systems – specifically how a Special Purpose Entity (SPE) will be used, and how loans from the Government of Japan (GoJ) will fund many of the utility improvements needed to address the direct impacts of the military relocation.

**Update:** DoD continues to work closely with other federal agencies, GovGuam agencies, and elected officials to identify solutions to fix substandard infrastructure on the island. As an example, DoD is working with GWA and USEPA Region 9 to ensure that GWA implements planned Capital Improvement Program (CIP) projects designed to repair, refurbish, improve existing water and wastewater infrastructure to meet the needs associated with the proposed Marine Corps relocation and associated population growth. The ability for GWA to secure necessary funding for the required CIP remains a key concern and a potential impediment to the Guam military relocation effort and the return of GWA to full compliance with the Clean Water Act (CWA).

DoD plans to make excess water system capacity available to GWA to meet an expected off-base shortfall in potable water, including installing new wells and maximizing existing water supply sources and instituting robust on-base water conservation measures. DoD is also proposing to install transfer points between the DoD water supply transmission system and GWA's water distribution system to get water more efficiently to areas where there are shortfalls rather than relying solely on GWA's distribution system. DoD is also seeking legislative authority to fund \$50 million toward port improvements. For other systems and services, additional mitigation measures have been added to the Final EIS to help offset interim and long-term impacts.

The Realignment Roadmap Agreement between the U.S. and Japan states that “Japan will provide \$6.09 billion (fiscal year 2008 dollars), including \$2.8 billion in direct cash contributions to develop facilities and infrastructure on Guam to enable the III MEF (Marine Corps) relocation.” Of this amount, GoJ will provide \$740 million for utilities upgrades, expansion, and development associated with the Marine Corps relocation. Currently, the DoD is seeking from GoJ approximately \$580 million for water and wastewater improvement projects. This funding is part of the \$740 million mentioned above.

In addition to DoD's efforts with GoJ, the President's Council on Environmental Quality has also facilitated interagency meetings with DoD and appropriate federal agencies to identify the specific projects and level of funding necessary water and wastewater infrastructure improvements must be accomplished in the first 5 years to accommodate the relocation construction. These various projects total approximately \$1.3 billion.

The President's Economic Adjustment Committee (EAC) is evaluating overall Guam civilian hard and soft infrastructure needs, including those associated with the proposed DoD relocation. As part of this evaluation, the EAC is specifically examining federal funding options for the remaining portion of the estimated \$1.3 billion water and wastewater improvements that may not be provided by GoJ financing.

A more detailed discussion related to Wastewater and Potable Water is provided in sub-sections B and C below.

## **B. Utilities – Wastewater**

**Issue:** There were numerous comments concerning wastewater issues. Questions centered on how DoD would contribute financially to GWA so that wastewater systems on Guam will be able handle the additional sewage treatment loads from both DoD bases and from the off-base population growth on Guam. Commentors were concerned that the military relocation would burden a system that cannot handle Guam's current wastewater flows. Commentors were also concerned that the wastewater treatment plants (WWTPs) currently only have primary treatment prior to discharge at the outfalls although secondary treatment is standard for domestic wastewater. Commentors asked how DoD would propose to accomplish secondary treatment.

**Response:** As noted in sub-section A above, and as noted in the Final EIS, DoD has arranged funding to ensure the NDWWTP provides fully compliant primary treatment by 2013. The requirement for secondary treatment is based on a recent waiver denial issued by USEPA, which has been challenged by GWA. The requirement for secondary treatment at the NDWWTP and at one other GWA plant will not be determined until after the Record of Decision is issued. If secondary treatment is required, the ability of GWA to secure funding for projects required to achieve secondary treatment at the NDWWTP remains a concern. DoD supports the secondary upgrades, and is working to secure necessary funding, including funding from the GoJ, for secondary upgrades should they ultimately be required. The Final EIS has also been expanded to include a discussion of indirect/induced impacts on other WWTPs and associated collection systems on the island.

**Update:** DoD is working with the GoJ to secure funding for the needed upgrades to the NDWWTP. Currently, GoJ is considering funding approximately \$60 million to cover repairs and upgrades to restore primary treatment plant capability at the NDWWTP. Construction is planned to begin in January 2011 and be completed by December 2012. Although the U.S. Government has not yet ordered the implementation of secondary treatment for Guam's WWTPs, DoD, USEPA Region 9, and GWA have agreed in principle to the upgrades that would be required at the NDWWTP to achieve secondary treatment standards. GoJ is considering funding approximately \$130 million (M) to expand the capacity of the NDWWTP and upgrade it to meet secondary treatment standards.

Discussions continue on the best business approach to facilitate the required wastewater system upgrades. This could involve the use of a SPE, which would likely be an SPE formed to finance, operate, manage, upgrade, or develop potable water infrastructure. It is anticipated that this SPE would utilize GoJ financing provided in accordance with the Realignment Roadmap. Alternatively, GoJ financing could be provided to GWA to conduct the upgrades. The precise manner in which these SPE business entities would operate is under development, and therefore is not known at this time. The NDWWTP may be operated by the SPE and fees generated through utilities service contracts could be used to repay financing costs. The DoD rate structure that would be established would reflect current rates adjusted for inflation.

Discussions regarding technical solutions and financing for other GWA WWTPs requiring secondary treatment and collection system upgrades, including the Hagatna WWTP, are ongoing. Currently, DoD is seeking approximately \$150 million from the GoJ to fund primary and secondary treatment plant upgrades to the Hagatna Wastewater Treatment Plant, and approximately \$80 million in upgrades and repairs to GWA's northern and central wastewater collection systems.

If the DoD should fail to secure necessary financing from the GoJ, significant environmental impacts will continue to occur. These are described in Volume 6, Chapter 3. These will include increased flows to already non-compliant treatment plants, resulting in further impacts to receiving waters due to poorly

treated wastewater, and adverse impacts to fishing and recreational use of these waters. Consistent with the Navy's commitment to keep from significantly impacting utilities on Guam, the DoD would apply force flow reductions and/or adaptive program management of construction as explained in Volume 7, Chapter 2. Failure to secure necessary funding may require that DoD delay or not issue construction contracts or task orders until such time as the financing is received from the GoJ and the necessary improvements to the NDWWTP primary treatment capability are implemented. Such action would severely impact the construction pace and the ability of Navy to complete required construction to support the Marine Corps relocation.

### **C. Utilities – Potable Water**

**Issue:** A significant number of comments centered on the use, depletion, and the potential for salt water intrusion of the NGLA. Comments expressing concern for the impact of the proposed action on the NGLA were submitted by federal and local agencies, interest groups, and individuals. Commentors were concerned that the NGLA could be depleted or contaminated, resulting in degraded water supply and quality. There was also significant concern, primarily from regulatory agencies, over anticipated shortfalls in water supply and poor water quality due to the existing substandard condition of the water supply and distribution system on the island.

**Response:** The Final EIS, Volume 6 has been updated to include the latest information on DoD's plan to share excess water capacity with GWA during the construction period to offset off-base water supply shortfalls. This includes a plan to build a new line to connect DoD and GWA water systems to allow for islandwide transfer between the DoD and GWA systems. The Final EIS discusses the proposed 22 new DoD water supply wells that would provide additional capacity for the DoD water system. These wells would be drilled before and during the early stages of construction in northern Guam and extract potable water from the NGLA. Combined with excess water from DoD's Fena Reservoir and existing DoD wells, there would be adequate water supply to meet the near-term increase in off-base water demand expected to occur over the next 3–5 years during the construction phase of the military relocation. During this time, GWA will make improvements to their system to meet the long-term water needs of off-base communities.

The sustainable yield from the NGLA is estimated at approximately 80 million gallons per day (MGd). Aquifer sustainable yield is the amount of water that can be continuously withdrawn from groundwater sources without degrading water quality or viable production water. The estimated total average daily water demand from this aquifer is 63 MGd at the peak of construction of the proposed DoD military relocation. Thus, there will be an adequate supply of potable water. DoD and GWA plan to jointly manage the production of water and to monitor water quality closely. DoD will conduct a long-term study and develop a 3-dimensional model that will further define the sustainable yield of the NGLA and become an invaluable tool to manage aquifer withdrawal.

The Final EIS includes more information on how contamination of the aquifer would be avoided, and sustainability measures that would be adopted by DoD to reduce water demand on base. The Final EIS also acknowledges that, until the distribution system is upgraded by GWA, localized potable water issues will continue on Guam regardless of the amount of potable water available.

**Update:** The Final EIS, Volume 6 has been updated to include the latest information on DoD's plan to share excess water capacity with GWA during the construction period to offset off-base water supply shortfalls. The Final EIS discusses DoD's proposal to provide additional water capacity to the DoD system of 11.28 MGd, which is anticipated to be met by installation of new wells and rehabilitation of existing wells. DoD also proposes to interconnect the DoD water transmission system to the GWA water

distribution to allow for more efficient transfer of water to GWA at locations closest to where water is needed. These transfer points would limit water loss and degradation of water quality by minimizing time water is spent in GWAs substandard distribution system. DoD is seeking approximately \$159 million from the GoJ funding to finance the new DoD water system.

Discussions continue on the best business approach to facilitate the required water system upgrades. This could involve the use of a SPE, which would likely be a private business entity formed to finance, develop, upgrade, operate and manage on and off base potable water infrastructure associated with the military relocation. It is anticipated that this SPE would utilize GoJ financing provided in accordance with the Realignment Roadmap. The precise manner in which these SPE business entities would operate is under development, and therefore is not known at this time.

GWA and DoD are cooperatively working together to plan for the expected increase in population on Guam. Since the end of the public comment period, the DoD has reached an agreement in principle on establishing a joint management team to manage use of the NGLA, which includes experts from DoD, GWA, GEPA, USEPA Region 9, the U.S. Geological Service, and the UoG Water and Environmental Research Institute. DoD continues to accelerate the schedule for the installation of proposed new wells to ensure excess water would be available for GWA in the early years of the proposed military relocation when shortfalls in the GWA system are anticipated. DoD is also working with GWA to identify the best transfer points from the DoD water transmission system to the GWA distribution system.

#### **D. Marine Biological Resources (Coral Assessment, Mitigation, Water Quality, Essential Fish Habitat, and Endangered Species)**

**Issue:** A number of commentors expressed concern over impacts on marine resources (primarily in Apra Harbor) including impacts on coral and sea turtles. Many federal agencies expressed concern that DoD used an improper assessment methodology (percent coral cover) to assess the functional value of coral loss as a result of proposed dredging operations. Many commentors expressed concern over the type and amount of mitigation proposed to replace the functional value of coral lost from proposed dredging. Finally, some commentors felt that DoD did an inadequate job of performing the Essential Fish Habitat assessment, and that DoD did not properly assess aggregate water quality impacts from dredging, sewage treatment plant discharges, increased shipping traffic, and construction activities.

**Response (Coral Habitat Assessment):** Habitat assessment methodologies to 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 U.S. and the evolving nature of science regarding aquatic ecosystem restoration make the establishment of standard assessment methodologies impracticable. The assessment for this EIS used a historically approved methodology (percent coral cover), supplemented by other methods such as the use of Light Detection and Ranging satellite photos, for quantifying impacts to affected coral reef ecosystems impacted by the proposed transient aircraft carrier wharf and associated dredging. DoD believes that use of the percent coral cover methodology, supplemented by use of Light Detection and Ranging satellite photos, is the "best currently available science" to capture the thousands of elements that comprise the function of a coral reef ecosystem. As noted in the "Update" below, DoD has agreed to defer a final site-specific decision on the transient aircraft carrier wharf location and collect additional coral/habitat data. This additional data will be used to prepare follow-on environmental analysis and for CWA permitting.

**Response (Coral Mitigation):** DoD has, within this Final EIS, disclosed compensatory mitigation options on a programmatic basis. This programmatic analysis is sufficient to allow DoD to make a decision regarding the general location of the transient aircraft carrier wharf. DoD recognizes that the programmatic analysis of mitigation is insufficient at this time to support the CWA Section 404 permitting process.

A detailed compensatory mitigation plan would be submitted as part of the CWA Section 404 permit application for construction affecting the navigable waters of the U.S. (including the transient aircraft carrier 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 Final EIS. However, a number of mitigation options, including watershed restoration and the use of artificial reefs, are discussed in programmatic nature in Volume 4, Chapter 11, Section 11.2. 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.

**Response (Water Quality Impacts):** Both the Draft EIS and Final EIS acknowledge that dredging would result in short-term, localized impacts to water quality (see Volume 4, Chapter 4, Section 4.2.2.2). As noted in this Section, there would be short-term increases in turbidity, short-term decreases in dissolved oxygen, and re-suspension of sediments possibly containing metals. Historically, combined Apra Harbor WWTP outflows, wharf construction, and dredging activities have only resulted in short-term, localized impacts to water quality with the use of Best Management Practices. There have been no violations of water quality standards reported. It is anticipated that even with a potential increase in flows from the Apra Harbor WWTP, construction and dredging activities associated with the proposed transient aircraft carrier wharf would be consistent with previous actions regarding impacts to water quality. As part of the CWA Section 404 permitting process, the DoD would conduct appropriate modeling prior to obtaining a CWA Section 401 Water Quality Certification for in-water construction activities.

**Response (Essential Fish Habitat):** Additional information has been added to the Final EIS that further expands and clarifies impacts on habitats and Management Unit Species. The Essential Fish Habitat assessment was officially forwarded to the National Marine Fisheries Service (NMFS) in April 2010 for review and concurrence.

**Response (Endangered Species):** DoD has initiated consultation under Section 7 of the Endangered Species Act (ESA) and a Biological Assessment (BA) has been completed and submitted to NMFS for potential impacts on sea turtles in Apra Harbor. DoD has received draft comments and conservative measures from NMFS on the BA.

**Update:** The Navy has elected to forego selection of a specific site for the transient aircraft carrier berth within Apra Harbor for the near term. Volume 4 of the Final EIS presents the analysis of impacts associated with construction and use of a deep draft berthing capability in Guam for transient (visiting) nuclear-powered aircraft carriers. The Final EIS identifies site specific alternatives within Apra Harbor for location of the transient berth and analyses the impacts associated with development and use of a transient aircraft carrier berth at those alternative locations. Apra Harbor is the only deep water port on the island of Guam and is the only location with sufficient road, utility, and naval infrastructure to support a transient aircraft carrier berth. The Draft EIS identified several alternatives within Apra Harbor as potential transient aircraft carrier berth locations, but the Draft EIS eliminated some of those alternatives from detailed analysis based on operational and environmental factors. Polaris Point was identified as the preferred transient aircraft carrier berth site in the Draft EIS and remains the Navy's preferred site for

construction of a wharf to accommodate transient aircraft carriers.

Comments received on the Draft EIS from federal agencies, Guam agencies, the Guam legislature, and private parties were critical of the marine resources analysis and other analysis presented in the Draft EIS regarding the proposed transient aircraft carrier berth. Some commentors also suggested consideration of other sites or reconsideration of alternative sites that had been eliminated from detailed analysis. Those comments were carefully considered and some changes/additions were made to the analysis that was presented in the Draft EIS. In the view of the Department of the Navy, the analysis now presented in the Final EIS, including the marine resources impacts analysis, provides the information necessary to allow the decision-maker to fully consider the direct, indirect, and cumulative environmental impacts of locating a transient aircraft carrier berth within Apra Harbor, including those associated with constructing a wharf, dredging a turning basin, and deepening the access channel. Further, the analysis provided in the Final EIS would allow the decision-maker to make an informed, reasoned selection of a specific site for the transient aircraft carrier berth within Apra Harbor.

Although the Navy believes the analysis in the Final EIS is sufficient to inform selection of a specific site for a transient aircraft carrier berth, the Navy recognizes that concerns remain on the part of regulatory agencies and the public, about the analysis and about the sufficiency of the information that would be required to support future federal permitting actions to allow for construction of the proposed transient aircraft carrier berth. Based on the level of concern expressed in comments on the Draft EIS, continued discussions with cooperating agencies under NEPA, and the Navy's continuing commitment to environmental stewardship, the Navy has elected to forego selection of a specific site for the transient aircraft carrier berth within Apra Harbor for the near term. Therefore, the Navy will continue to proceed toward a decision whether to locate a transient aircraft carrier berth generally within Apra Harbor but will defer a decision on a specific site. The Navy will voluntarily collect additional data on marine resources in Apra Harbor at the alternative transient aircraft carrier berth sites still under consideration by the Navy in this Volume of the Final EIS. That additional data and associated analysis will be used in the future to inform the subsequent selection of a specific site for the transient aircraft carrier berth within Apra Harbor. To the extent the additional data produces significant new circumstances or information relevant to environmental concerns and bearing on the deferred portion of the proposed action (i.e., site specific selection) or its impacts, supplemental analysis will be completed under NEPA as provided in the CEQ regulations governing supplemental environmental impact analysis (42 CFR 1502.09).

Regardless of whether supplemental environmental impact analysis is required, any additional data collected and/or analysis will be incorporated into the Navy's subsequent application for required federal permits and natural resource consultations to support construction of the transient aircraft carrier berth.

The election by the Navy to defer a decision on a specific transient aircraft carrier berth site does not affect the discussion and analysis in Volume 4 or other portions of the Final EIS.

#### **E. Access to Cultural and Recreational Sites**

**Issue:** A significant number of comments were received expressing concern that the proposed action would limit access for residents of Guam to culturally and recreationally important sites, such as Marbo Cave, Mount Lam Lam, and Pagat Archaeological Site/Cave/Trail. The commentors claim that hunting, fishing, and boonie stomping are cultural activities that are very important to their livelihood and it is unacceptable for DoD to control these sites/activities. Commentors are concerned that these areas will be permanently closed in the future just as the Spanish Steps were. The loss of access to natural, cultural, and recreational resources is a significant concern to Guam residents.

Comments from the Boonie Stompers, a non-profit corporation of volunteers that lead weekly hikes on Saturdays to unique destinations on Guam, expressed the desire to work directly with the military to ensure compatibility with mission requirements, protection of natural and cultural resources, and public access.

Commentors also stated that the Volume 4, Chapter 11 and the Record of Decision should have clear mitigation measures regarding public access to cultural and recreational sites.

**Response:** DoD understands and recognizes the significance of cultural and recreational sites located on DoD land on 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.

**Update:** DoD has re-examined the proposal to replace the existing Mount Lam Lam trail leading to Mount Jumullong Manglo and determined that a new access road is not preferred as the existing trail is sufficient to provide needed access. As part of the Section 106 consultation process under the National Historic Preservation Act, the DoD is working closely with consulting parties to ensure the public would continue to have access to Pagat.

## **F. Land Acquisition**

**Issue:** Numerous comments were received regarding land acquisition. Commentors seemed most concerned with land condemnation and compensation for the “taking of land.” Comments indicated that the Chamorro community still recall the land takings on Guam after World War II and feel the same land takings are going to occur with this proposed military relocation. Several commentors expressed a familial and spiritual tie to lands that have been in their families through many generations and want respect for the Chamorro lands and rights. Many commentors stated that DoD already owns 30 percent of Guam and should not acquire more land under any circumstance.

**Response:** DoD acknowledges that the issue of land acquisition is a complex and sensitive one with both historical and contemporary contexts. DoD was required to determine whether military relocation requirements could be met by excess, underutilized, or otherwise available land held by DoD on Guam. Early development plans attempted to keep all activities on existing DoD lands. However, as discussed in the Final EIS (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. 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. 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.

**Update:** Since the close of the public comment period, the DoD has added the Acquisition Impact Assessment to the Socioeconomic Impact Assessment Study (SIAS) (Volume 9, Appendix F) and Volume 2, Chapter 16. Baseline information is available in the Land Acquisition Baseline Report, also in Volume 9, Appendix F. Additional proposed mitigation measures have been added and specific areas being considered for acquisition are identified in the Final EIS.

### **G. Public Comment Period, Complexity of the EIS**

**Issue:** Numerous comments were received requesting additional time to review and comment on the Draft EIS. Some cited the regulations (40 Code of Federal Regulations Part 1502.7) that indicate an EIS should normally be less than 300 pages in length for proposals of unusual scope or complexity and that the Draft EIS was several times this length. A common theme expressed was that the 90-day duration of time for public review of the Draft EIS was insufficient for a meaningful review of a document the size of the Draft EIS. Many indicated concern over not only the length of the public comment period but also the complexity of the proposal and a lack of NEPA experience to fully understand what is being proposed.

**Response:** 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 relocation on Guam.

The proposed actions are complex and have many components. To characterize the affected environment and potential impacts, sufficient detail needed to be included in the Draft EIS. To facilitate meaningful review during the public comment period, 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.

### **H. Proposed Action - Why Guam?**

**Issue:** Many commentors questioned why Guam was chosen as the proposed location to relocate military forces given the island's limitation including the small size of the island, overpopulation, lack of and poor infrastructure, strain on natural resources, poor and inadequate health care, traffic congestion, increase in violence, increase in pollution, etc. There were suggestions to relocate 4,000 Marines to Guam and 4,000 Marines to CNMI, move the proposed project to American Samoa, and to leave the Marines in Okinawa.

**Response:** The Draft EIS Volume 1, Chapter 1, Section 1.4 provided a Global Perspective Background, and explained the various international and military capability requirements that were considered for the relocation of military forces. The discussion will remain the same for the Final EIS. This Section describes how several locations were considered throughout the Pacific region for the military relocation based on (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.

## **I. Proposed Action – Aircraft Carrier (Sediment Sampling, Dredging Methods, and Beneficial Reuse)**

**Issue:** Numerous comments were received that questioned the validity of the sediment sampling results, as well as that some results were not discussed in the Draft EIS. Numerous comments, questions, and concerns were also received on dredging options that were evaluated, carried forward, and considered in the Draft EIS. Many comments centered on concerns over potential sedimentation from proposed dredging activities. Finally, a number of comments were received that expressed concern that the Draft EIS did not evaluate the beneficial reuse of the dredged material. Comments expressed concern that this would force DoD to dispose of dredged material in the open ocean.

**Response (Sediment Samples):** Sediment samples within the proposed dredging areas were analyzed according to USEPA and U.S. Army Corps of Engineers testing criteria. The Final EIS includes results of additional sediment sampling conducted in Apra Harbor for the aircraft carrier wharf and turning basin alternatives. The Final EIS also discusses results of radiological testing of potentially impacted sediments. As discussed in the Final EIS (Volumes 2 and 4, Chapters 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 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.

**Response (Dredging Methods):** The differences between the environmental effects of mechanical and hydraulic dredging are discussed in the Final EIS Chapter 2, Volume 4 and Appendix D. 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 scow. 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 on dredging equipment. Final mitigation measures for all dredging activities would be determined and agreed on during the permit phase of the projects.

**Response (Beneficial Reuse):** As discussed in the Final EIS (Volume 4, Chapter 2), 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. An Upland Dredged Material Disposal Plan has been prepared and results from this plan have been incorporated in the Final EIS. While beneficial reuse is a priority for the DoD, the final decision on dredged material management would be made during the final design and permitting process. Detailed

analysis of the potential impacts from using dredged material for reuse projects would be conducted during the permitting phase.

## **J. Alternatives**

**Issue:** There were numerous comments that the Draft EIS did not rigorously and objectively explore a suitable range of alternatives that also took into account local issues. In particular, many commentors felt the Draft EIS did not explore a sufficient range of reasonable alternatives for construction and operation of firing ranges on Guam.

**Response:** In response to comments received during the public comment period, DoD carefully reviewed plans to support the military relocation to determine if any changes could be made to the proposed action/potential alternatives in the Final EIS. DoD also considered whether additional alternatives could be included to address Marine Corps training requirements. After reviewing requirements and criteria, DoD concluded that no additional alternatives would be fully assessed in the Final EIS. The Final EIS has been revised to include an expanded discussion of alternative locations of firing ranges on Guam that were initially considered but were not found to be reasonable alternatives.

With respect to looking at alternative locations other than Guam, several alternative locations were considered throughout the Pacific region for the military relocation based on (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.

## **K. Community Relations – Guam**

**Issue:** Commentors expressed concern that DoD is not engaging and viewing Guam as a full partner and is not communicating its intentions in a timely and comprehensive manner. There were comments that the EIS document should have been given substantially more transparency over the past several years and that secrecy points to arrogance and it implies that there is something to hide. There was also mention that the military could do a much better job of communications, planning, and showing more respect to their fellow American citizens on Guam.

**Response:** 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.

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 (see Sections 1 and 2). 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 has continued 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.

**Update:** Since the close of the public comment period, the DoD has continued working with local and federal agencies, elected officials, community leaders, and interest groups to discuss details of the proposed military relocation and ways to mitigate impacts on the citizens of Guam. DoD is participating in a Council on Environmental Quality-led interagency effort to resolve disagreements/concerns on the military relocation.

#### **L. Public Safety/Crime**

**Issue:** There were numerous comments regarding an increase in crime with the arrival of the Marines from Okinawa; much of the concern centers on rape (citing the increased incidents in Okinawa by military personnel). Concern also centered on prostitution, drinking of alcoholic beverages, driving under the influence, human trafficking, Acquired Immune Deficiency Syndrome/Human Immunodeficiency Virus, fighting, robberies, etc.

**Response:** A detailed discussion of each concern is provided in the SIAS in Volume 9, Appendix F, Section 3.5.2 of the Final 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 the Final EIS Volume 2. 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 crime 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 proportional increase in crime and social disorder. The DoD also acknowledges that widely publicized instances of military crime in Okinawa would 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 military relocation 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.

Additional information on military off-base crime statistics on Guam was added to Volume 2, Chapter 16. The socio-cultural impacts were revised, significance criteria were edited, and additional mitigation measures have also been added to the Final EIS. There was a major change to the Public Health and Safety section due to public comments. The Public Health and Safety Section was updated to indicate that any increased demand in public services (health care, protective, social, etc.) is now considered a significant impact.

#### **M. Chamorro Concerns/Interests**

**Issue:** Most of the comments regarding Chamorro concerns and interests centered on fear that once the Marines arrive, the indigenous Chamorro population and language will be diminished. In addition, there is a fear that the proportion of Chamorro office-holders and government workers would be impacted and that would have an impact to current government budgets and activities dedicated to cultural issues and

practices. Comments were also received that indicated the DoD does not demonstrate appreciation or consideration for the Chamorro culture and beliefs.

**Response:** Through the process of public involvement that has accompanied this proposed action (see Final EIS, Volumes 1 and 10), 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 or significantly marginalized by western culture. While population increases can highlight cultural differences, they also present unique and new opportunities for cultural learning and sharing. As indicated in the Final EIS (Volume 2, Section 16.2.5; Volume 4, Section 16.2.5), the DoD plans for cultural sensitivity orientation and awareness programs that 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 to foster strong and mutually beneficial military civilian relationships that include the sharing and understanding of culture.

**Update:** Since the end of the public comment period, the impact analysis has been reviewed and edited. Additional information has been added about fishing resources and significance criteria were added. Additional mitigation measures have also been added in Volume 7, Chapter 2.

#### **N. Stormwater/Surface Waters**

**Issue:** There were numerous concerns regarding increases in impervious surfaces and effects on groundwater via stormwater. Many commentors expressed concern that an increase in stormwater would result contamination of the NGLA.

**Response:** 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 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 military relocation. DoD is also preparing a Stormwater Pollution Prevention Plan and will apply for permits that regulate stormwater discharges during construction. The permits and plan are 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 waste management plan in concert 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 Stormwater Pollution Prevention Plan 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 Environmental Protection Agency.

### **O. Terrestrial Biological Resources (including Endangered Species)**

**Issue:** Numerous comments were concerned with terrestrial biological resources including endangered species on Guam. Many centered on the expected loss of habitat, especially in the Overlay Refuge since it is reserved for threatened and endangered species recovery. Commentors indicated that any loss of habitat must be compensated and that an alternative that minimizes habitat loss should be developed. Others commented that clearing or impacting mangroves and associated vegetation should be considered significant. Some commented that forest habitat, whether primary, secondary, or scrub, are critical to the recovery of Guam's native wildlife, and forests are not easily recovered and that all losses should be compensated. Numerous comments regarding wetland-dependent endangered species were also received. Other commentors expressed concern over the potential introduction of non-native invasive species. The commentors also requested a true commitment, in writing by the DoD, that all proposed mitigations and plans are actually going to be implemented.

**Response:** The Navy is in formal consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the ESA. A BA has been prepared by the Navy to analyze the potential impacts on ESA-listed and candidate species and critical habitat under the jurisdiction of the USFWS. The Biological Opinion (BO), issued by the USFWS after their review of the BA and consultation as part of the ESA Section 7 consultation process, will be the final determination of impacts to ESA-listed species that are being evaluated in this EIS. The BO may specify Conservation Recommendations that are discretionary proponent activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The USFWS "effects determinations" from the BO will be incorporated into the Final EIS, if available by the time the Final EIS is published.

**Update:** Related to potential impacts on endangered species, since the publication of the Draft EIS various agencies within the Department of Interior (DoI) have expressed concern regarding the adequacy of BTS interdiction efforts in response to the relocation of Marine Corps forces to Guam. As part of the proposed action, the Navy proposes to fund the increase from current federally funded (DoI, and U.S. Department of Agriculture [USDA]) BTS interdiction measures (in Guam, CNMI, and Hawaii) where the increase is related to direct, indirect and induced-growth caused by the proposed action. For the purposes of this EIS, interdiction is defined as: "to hinder, prohibit, or prevent the BTS from becoming established in new locations by conducting inspection, capture and suppression processes around existing transportation facilities on Guam and, when necessary, complementary, secondary activities in recipient sites such as Hawaii and islands within the CNMI without suspected populations of BTS." Existing interdiction efforts and associated funding would continue. Any additional interdiction efforts and associated funding required to address the proposed Marine Corps unit relocation to Guam would become part of the Navy's BTS interdiction efforts under authority of the Brown Tree Snake Control and Eradication Act. The Department of Interior agrees that it is DoD's responsibility to fund increased interdiction measures through the period ending one year after the end of the fiscal year (FY) in which both construction undertaken to implement the proposed relocation decisions made in the ROD for this EIS has ended, and the permanent non-transient military units relocated are relocated from Okinawa to Guam.

DoD has established a Section 7, ESA Mitigation Tracking Database. As new consultations occur, they are added to the database for recording, tracking, and organization purposes. The database contains the following subject matters:

- Proposed Action
- Site Location
- Formal or Informal Consultation, Initiation Date, and document and date
- Species Addressed
- Proposed Conservative Measures

This database is an internal tool that the DoD has developed to track a specific project through Section 7 consultation resolution.

#### **P. Transportation (Off Base Roads)**

**Issue:** Numerous comments were received on the increase in traffic, congestion, drive times, accidents, and expedited deterioration of the existing off base roads. There were also several comments that recommended a mass transit system for the island.

**Response (Overall Traffic Congestion):** Overall traffic congestion and resulting travel times will increase as non-military population increases on Guam. The increase in population associated with the military relocation would also add traffic and increase congestion. The Final EIS identifies a number of roadway improvement projects planned for the immediate future to alleviate traffic concerns associated with the relocation. In addition, the Final EIS also identifies other long-term transportation initiatives for the 2030 planning horizon that, if implemented, will offset the increased congestion attributable to the military at many locations. The Final EIS Volumes 6 and 7 include discussion of transportation impacts and mitigation.

**Response (Mass Transit):** 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 was formed and will now be responsible for all public transit functions. The Guam Regional Transit Authority approved the Guam Transit Business Plan in January 2010, which includes purchasing new buses, constructing a bus maintenance facility, and modifying the bus schedule.

**Update:** Since the end of the comment period, three additional bridge projects have been incorporated into the Final EIS to accommodate the special military vehicles.

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## 4.0 RESPONSE TO COMMENTS

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Comments received on the Draft EIS (and associated responses) are organized in this Section as follows:

- Federal elected officials
- Federal agencies
- Territory elected officials
  - Guam
  - CNMI
  - Other
- Territory agencies
  - Guam
  - CNMI
  - Other
- Local elected officials
  - Guam
  - CNMI
  - Other
- Non-governmental organizations, associations, interest groups
- Individuals
- Business
- Comments postmarked after February 18, 2010

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## **5.0 COMMENTS AND RESPONSES (CD-ROM)**

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Enclosed on CD-ROM.

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