

## **DEPARTMENT OF DEFENSE**

### **Department of the Navy**

## **Record of Decision for the Final Supplemental Environmental Impact Statement for Guam and Commonwealth of the Northern Mariana Islands Military Relocation**

**AGENCY:** Department of the Navy, Department of Defense

**ACTION:** Record of Decision

**SUMMARY:** The Department of the Navy (DON), after carefully considering the environmental consequences of the proposed action, as well as strategic, operational, and training requirements, obligations under treaties and other international agreements, and cost, announces its decision to construct and operate a main base (cantonment area), a family housing area, a live-fire training range complex (LFTRC), and associated infrastructure on Guam to support the relocation of a substantially reduced number of Marines and dependents than previously analyzed in a 2010 Final Environmental Impact Statement (EIS) (*Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation; Relocating Marines from Okinawa, Visiting Aircraft Carrier Berthing, and Army Air and Missile Defense Task Force*). The DON has selected the preferred alternative as identified in the 2015 Final Supplemental Environmental Impact Statement (SEIS), consisting of a cantonment at Naval Computer and Telecommunications Station Finegayan (Finegayan) and family housing at Andersen Air Force Base (AAFB) (Alternative E in the 2015 Final SEIS), and a LFTRC at AAFB–Northwest Field (NWF) (Alternative 5 in the 2015 Final SEIS). The LFTRC also includes a stand-alone hand grenade range at Andersen South. Under Alternatives E and 5, the DON will be able to meet current and future DON and Department of Defense (DoD) training and operational requirements.

This Record of Decision (ROD) documents why the DoD has chosen to implement the preferred alternatives as described in the 2015 Final SEIS. The ROD includes descriptions and discussions of the anticipated environmental impacts of the proposed action. It also includes descriptions and discussions of all related actions and their anticipated impacts.

The selected cantonment/family housing Alternative E comprises approximately 1,751 acres (709 hectares [ha]) of land (not including offsite utility corridor improvements which total approximately 150 acres [60 ha]) that are currently under the custody and control of the DoD. The selected LFTRC Alternative 5 at AAFB-NWF includes a construction footprint area of approximately 338 acres (137 ha) plus an additional 3,701 acres (1,498 ha) of land and submerged land for surface danger zones (SDZs). The entire LFTRC Alternative 5 construction footprint is currently under the custody and control of the federal government. Although the selected alternative does not require acquisition of non-federal land on Guam, access restrictions already established by the U.S. Fish and Wildlife Service (USFWS) at the Ritidian Unit of the Guam National Wildlife Refuge (NWR) (which is managed by the USFWS) may be adjusted to account for the establishment of the SDZs for the LFTRC once it is operational. In accordance with the provisions of section 2822 of the National Defense Authorization Act (NDAA) for the fiscal year (FY) 2015 (Pub. L. No. 113–291), the DON will pursue an agreement with the USFWS to establish and operate a SDZ associated with LFTRC Alternative 5 that will allow for the continued management of and access to the Ritidian Unit consistent with the purposes for which it was established.

This decision adopts all of the mitigation measures that were identified in the 2015 Final SEIS to avoid or minimize adverse environmental impacts from the preferred alternatives with the exception of proposed

mitigation to designate an Ecological Reserve Area (ERA) on Naval Muniton Site (NAVMAG) and for the expansion of Orote Peninsula ERA. The ERA on NAVMAG and Orote Peninsula ERA expansion were proposed to mitigate for loss of native habitat from direct and indirect impacts of the preferred alternatives. To mitigate for loss of recovery habitat for the endangered Guam Micronesian kingfisher, the DON and the USFWS entered into a Memorandum of Agreement (MOA) on June 11, 2015, which commits the DON to designate approximately 5,324 acres under the custody and control of the DoD in northern Guam to a status that will provide durable habitat protection needed to support recovery habitat and land management for the survival and recovery of the species. This designation and management commitment, together with other MOA provisions, the conservation measures and best management practices identified in the Final SEIS, and the terms and conditions in July 31, 2015 Biological Opinion issued by the USFWS, adequately mitigate for impacts to recovery habitat for the Guam Micronesian kingfisher resulting from implementation of the selected alternatives. This ROD was prepared in accordance with Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA), 40 Code of Federal Regulations (CFR) §§ 1500–1508, and specifically, 40 CFR § 1505.2 (“Record of decision in cases requiring environmental impact statements”).

**FOR FURTHER INFORMATION CONTACT:** Director, Joint Guam Program Office Forward, P.O. Box 153246, Santa Rita, Guam 96915.

**SUPPLEMENTARY INFORMATION:** Pursuant to 42 United States Code (U.S.C.) §§ 4321 *et seq.* (section 101 *et seq.* of NEPA), the regulations of the CEQ that implement NEPA procedures (40 CFR §§1500–1508), and applicable DoD and DON environmental regulations and instructions that implement these laws and regulations, the DON announces its decision to construct and operate a cantonment, family housing, a LFTRC, and associated infrastructure on Guam to support the relocation of a reconfigured and substantially reduced U.S. Marine Corps force to Guam than originally was addressed in the 2010 Final ROD. This decision will enable the DON to: (1) ensure that the relocated Marines are organized, trained, and equipped as mandated by 10 U.S.C. § 5063; (2) satisfy individual live-fire training requirements as described in the 2015 Final SEIS; and (3) establish an operational Marine Corps presence on Guam in accordance with the April 27, 2012, joint statement issued by the U.S.-Japan Security Consultative Committee (hereinafter the “2012 Roadmap Adjustments”).

**BACKGROUND:** On September 30, 2010, the DON signed a ROD (77 Federal Register [FR] 60438) regarding the 2010 Final EIS for the *Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation; Relocating Marines from Okinawa, Visiting Aircraft Carrier Berthing, and Army Air and Missile Defense Task Force*. The 2010 ROD documented, in pertinent part, the DON’s decision to implement the preferred alternatives identified for the main cantonment area, aviation, and waterfront operations to support relocation of approximately 8,600 Marines and approximately 9,000 dependents to Guam. The 2010 ROD deferred a decision on the specific site for a LFTRC pending completion of the section 106 consultation process under the National Historic Preservation Act (NHPA) (16 U.S.C. § 470 *et seq.*). In March 2011, subsequent to issuance of the 2010 ROD, the DoD executed the *Programmatic Agreement among the Department of Defense, the Advisory Council on Historic Preservation, the Guam State Historic Preservation Officer, and the Commonwealth of the Northern Mariana Islands State Historic Preservation Officer Regarding the Military relocation to the Islands of Guam and Tinian* (2011 Programmatic Agreement [PA]). The 2011 PA was developed in consultation with the Guam and CNMI State Historic Preservation Offices (SHPO), the Advisory Council on Historic Preservation (ACHP), the National Park Service (NPS), other federal and Guam and CNMI agencies, and the public.

On February 7, 2011, the Undersecretary of the Navy sent a letter to the Governor of Guam reiterating the 4-pillars that would guide DoD's approach to the military buildup. The DON remains committed to the 4-pillars. Relative to the analysis in the 2015 Final SEIS, one of the pillars was a commitment to provide 24 hour a day, 7 days a week access to the Pāgat Village and Pāgat Cave historical sites, to include the existing trail. Having deferred a decision on the location for the LFTRC along Route 15, the DON subsequently applied a probabilistic methodology to more precisely model the size of the SDZ associated with the Multi-Purpose Machine Gun (MPMG) Range that will be part of the LFTRC. Application of this methodology reduced the size of the overall footprint and enabled the DON to reevaluate potential LFTRC locations on Guam, including those locations previously considered but not carried forward for detailed analysis. This reevaluation resulted in the identification of additional LFTRC preliminary alternatives. In light of this information, the DON initially elected to prepare a SEIS limited solely to the evaluation of potential impacts associated with the construction and operation of a LFTRC on Guam (hereinafter "LFTRC SEIS"). The DON issued a Notice of Intent (NOI) to prepare the LFTRC SEIS on February 9, 2012, (77 FR 6787), and held three public scoping meetings on Guam on March 17, 19, and 20, 2012.

On April 27, 2012, the U.S.-Japan Security Consultative Committee issued a joint statement announcing its decision to adjust the plans outlined in the May 2006 Roadmap for Realignment Implementation. In accordance with these 2012 Roadmap Adjustments, the DoD adopted a new force posture in the Pacific, providing for a materially smaller and reconfigured force on Guam. In conjunction with changes to the mix of personnel involved in the relocation, the force adjustments reduced the originally planned relocation of approximately 8,600 Marines with 9,000 dependents to a force of approximately 5,000 Marines with approximately 1,300 dependents. That decision prompted the DON's review of the actions previously planned for Guam and approved in the 2010 Final ROD. This review concluded that while some actions remained unchanged, others, such as the size and location of the cantonment and family housing areas, could significantly change as a result of the modified force. Therefore, the DON published a new NOI on October 11, 2012, (77 FR 61746), and amended the scope of the ongoing LFTRC SEIS to add those actions that materially changed as a result of the new force posture.

The proposed change in size and composition of the new force structure under the 2012 Roadmap Adjustments and the reconsideration of the LFTRC SDZ footprint did not affect all of the decisions made in the 2010 Final ROD. For example, the location of Aviation Combat Element facilities, the air embarkation facilities (Air Mobility Command Complex), the development of the North Gate and access road at AAFB, the wharf improvements at the Navy base at Apra Harbor, and the non-live fire and maneuver training ranges on Andersen South remain unaffected by the changes in force structure resulting from the 2012 Roadmap Adjustments. For those decisions not affected by the new force structure, the 2010 Final ROD stands as the final agency action. The 2015 Final SEIS and this ROD do not include the transient aircraft carrier berthing in Apra Harbor or the U.S. Army Air and Missile Defense Task Force deployment that were addressed in the 2010 Final EIS. The disposition of those projects is independent of the proposed action analyzed in the 2015 Final SEIS and in this ROD.

**PURPOSE AND NEED:** The overarching purpose of the proposed action is to meet international agreement and treaty requirements and to fulfill U.S. national security policy requirements to provide mutual defense, deter aggression, and dissuade coercion in the Western Pacific Region. From a global strategic perspective, the U.S. maintains military capabilities in the Western Pacific to support U.S. and regional security, economic, and political interests. The Guam Military Relocation proposes distinct, yet related actions to support this position.

The purpose and need for the proposed action evaluated in the 2015 Final SEIS is to (1) ensure that the relocated Marines are organized, trained, and equipped as mandated by 10 U.S.C. § 5063, (2) satisfy individual live-fire training requirements as described in the 2010 Final EIS, and (3) establish an operational Marine Corps presence on Guam and ensure consistency with the new force posture adopted by the DoD in accordance with the 2012 Roadmap Adjustments.

**PUBLIC INVOLVEMENT:** On October 11, 2012, the DON published a NOI (77 FR 61746) to prepare a SEIS to evaluate the potential environmental impacts of the construction and operations of a main base (cantonment), family housing, a LFTRC, and associated infrastructure on Guam to support the relocation of a substantially reduced number of Marines and dependents than previously analyzed in a 2010 EIS (*Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation; Relocating Marines from Okinawa, Visiting Aircraft Carrier Berthing, and Army Air and Missile Defense Task Force*). This notice included a project description and scoping meeting dates and locations. In addition, a NOI/Notice of Scoping Meetings was distributed concurrently to federal, state, and local elected officials and government agencies, non-governmental organization representatives, and other entities interested in the SEIS. The DON held three public scoping meetings on Guam on November 8, 9, and 10, 2012, which were attended by a total of 241 people. During the 60-day scoping period that concluded on December 10, 2012, the DON received 398 comment letters, including 10 duplicate comments, 131 identical form letters from members of the Community Advocates of the Raceway, and 52 comments from Community Advocates of the Raceway that attached signed petitions (collectively totaling more than 13,000 signatures). All topics identified during the scoping period were considered in the development of the scope of the environmental impact analysis.

On April 18, 2014, the U.S. Environmental Protection Agency (EPA) published a Notice of Availability (NOA) for the Draft SEIS (79 FR 21917). Concurrently, DON published a NOA and a Notice of Public Meetings (79 FR 21907) and in Guam newspapers. The Draft SEIS was distributed for public and agency review. The DON's NOA identified locations (e.g., public libraries) where the Draft SEIS was available for review, the duration of the public review and comment period, the available options for submitting comments, and the time and location of three scheduled public information meetings and public hearings on Guam.

The DON held three open-house style meetings combined with three public hearings to both inform the public about the proposed action and identified impacts and to receive written and verbal feedback about the Draft SEIS from the public. Informational posters were displayed, fact sheets about the project (including one translated into Chamorro) were handed out, and subject matter experts were available during each open house to answer questions on the Draft SEIS. Consistent with the meeting announcements, the DON provided information and supported discussion of how compliance with NHPA will be accomplished through continued implementation of the 2011 PA. Comment forms, a stenographer, and a Chamorro language translator were available during the open house portion of each meeting to receive written and oral comments. Oral comments were recorded during the public hearing portion of each meeting, and transcripts of each hearing are included in the record. The public meetings/hearings took place on Guam on May 17, May 19, and May 20, 2014. Each meeting consisted of an open house, immediately followed by a public hearing.

The public comment period for the Draft SEIS was initially scheduled to last 60 days, with a published end date of June 16, 2014. In response to public comments, the DON extended the public comment period for the Draft SEIS by 15 days to July 1, 2014. The DON received a total of 906 unique comments during the public comment period covering a number of topics.

The EPA published a NOA for the Final SEIS on July 17, 2015 (80 FR 42491). The DON published a NOA for the July 2015 Final SEIS in local newspapers and posted it on the project website ([www.guambuildupeis.us](http://www.guambuildupeis.us)). The notice announced the availability of the 2015 Final SEIS and gave an overview of the proposed actions and potential environmental impacts as presented in the document. The DON distributed copies of the 2015 Final SEIS in the same manner as the Draft SEIS (i.e., distributed to libraries on Guam, regulatory agencies, elected officials, and individuals and groups who had requested copies). The DON also mailed post cards announcing the availability of the 2015 Final SEIS to those individuals requesting such notice.

**ALTERNATIVES CONSIDERED:** NEPA requires the identification, consideration, and analysis of alternatives that contribute to the goal of objective decision making. CEQ's implementing regulations require the decision maker to consider the environmental effects of the proposed action, including a no action alternative to the proposed action (40 CFR § 1502.14). As a result of the reduced acreage requirements for the cantonment and family housing facilities, as well as other factors such as the reconfigured SDZ footprint for the proposed LFTRC, public input, refined range designs and criteria, and a reassessment of operational requirements, conflicts, and opportunities, the DON considered a broad range of siting alternatives in the Draft SEIS. Some of these siting alternatives were not feasible under the conditions evaluated in the 2010 Final EIS but were reconsidered for the 2012 Roadmap Adjustments that launched the SEIS.

**Cantonment/Family Housing:** The DON analyzed five cantonment/family housing alternatives in the 2015 Final SEIS, all of which are located on land under the custody and control of the DoD.

- Finegayan Cantonment/Family Housing (Alternative A): Alternative A would be completely contained on existing federally owned land. This alternative would be bound on the north by AAFB-NWF, on the east by Route 3, and on the west by a cliff line (within federal property), the Haputo Ecological Reserve, and the Philippine Sea. The site also would be bound to the east by limited residential development and to the south by the Dos Amantes planned area, also known as the former Harmon Village (non-federal property). This alternative would comprise approximately 1,495 acres (605 ha) within one contiguous parcel of land, although the family housing area would be separated from the cantonment core by approximately 1.5 miles (2.4 kilometers [km]).
- Finegayan Cantonment/South Finegayan Family Housing (Alternative B): Alternative B would include approximately 1,450 acres (587 ha) of federally owned land. The cantonment area of this alternative would be in the same location as the proposed cantonment for Alternative A. The family housing area would be located at the South Finegayan site, approximately 1.0 mile (1.6 km) from the southern boundary of Finegayan. The portion of the South Finegayan parcel proposed for development of family housing would cover approximately 290 acres (117 ha).
- AAFB Cantonment/Family Housing (Alternative C): Alternative C would be located on AAFB, which is bound to the north and east by the Pacific Ocean, to the south by privately owned residential areas, and to the west by Route 9 and AAFB-NWF. Alternative C would utilize approximately 1,819 acres (736 ha) of federally owned land. The cantonment/family housing areas of Alternative C would not be contiguous, but both areas would be contained within the same installation fence line. The family housing area for Alternative C would be located at the current AAFB family housing area approximately 2 miles (3.2 km) southeast of the proposed cantonment area.

- Barrigada Cantonment/Family Housing (Alternative D): Alternative D would be located on the eastern side of Guam, with Route 15 bordering the site to the east and south, and Routes 16 and 10 to the west. The northern and southern sections of the Barrigada property are connected by a strip of open space that was the former Nimitz Golf Course. Alternative D would comprise approximately 1,194 acres (483 ha) of federally owned land. The cantonment and family housing areas would be located on one contiguous parcel of land. This is the environmentally preferred alternative for cantonment/family housing.
- Finegayan Cantonment/AAFB Family Housing (Alternative E): Alternative E, the preferred alternative in the 2015 Final SEIS, would consist of a combination of the main cantonment at Finegayan that was previously analyzed in the Draft SEIS under Alternatives A and B, and the family housing at AAFB that was analyzed in the Draft SEIS under Alternative C. Alternative E would comprise approximately 1,723 acres (697 ha) of federally owned land. The cantonment for this alternative would consist of 1,213 acres (491 ha) located at Finegayan. The family housing area for Alternative E would consist of 510 acres (206 ha) located at the current AAFB family housing area.

**Live-Fire Training Range Complex:** The DON analyzed five alternatives for the LFTRC in the 2015 Final SEIS. As identified in the Final SEIS, the location for the hand grenade range is common to all LFTRC alternatives and is located at Andersen South as identified in the Final SEIS. Workign with the Federal Aviation Administration (FAA), establishment of Special Use Airspace (SUA) would be required for each alternative. Configuration of the SUA would be specific to each LFTRC alternative, the determination of which would be made issuance of this ROD

- Route 15A (Alternative 1): Alternative 1 would consist of approximately 3,762 acres (1,522 ha) and would require federal land acquisition of an estimated 872 acres (353 ha) of Chamorro Land Trust Commission, Guam Ancestral Lands Commission (GALC), and GovGuam lands. Direct physical disturbance would potentially occur on approximately 383 acres (155 ha) of this site for the construction of the individual ranges, range support building, parking areas, range towers, internal range access roads, a perimeter fence, and the realignment location of Route 15. Approximately 3,379 acres (1,367 ha) would include lands and submerged lands within the SDZ that would not be directly impacted as a result of construction or operation of the LFTRC. This includes approximately 574 acres (232 ha) of GovGuam land and 2,805 acres (1,135 ha) of the submerged lands of the Pacific Ocean.
- NAVMAG (East/West) (Alternative 2): Alternative 2 would consist of approximately 3,815 acres (1,544 ha) (not including the hand grenade range at Andersen South) and would require acquisition of approximately 1,894 acres (766 ha) of privately owned and GovGuam land. Direct physical disturbance would occur on approximately 382 acres (154 ha), including 275 acres (111 ha) for the construction of the individual ranges, range support building, internal range access roads, and a perimeter fence, plus approximately 107 acres (43 ha) to construct an external LFTRC access road from Route 4. The remaining approximately 3,433 acres (1,389 ha) would include 3,026 acres (1,225 ha) of lands within the SDZ and 407 acres (165 ha) of land surrounding the individual ranges that would not be directly affected by construction or operation of the LFTRC. Alternative 2 would be located in a single location on the non-federal land to the southeast of the NAVMAG. The ranges would be oriented to the west and the composite SDZ would extend over portions of the NAVMAG. Access to the ranges would be via a new access road from Dandan Road that would be constructed with the LFTRC.

Approximately 5 miles (8 km) of roads would be constructed to provide access between the individual ranges. This is the environmentally preferred alternative for the LFTRC.

- NAVMAG (North/South) (Alternative 3): Alternative 3 would comprise approximately 3,549 acres (1,436 ha) (not including the stand-alone hand grenade range at Andersen South) and would require acquisition of 252 acres (102 ha) of GovGuam and privately owned lands. Approximately 370 acres (150 ha) would be required for construction of the proposed range facilities, while 3,179 acres (1,286 ha) would be land within the SDZ that would not be directly affected by construction or operation of the LFTRC. The 370 acres (150 ha) that would be developed would include the areas for construction of the individual ranges, range support building, range access roads, munitions magazine relocation area, and a perimeter fence along the western edge of the LFTRC. An estimated 72 new concrete munitions storage magazines would be constructed at Orote Point to accommodate the transfer of munitions from the existing magazines that would be encumbered by the range SDZs. The existing magazines would be abandoned in place.
- NAVMAG (L-Shaped) (Alternative 4): Alternative 4 would consist of approximately 4,895 acres (1,981 ha) (not including the hand grenade range at Andersen South) and would require the acquisition of approximately 914 acres (370 ha) of privately owned and GovGuam land. Direct physical ground disturbance would occur on approximately 477 acres (193 ha), which would include approximately 356 acres (144 ha) for the construction of the individual ranges, range support building, internal range access roads, munitions magazine relocation area, and a perimeter fence along the western and southern edges of the LFTRC, and approximately 121 acres (49 ha) to construct an external LFTRC access road from Route 4 to the east/west facing ranges (see Figure 2.5-1). The remaining 4,418 acres (1,788 ha) would include 4,165 acres (1,686 ha) of land within the SDZ and 253 acres (102 ha) of land surrounding the individual ranges that would not be built up. An estimated 66 new concrete munitions storage magazines would be constructed at Orote Point to accommodate existing magazines that would be encumbered by the range SDZs. The existing magazines would be abandoned in place.

Alternative 4 would be divided between two locations: the MPMG Range and range maintenance facility would be located in the same locations identified in Alternative 3, and the other ranges would be located on adjacent non-federal property to the southeast of the NAVMAG (near the area of Alternative 2). Access to the MPMG Range and range maintenance building would be the same as described for Alternative 3. Approximately 1 mile (1.6 km) of new roadway would be required.

Access to the ranges located east of the NAVMAG would occur via a new access road from Route 4. The new access road would follow the existing road from Route 4 to the Dandan Communication Site and then would continue to the KD Rifle Range. Access between the ranges proposed in the southeastern portion of the LFTRC would be via approximately 3.0 miles (4.8 km) of new roads constructed as part of the LFTRC.

- AAFB-NWF (Alternative 5) (Preferred Alternative): Alternative 5 would consist of approximately 4,016 acres (1,625 ha) (not including the hand grenade range at Andersen South). Although Alternative 5 would not require acquisition of non-federal land, access restrictions already established by the USFWS at the Ritidian Unit of the Guam NWR would be adjusted to account for the establishment of the SDZs for the LFTRC. The Ritidian Unit of the Guam NWR is owned and managed by the USFWS. The DON would pursue an agreement with the USFWS in accordance with the provisions of section 2822 of the FY 2015 NDAA that would allow for

the continued management of the Ritidian Unit consistent with the purposes for which it was established and the operation of the SDZs associated with the LFTRC alternative at AAFB-NWF. The DON anticipates that access restrictions will be addressed in this agreement.

Construction of Alternative 5 would cause direct disturbance to approximately 315 acres (128 ha) of land, including 256 acres (104 ha) for the construction of the individual ranges, range support building, range towers, internal range access roads, a perimeter fence (all within federally controlled land at AAFB-NWF), and the potential relocation of the USFWS facilities within the Ritidian Unit of the Guam NWR that would be encumbered by the range SDZs. The remaining approximately 59 acres (24 ha) of disturbed area would be required for construction to improve existing roadways from the intersection of Routes 3, 3A, and 9 to the Ritidian Unit of the Guam NWR. Conclusion of the consultation under section 7 of the Endangered Species Act (ESA) excluded the proposed relocation of the USFWS facility and the improved access road to the Ritidian Unit of the Guam NWR. Any decisions ensuring continued access to the Ritidian Unit of the Guam NWR are dependent on the outcome of the negotiation of the agreement authorized by section 2822 of the FY 2015 NDAA. The remaining 3,701 acres (1,498 ha) in the overall Alternative 5 footprint would include additional lands and submerged lands under the exclusive custody and control of the DON and the USFWS within the SDZ that would not be affected by construction. This includes approximately 267 acres (108 ha) of the Ritidian Unit of the Guam NWR and 3,434 acres (1,390 ha) of the submerged lands of the Philippine Sea.

In compliance with CEQ's implementing regulations, the DON analyzed the potential environmental consequences of implementing each alternative (and each combination of a cantonment/family housing and a LFTRC alternative) with the same level of scrutiny. The 2015 Final SEIS evaluated all alternatives for potential direct, indirect, additive (associated with combinations of cantonment/family housing and LFTRC alternatives), and cumulative impacts.

**No-Action Alternative:** Under the No-Action Alternative, the DON would continue to implement the 2010 Final EIS and ROD. The decision to construct and operate the LFTRC would remain deferred, and the DON would establish a cantonment/family housing area for a larger force of approximately 8,600 Marines and approximately 9,000 dependents on federally controlled lands at Finegayan and South Finegayan by acquiring land known as the former FAA parcel. The No-Action Alternative is not a reasonable alternative because it would not meet the purpose and need for the proposed action as defined above. Foremost, it would be inconsistent with the new force posture adopted by the DoD in accordance with the 2012 Roadmap Adjustments that provides for a materially smaller relocated force on Guam. Furthermore, the No-Action Alternative would neither satisfy the training requirements for the relocated Marines as mandated by 10 U.S.C. § 5063 nor satisfy the individual live-fire training requirements as described in the 2010 Final EIS and ROD. Although the No-Action Alternative presumes the course of action identified in the 2010 ROD, for purposes of assessing the environmental impacts of the proposed alternatives in the 2015 SEIS, the DON compared the impacts of the proposed action to the baseline conditions identified in the 2010 Final EIS. The DON updated baseline conditions, as appropriate, based upon the availability of new information.

**ENVIRONMENTAL IMPACTS:** The DON prepared the 2015 Final SEIS to evaluate the potential environmental consequences of implementing each of the alternatives that were carried forward for analysis. Impacts were assessed for the following resource areas: geological and soil resources; water resources; air quality; noise; airspace; land and submerged land use; recreation; terrestrial biological resources; marine biological resources; cultural resources; visual resources; ground transportation; marine transportation; utilities; socioeconomics and general services; hazardous materials and waste; public



health and safety; and environmental justice/protection of children. The following discussion summarizes environmental impacts for the alternatives selected for implementation in this ROD (Alternative E and Alternative 5) and only addresses those resources that may result in significant impacts or significant but mitigable impacts. The significant impacts designation applies to impacts that may be significant, and either no mitigation measures were identified that could reduce the impact to a less than significant level or the impact may remain significant even with the application of mitigation measures. The significant but mitigable impacts designation applies when the impact on a resource may be significant without mitigation but may be reduced to a less than significant level with the application of identified mitigation measures. This section of the ROD summarizes the potential impacts, while associated mitigation measures are summarized in a later section.

The 2015 Final SEIS also evaluated additive impacts and cumulative effects. Additive impacts are those associated with a particular cantonment/family housing alternative being paired with a particular LFTRC alternative (e.g., the traffic generated between the cantonment and the LFTRC or the effects of installing information technology/communications [IT/COMM] infrastructure between a specific cantonment/family housing area, a LFTRC, and other DoD facilities on Guam). Cumulative effects are the potential impacts associated with implementing the proposed action in conjunction with those projects that remained final under the 2010 ROD and not subject to further analysis and other past, present, and reasonably foreseeable future projects on Guam.

### **Significant Impacts of Cantonment/Family Housing Alternative E – Finegayan/AAFB**

#### **Water Resources**

##### **Construction Impacts**

*Groundwater:* The Guam Waterworks Authority's (GWA) interceptor sewer from AAFB to the Northern District Wastewater Treatment Plant (WWTP) is in a state of deterioration, and the number of spills from this system exceeds spill rate norms for similar wastewater systems. Increased wastewater flows associated with the construction/DoD workforce and induced civilian population growth during the construction phase of Alternative E will potentially accelerate deterioration and increase the rate of sewage spills, resulting in significant but mitigable indirect impacts to groundwater quality.

*Nearshore Waters:* Increased wastewater flows associated with induced civilian and construction/DoD workforce growth under Alternative E would result in a significant and unmitigable, indirect impact to nearshore waters from increased wastewater discharge from the Northern District WWTP outfall. The Northern District WWTP is non-compliant with the current (2013) National Pollutant Discharge Elimination System (NPDES) permit and increasing the wastewater discharge and corresponding increases in pollutants (e.g., orthophosphates, nitrate-nitrogen, and ammonia) from a non-compliant treatment plant would be a significant indirect impact during the period of noncompliance. WWTP upgrades are not anticipated to be completed until early in the operational phase of the proposed action. There would be an indirect and unmitigable significant impact to nearshore waters during construction until upgrades are complete.

##### **Operation Impacts**

*Groundwater:* Operation of the cantonment/family housing facilities under Alternative E would result in a significant but mitigable impact to groundwater in the form of a long-term increase in annual groundwater production (withdrawal) of 1.7 million gallons per day, which could result in a localized significant indirect impact to the Northern Guam Lens Aquifer (NGLA). In addition, the GWA interceptor sewer from AAFB to the Northern District WWTP is in a state of deterioration that requires refurbishment.

Increased wastewater flow from the proposed relocation would potentially accelerate this deterioration and increase the rate of sewage spills, resulting in a significant but mitigable indirect impact to groundwater quality from potential exposure to additional raw sewage.

*Nearshore Waters:* Operation of the cantonment and family housing facilities under Alternative E would result in a significant but mitigable impact to nearshore waters from increased wastewater discharge and corresponding pollutants as described above from the Northern District WWTP outfall. Increasing wastewater discharge from a non-compliant treatment plant would be a significant indirect impact during the period of non-compliance.

## **Terrestrial Biological Resources**

### Construction Impacts

*Vegetation:* Construction of the cantonment facilities under Alternative E would result in a significant but mitigable impact to vegetation as a result of the conversion of 780 acres (316 ha) of limestone forest to developed area. Construction of the family housing facilities under Alternative E would have a less than significant impact to this resource.

*Terrestrial Conservation Areas:* Construction of the cantonment facilities under Alternative E would result in a significant but mitigable impact to terrestrial conservation areas as a result of the conversion of 1,065 acres (431 ha) of Overlay Refuge lands to developed area.

*Special-Status Species – Endangered Species Act (ESA) (16 U.S.C. §§ 1531 et seq.) – Listed/Proposed Species:* Construction of the cantonment and family housing facilities under Alternative E would result in significant but mitigable impacts to special-status species (ESA-listed/proposed species) as a result of impacts to 719 acres (291 ha) of Mariana fruit bat recovery habitat, 719 acres (291 ha) of Mariana crow recovery habitat, 507 acres (205 ha) of Guam rail recovery habitat, 719 acres (291 ha) of Guam Micronesian kingfisher recovery habitat, and 648 acres (262 ha) of *Serianthes* recovery habitat conversion to developed area.

*Special-Status Species – Guam-Listed and Species of Greatest Conservation Need (SOGCN):* Impacts and mitigation associated with Guam-listed species that are also listed under the ESA would be the same as those described above. Impacts to other Guam-listed species from construction of the cantonment facilities under Alternative E would include significant but mitigable impacts to special-status species (Guam-listed and SOGCN) as a result of the loss of 765 acres (310 ha) of occupied moth skink and Pacific slender-toed gecko habitat.

### Operation Impacts

*Terrestrial Conservation Areas:* Operation of the cantonment/family housing facilities under Alternative E would result in a significant but mitigable impact to terrestrial conservation areas as a result of potential increased usage by military and civilian personnel that could damage to the vegetation of the Haputo Ecological Reserve Area (ERA).

*Special-Status Species – ESA-Listed/Proposed Species:* Operation of the cantonment/family housing facilities under Alternative E would result in significant but mitigable impacts to special-status species (ESA-listed/proposed species) as a result of impacts to Mariana fruit bat habitat from light, noise, and human activity.

## **Marine Biological Resources**

### Construction Impacts

Induced civilian and construction/DoD workforce growth under Alternative E would result in a significant, unmitigable, indirect impact to marine flora and invertebrates, fish, and Essential Fish Habitat (EFH) from increased wastewater discharge and corresponding increases in pollutants (e.g., orthophosphates, nitrate-nitrogen, and ammonia) from the Northern District WWTP outfall. The Northern District WWTP is non-compliant with the standards required by its current NPDES permit and increasing the wastewater discharge from a non-compliant treatment plant would be a significant, indirect impact. WWTP upgrades are not anticipated to be completed until early in the operational phase of the proposed action. There would be an indirect and unmitigable, significant impact to nearshore waters during construction until upgrades are complete.

### Operation Impacts

Operation of the cantonment and family housing facilities under Alternative E would result in a significant but mitigable impact to marine flora and invertebrates, fish, and EFH from increased wastewater discharge, as described above, from Northern District WWTP outfall. Increasing wastewater discharge from a non-compliant treatment plant would result in significant, indirect impacts during the period of non-compliance.

## **Cultural Resources**

### Construction Impacts

Construction of the cantonment/housing family housing facilities under Alternative E would result in significant but mitigable, potential, direct, adverse effects to 17 historic properties (16 National Register of Historic Places [NRHP]-eligible archaeological sites and 1 NRHP-eligible structure) and 14 buildings not fully evaluated for NRHP eligibility and effects. All potential effects to historic properties are subject to further review under the 2011 PA.

## **Utilities**

### Construction Impacts

*Wastewater:* Construction of the cantonment/family housing facilities under Alternative E would result in significant direct impacts during the period of non-compliance with the 2013 NPDES permit at the Northern District WWTP.

### Operation Impacts

*Potable Water (NGLA Impact):* Operation of the cantonment/family housing facilities under Alternative E would result in significant but mitigable, short-term, localized significant impacts to the affected basin within the NGLA but less than significant impacts to the overall NGLA. Increased withdrawal from the NGLA may result in higher levels of chloride concentrations. According to U.S. Geological Survey (USGS) modeling of the NGLA, the chloride concentration spikes could be a localized phenomenon.

*Wastewater:* Operation of the cantonment/family housing facilities under Alternative E would result in significant direct impacts during the period of non-compliance with the 2013 NPDES permit at the Northern District WWTP. Operation of the cantonment/family housing facilities would also generate additional wastewater flow from both AAFB family housing facilities and Finegayan cantonment that would use the existing GWA interceptor sewer system from AAFB to the Northern District WWTP. This interceptor sewer system is in a state of deterioration that requires rehabilitation. Increased flow

associated with Alternative E would accelerate this deterioration and could lead to failure of the sewer system. This would represent a significant but mitigable impact.

## **Socioeconomics and General Services**

### Construction and Operation Impacts

*Population Change:* The population change associated with the Marine Corps relocation would be considered significant during both the construction and operations phases (given that population change would exceed 2%). Between 2021 and 2023, the population would be 5.6% higher than it otherwise would have been without the proposed action. At a steady-state the difference would be 4.1%. However, the significant change would not be considered entirely negative. Impacts related to population change would be mixed, with some adverse and some beneficial outcomes associated with the increased demand for public services and sociocultural issues described below.

*Public Services:* During construction, all categories of public services agencies combined would require an estimated 185 additional employees, an increase of 3.6% over baseline staffing levels. This maximum increase in staffing levels would be temporary, lasting from approximately 2021 through 2023. During this two-year period, staffing requirements for many public service agencies would increase by more than 2%. Given existing deficiencies at many agencies, significant impacts were identified. However, over the longer term, Guam government (GovGuam) agencies would require an additional 66 staff (an increase of 1.3% over baseline levels), which would be less than significant. From a broad perspective, looking at the entire group of GovGuam public services agencies overall, impacts would be considered significant in the short-term and less than significant in the long term. While the total number of additional staff required during the relatively short construction phase may appear manageable (representing only a 3.6% increase over baseline staffing), other factors, including existing shortfalls in staffing and deficiencies in facilities and equipment were considered when determining significance. The population increase likely would not result in a significant sustained increase in demand on Guam's public services and permitting agencies, and the estimated increases in GovGuam tax revenues would likely compensate for any increased demand on public services that would occur. However, while additional tax revenues to GovGuam associated with the proposed action would compensate for additional costs that would be incurred and ample time should be available to plan for short-term staff increases, GovGuam agencies may still face challenges.

*Sociocultural Issues:* There is a potential for sociocultural impact associated with an increase in crime and social disorder, political and Chamorro issues, and community cohesion to occur, but the magnitude of the impacts are difficult to predict and could vary substantially based on policy and program choices yet to be made. For these reasons, and for the purposes of the 2015 Final SEIS, impacts to sociocultural issues are conservatively classified as significant but mitigable.

## **Environmental Justice and Protection of Children**

### Construction and Operation Impacts

*Socioeconomics and General Services:* Temporary population growth may stress some sectors of the Guam economy (e.g., housing, costs of goods and services). In the short-term (during construction), direct and indirect impacts to health services would be significant; during the steady-state period (operational phase), impacts to public health and human service agencies would be less than significant.

This impact would be felt more severely by low-income people, who often do not have resources to buffer hard economic times. However, there would also be some economic benefits as a result of increased employment opportunities. There would be adverse and disproportionate socioeconomic impacts in terms

of environmental justice on low-income populations; however, some of the socioeconomic impacts would be beneficial (e.g., economic opportunities).

*Public Health and Safety:* Since the number of public health and safety professionals required to maintain current levels of service at public health and safety agencies would increase by more than 2%, and because deficiencies currently exist in facilities and equipment at these agencies, there would be short-term, direct, and indirect significant impacts to public health agencies and significant, direct, and indirect impacts on public safety agencies, both in the short term (during construction) and during the steady-state period (during operation). Given that public health agencies that serve low-income and uninsured populations already have insufficient staffing levels, population increases would further strain these resources, causing a significant environmental justice impact.

## **Significant Impacts of LFTRC Alternative 5 – AAFB-NWF**

### **Geological and Soil Resources**

#### **Construction Impacts**

*Topography:* Construction of the LFTRC under Alternative 5 would result in a significant, direct, long-term impact to topography in the form of major changes to surface elevation from excavation and filling during construction.

### **Land and Submerged Land Use**

#### **Operation Impacts**

*Public Access:* Although the land and submerged land use within the Ritidian Unit of the Guam NWR would remain as Conservation land use, there will be access restrictions to those lands within the SDZs while the ranges are in use. Such restrictions would be limited to the minimum SDZ area and time period required for the training on the LFTRC. Access to submerged lands adjacent to the Ritidian Unit under the custody and control of the DON would be similarly restricted.

### **Recreational Resources**

#### **Operation Impacts**

Operation of the LFTRC under Alternative 5 would result in significant impacts as a result of intermittent loss of access (while the SDZ for the LFTRC is operational) to existing features or sites such as hiking trails, caves and other sites of interest within the Ritidian Unit of the Guam NWR. As discussed previously, access to areas within the Ritidian Unit of the Guam NWR will be addressed in the Refuge Agreement between the DON and the USFWS, pursuant to the FY 2015 NDAA and will ensure maximum, continued access. Some of these sites are currently open for access during normal refuge hours; access to others are currently restricted by the USFWS. Access to the areas within the largest of the range SDZs would be restricted during that range's operational periods. Recreational resources within that SDZ include a portion of existing hiking trails and caves with pictographs within the Ritidian Unit of the Guam NWR.

### **Terrestrial Biological Resources**

#### **Construction Impacts**

*Vegetation:* Construction of the LFTRC under Alternative 5 would result in a significant but mitigable impact to vegetation as a result of the conversion of 219 acres (89 ha) of limestone forest to developed area.

*Terrestrial Conservation Areas:* Construction of the LFTRC under Alternative 5 would result in a significant but mitigable impact to terrestrial conservation areas as a result of the conversion of 298 acres (121 ha) of Overlay Refuge lands to developed area.

*Special-Status Species – ESA-Listed/Proposed Species and Critical Habitat:* Construction of the LFTRC under Alternative 5 would result in a significant but mitigable impact to special-status species as a result of impacts to 215 acres (87 ha) of Mariana fruit bat recovery habitat, 215 acres (87 ha) of Mariana crow recovery habitat, and 215 acres (87 ha) of Guam Micronesian kingfisher recovery habitat conversion to developed areas. The Mariana fruit bat may also be impacted by noise, human disturbance, and lighting during both construction and operation because they are present in the action area.

*Special-Status Species – Guam-Listed and SOGCN:* Impacts associated with Guam-listed species that are also federally listed would be the same as described above for those species. No additional Guam-listed species are known to occur in the project area for Alternative 5.

## **Cultural Resources**

### Construction Impacts

Construction of the LFTRC under Alternative 5 would result in significant but mitigable impacts. Twenty historic properties would be directly, adversely affected, and culturally important natural resources could be impacted by vegetation removal.

### Operation Impacts

Operation of the LFTRC under Alternative 5 would result in significant impacts, which are not fully mitigable, due to restricted access to two NRHP-eligible archaeological sites. Significant but mitigable impacts would result from indirect, adverse effects to three NRHP-eligible archaeological sites as a result of substantial changes in the audible environment.

## **Significant Additive Impacts of the Selected Alternatives**

For the purposes of the 2015 Final SEIS, additive impacts are those that would result specifically from the combination of a cantonment/family housing alternative with a LFTRC alternative. These project impacts were addressed in Chapter 6 of the 2015 Final SEIS. The additive impacts resulting from the selected combination of cantonment/family housing Alternative E and LFTRC Alternative 5 would yield additional, significant but mitigable impacts to two resource areas: cultural resources and ground transportation.

## **Cultural Resources**

There would be significant but mitigable impacts as a result of potential adverse effects to six known historic properties from construction of IT/COMM lines. There would be no adverse effects from operation of IT/COMM lines once construction is complete.

## **Ground Transportation**

There would be a slight increase in traffic on segments and intersections between the cantonment at Finegayan, the family housing at AAFB, and the LFTRC at AAFB-NWF. There would be potentially significant impact on eight segments in at least one direction and ten intersections for weekday a.m. and/or p.m. peak hours.

## **Significant Cumulative Impacts of the Selected Alternative**

The assessment of cumulative effects presented in Chapter 7 of the 2015 Final SEIS addressed the potential long-term impacts of recently completed, present, and reasonably foreseeable future projects in conjunction with the proposed action. The resources most likely to be adversely affected by these projects are terrestrial biological and cultural resources. This is largely due to the fact that most projects would result in ground disturbance and potential for removal or disturbance of habitat and cultural resources. The resource areas that benefit most from the projects evaluated for cumulative effects are ground transportation, utilities, socioeconomic and general services, public health and safety, and environmental justice/protection of children. This is because many of the evaluated projects are capital improvement projects designed to support the health and safety of the community, as discussed in the mitigation section below. A nearly equal number of projects having adverse and beneficial impacts were identified for geological and soil resources and water resources. Air quality, noise, airspace, land use, recreational resources, and marine transportation resource areas are impacted by fewer projects than other resource areas, either beneficially or adversely.

A brief summary of cumulative impacts to terrestrial biological resources and cultural resources is discussed below.

### **Terrestrial Biological Resources**

The following are the general types of projects or activities that would result in cumulative impacts to terrestrial biological resources:

- Loss or conversion of native habitat would reduce the potential recovery and survival of ESA-listed species creating an adverse impact.
- Reductions and management activities (e.g., fencing, removal) of invasive species and/or feral ungulates or their access to habitat would have a beneficial impact.
- Projects involving ground disturbance (e.g., construction of housing or new and widened roadways) would contribute to an adverse cumulative effect. Projects that are renovations or improvements to existing facilities (e.g., resurfacing a roadway) within the existing facility footprint would have no impact on terrestrial biological resources.

The proposed action and recently completed projects, present projects, and reasonably foreseeable projects all have the potential to contribute to adverse cumulative effects to terrestrial biological resources. The primary impact from these projects would be the loss of native habitat and the increased potential for the spread of invasive species. Most of the projects require ground disturbance, and the assumption is that terrestrial biological resources would be affected. The terrestrial biological resource health on Guam would continue to decline, and threatened and endangered species would continue to be vulnerable to natural and anthropogenic stressors.

### **Cultural Resources**

The following are the general types of projects that would result in cumulative impacts to cultural resources:

- Projects that result in adverse effects to historic properties can lead to a cumulative loss of the archaeological and built-historical record that could contribute to an adverse cumulative impact.
- Projects that affect culturally important natural resources can lead to an adverse cumulative impact.

- Projects that lead to reduced access to cultural sites can lead to an adverse cumulative impact.

Recently completed projects, present projects, and reasonably foreseeable projects all have the potential to contribute to adverse cumulative effects to cultural resources. The primary impact from these projects would be direct and indirect, adverse effects to historic properties, archaeological sites, and impacts to culturally important natural resources. Direct and indirect, adverse effects would contribute to the decline in preservation of cultural resources. Other factors unrelated to the project (e.g., vandalism and weathering) would continue to adversely impact cultural resources. Disturbance or destruction of cultural resources would further diminish the regional historic record, thus decreasing the potential of its overall research contribution. The loss of culturally important natural resources would reduce opportunities for important cultural practices. Reduced access to cultural sites, whether for cultural practices, recreation, tourism, or academic study would also diminish the cultural resources of Guam.

**MITIGATION MEASURES AND MONITORING:** The impact analyses described in the 2015 Final SEIS considered the influence of Best Management Practices (BMPs) as well as mitigation measures. BMPs are existing policies, practices, and measures that the DON will adopt to proactively reduce the environmental impacts of designated activities, functions, or processes. Although BMPs help to avoid, minimize, or reduce/eliminate impacts, they are distinguished from potential mitigation measures because they are (1) included in the proposed action, (2) ongoing, regularly occurring practices, or (3) not unique to the proposed action. In other words, the BMPs are proposed as part of the action (all alternatives) and are not targeted mitigation measures identified in response to the findings of the NEPA environmental review process. Specific BMPs that are included in the proposed action are described in section 2.8 of the 2015 Final SEIS.

Consistent with the CEQ Guidance, mitigation measures developed to address specific impacts identified in the 2015 Final SEIS analysis are described below. Mitigation measures will be monitored and tracked as required by applicable DON regulations and instructions. Implementation of mitigation measures will be subject to availability of funding. Implementation of ground transportation mitigation projects will be determined through the Defense Access Road Program.

### **Mitigation Measures for Impacts Associated with the Cantonment/Family Housing Alternative E**

#### **Mitigation for Water Resources Impacts**

##### Groundwater

- Refurbishment of the GWA interceptor sewer system will mitigate significant impacts to groundwater resources during the construction phase of the proposed action. Section 2822(d) of the FY 2014 NDAA directed the Secretary of Defense to convene the Economic Adjustment Committee (EAC) established in Executive Order No. 127887 “to consider assistance, including assistance to support public infrastructure requirements, necessary to support the preferred alternative for the relocation of Marine Corps forces to Guam.” Section 2822(d) further requires the EAC to submit a report to congressional defense committees which includes an Implementation Plan that addresses public infrastructure requirements necessary to support the preferred alternative identified in the Final SEIS. The EAC Implementation Plan, which was coordinated with EAC federal agencies, includes detailed descriptions of work, costs, and schedules for completion of construction, improvements, and repairs to Guam public infrastructure affected by the realignment, including the refurbishment of the GWA interceptor sewer from AAFB to the Northern District WWTP, and expansion/rehabilitation of the NGLA monitoring network for sustainment of the NGLA. To support the Implementation Plan, EAC



assessed GWA water and wastewater systems that may be affected by the preferred alternative. The water and wastewater assessment recommended an updated and expanded NGLA monitoring well network and the refurbishment of the GWA interceptor sewer from AAFB to the Northern District WWTP. In addition to funds (\$106.4 million) previously appropriated to the Secretary of Defense under section 8102 of the FY 2014 Consolidated Appropriations Act (Pub. L. No. 113-76), DoD will seek additional funding (\$67.5 million) to complete the necessary Guam water and wastewater system upgrades identified in the EAC Implementation Plan that are estimated to be no more than \$173.9 million.

- The DoD will, as appropriate, implement enhanced water conservation measures for the proposed action, improve existing DoD potable water systems to reduce system leaks, adjust pumping rates at DoD wells, and increase the use of existing wells and/or surface water from Fena Reservoir to reduce withdrawals from the NGLA.
- The DoD will continue to support the Guam Water Resources Development Group (GWRDG) and support the USGS's recommendation to rehabilitate and expand the hydrologic data collection network and monitoring necessary to ensure sustainable management of NGLA.

### Nearshore Waters

Upgrading the Northern District WWTP treatment systems (as required by the 2013 NPDES permit, the section 7 ESA consultation and the Magnuson-Stevens Fisheries Conservation Management Act [MSA] [16 U.S.C. § 1801-1891(d)] consultation with the National Marine Fisheries Service [NMFS]) will mitigate significant impacts to the wastewater system on Guam once the upgrades are completed. In addition, refurbishing the main GWA sewer lines from AAFB to the Northern District WWTP along Routes 3 and 9 will mitigate potential failure of the concrete reinforced sewer lines that are in a state of deterioration. The EAC Implementation Plan will include detailed descriptions of work, costs, and schedules for completion of construction, improvements, and repairs to Guam public infrastructure affected by the realignment, including improvements and upgrades to the Guam wastewater system. The water and wastewater assessment that EAC prepared to support the Implementation Plan recommended upgrades to the Northern District WWTP and the refurbishment of the GWA interceptor sewer from AAFB to the Northern District WWTP. In addition to funds (\$106.4 million) previously appropriated to the Secretary of Defense under section 8102 of the FY 2014 Consolidated Appropriations Act (Pub. L. No. 113-76); the DoD will seek additional funding (\$67.5 million) to complete the necessary Guam water and wastewater system upgrades identified in the EAC Implementation Plan. The costs are estimated to be no more than \$173.9 million.

### **Mitigation for Terrestrial Biological Resources Impacts**

A general description of conservation measures and mitigations for terrestrial biological resources as included in the 2015 Final SEIS are provided below. As a result of completing ESA section 7 consultation with the USFWS, the DON received a final biological opinion (BO) on July 31, 2015. This BO contains detailed descriptions of the conservation measures, BMPs, additional mitigation in the form of reasonable and prudent measures, and associated terms and conditions for minimizing the anticipated incidental take of 30 Mariana fruit bats in the form of repeated harassment. The DON commits to all the conservation measures, BMPs, reasonable and prudent measures, and terms and conditions as expressed in the BO (section B, pages 36-46, and sections K & L, pages 156-159). These measures include:

### Vegetation

- Forest enhancement on a minimum of 780 acres (316 ha) of limestone forest.

### Terrestrial Conservation Areas

- Install fencing.
- Install informational/educational signage.
- Develop and distribute educational materials regarding sensitive biological resources.
- Conduct monitoring of visitor use at the Haputo ERA.

### Special-Status Species – Federal ESA and Proposed

- Control and suppression of brown treesnakes.
- Implement forest enhancement mitigation identified for vegetation will also benefit these species.
- Install fencing, provide informational/educational signage and educational materials regarding sensitive biological resources, and monitor of visitor use at Haputo ERA.

### Special-Status Species – Guam-Listed and Species of Greatest Conservation Need

- Implement the forest enhancement mitigation identified for vegetation will also benefit these species.

### **Mitigation for Marine Biological Resources Impacts**

- Upgrade the Northern District WWTP treatment systems (as required by the 2013 NPDES permit, the section 7 ESA consultation and the MSA (16 U.S.C. §§ 1801–1891(d)) consultation with the NMFS) as described above will mitigate significant impacts to marine biological resources.
- Monitor stormwater BMP effectiveness and if practicable, design and implement additional processes to determine the fate of stormwater for the Finegayan Cantonment and AAFB-NWF LFTRC, to sensitive nearshore reefs such as the HAPCs at Haputo ERA and the Ritidian Unit of the Guam NWR.
- Provide guidelines for programs to minimize impacts from training, recreation, and fishing activities for Marine Corps personnel.
- Institute physical training awareness and operational guidance that identifies appropriate physical training areas and sensitive areas that are off-limits for such activities in coordination with installation and regional resource management plans.
- Coordinate updates to the Joint Region Marianas (JRM) Integrated Natural Resources Management Plan and installation fishing instructions to include increased awareness about destructive fishing methods for all DoD personnel deployed or permanently assigned to Guam and the CNMI for submerged lands beyond the custody and control of the DoD. The DON will also consider instituting a ban on all DoD personnel from using scuba for fishing and fishing for species of local concern such as humphead wrasse and green humphead parrotfish.

## **Mitigation for Cultural Resources Impacts**

- Implement the 2011 PA. Mitigation processes include reviewing projects as they are developed to confirm the identification of historic properties and appropriate measures to avoid, minimize, and mitigate adverse effects. The 2011 PA requires consultation with the public and the PA Parties, which include Guam SHPO, ACHP, NPS, Guam Preservation Trust (GPT), and the Department of Chamorro Affairs (DCA). Potential impacts to culturally important natural resources will be addressed through requirements in the 2011 PA in coordination with knowledgeable traditional practitioners.

## **Mitigation for Utilities Impacts**

### Wastewater

- Potential mitigation measures during construction may include constructing sewers during low flow periods by-pass pumping and having pump trucks on stand-by.
- Upgrades to the Northern District WWTP treatment systems (as required by the 2013 NPDES permit), as described above, will mitigate significant impacts to the wastewater system on Guam. In addition, refurbishing the main GWA sewer lines from AAFB to the Northern District WWTP along Routes 3 and 9 will mitigate potential failure of the concrete reinforced sewer lines that are in a state of deterioration.

### Potable Water

- The DoD will, as appropriate, implement enhanced water conservation measures for the proposed action, improve existing DoD water systems to reduce system leaks, adjust pumping rates at DoD wells, and increase the use of surface water in northern Guam from Fena Reservoir to reduce withdrawals from the NGLA.
- The DoD will continue to support the GWRDG and the USGS' recommendation to rehabilitate and expand the hydrologic data collection network and monitoring necessary to ensure sustainable management of NGLA.
- As discussed in groundwater mitigation, expansion/rehabilitation of the NGLA monitoring network for sustainment of the NGLA will mitigate significant impacts to potable water.

## **Mitigation for Socioeconomics and General Services Impacts**

### Public Services

- Although the DON has determined that Adaptive Program Management as described in the 2010 ROD is no longer required (see section 2.9.2 of the 2015 Final SEIS), the DoD will continue to work towards a charter as described in the 2010 ROD and support the efforts of the Civilian Military Coordination Council (CMCC) to develop recommendations, as appropriate, regarding adjustment of construction tempo and sequencing to directly influence workforce population levels and indirectly influence induced population growth before infrastructure capabilities are exceeded. Such support may include providing project-related employment and population forecasts, participating in the identification of shortfalls in Guam public services, and assisting in the identification of federal programs and funding sources that may help GovGuam to address shortfalls.

- The DoD will continue to support existing programs that contribute and/or donate excess equipment to local agencies.

### Sociocultural Issues

- Conduct orientation briefs, in accordance with the 2011 PA, for all incoming DoD personnel, their families, and contractors regarding cultural sensitivity in the area. All DoD personnel and contractors working on Guam will receive annual briefings. The DoD will develop the briefing in consultation with the Guam SHPO and will provide Guam SHPO with a copy of the final briefing materials.
- The DoD will continue to support the efforts of the CMCC to develop recommendations, as appropriate, regarding adjustment of construction tempo and sequencing to directly influence workforce population levels and indirectly influence induced population growth to address sociocultural issues.
- Consistent with the 2011 PA, the DoD has developed a public access plan in coordination with the public and interested parties. The access plan provides a consistent process for regular public access and a point of contact to handle requests for access to cultural sites on DoD lands.
- In accordance with the 2011 PA, the \$12 million appropriated under the FY 2012 Consolidated Appropriations Act (Pub. L. No. 112-74) for a Guam Cultural Repository facility to mitigate cumulative impacts remains available. The appropriation provides funding for a repository for curation of archaeological collections on Guam and to serve as a source of information on Guam history and culture. Guam Cultural Repository is included in the EAC Implementation Plan, which addresses public infrastructure requirements necessary to support the preferred alternative. The EAC Implementation Plan will include detailed description of work, cost, and schedule for completion of construction of the Guam Cultural Repository. After the release of this ROD, the EAC Implementation Plan will be submitted to the congressional defense committees as part of a FY 2014 NDAA reporting requirement.

### **Mitigation for Environmental Justice and Protection of Children Impacts**

#### Socioeconomics and General Services

- The DoD will consider the recommendations, if any, of the CMCC to adjust the construction tempo and sequencing if necessary to directly influence workforce population levels and indirectly influence induced population growth before infrastructure capabilities are exceeded.

#### Public Health and Safety

- The DoD will consider the recommendations, if any, of the CMCC to adjust the construction tempo and sequencing if necessary to directly influence workforce population levels and indirectly influence induced population growth before infrastructure capabilities are exceeded.
- The construction of a public health laboratory to alleviate some existing deficiencies in Guam's public health infrastructure, and bolster Guam's capability to meet public health demands brought about by project-related population growth and the rotational nature of the deployable units for training in the region by providing a facility that would help identify, treat, and control diseases of public health concern. The EAC Implementation Plan, which was coordinated with EAC federal agencies, will include detailed descriptions of work, costs, and schedules for completion of construction for a regional public health laboratory with bio-safety level 2 and 3 analytical

testing capability. The cost estimate for a regional public health laboratory with bio-safety level 2 and 3 is no more than \$32.2 million. In addition to funds (\$13 million) previously appropriated to the Secretary of Defense under section 8102 of the FY 2014 Consolidated Appropriations Act (Pub. L. No. 113-76), DoD will seek additional funding (\$19.2 million). After the release of this ROD, the EAC Implementation Plan will be submitted to the congressional defense committees as part of a FY 2014 NDAA reporting requirement.

## **Mitigation Measures for Impacts Associated with LFTRC Alternative 5**

### **Mitigation for Terrestrial Biological Resources Impacts**

A general description of conservation measures and mitigations for terrestrial resources as included in the 2015 Final SEIS are provided below. As a result of completing section 7 ESA consultation with the USFWS, the DON received a final BO on July 31, 2015. This BO contains detailed descriptions of the conservation measures, BMPs, additional mitigations in the form of reasonable and prudent measures, and associated terms and conditions for minimizing the anticipated incidental take of 30 Mariana fruit bats in the form of repeated harassment. The DON commits to all the conservation measures, BMPs, reasonable and prudent measures, and terms and conditions as expressed in the BO (section B, pages 36-46, and sections K & L, pages 156-159). These measures include:

#### **Vegetation**

- Forest enhancement on a minimum of 219 acres (89 ha) of limestone forest.

#### **Special-Status Species – ESA-Listed/Proposed Species and Critical Habitat**

- Implementing the forest enhancement identified for vegetation on a minimum of 219 acres (87 ha) of limestone forest vegetation will also benefit these species.
- Control and suppression of brown treesnakes.

### **Mitigation for Cultural Resources Impacts**

- Implement the 2011 PA. Processes will include reviewing projects as they are developed to confirm the identification of historic properties and appropriate measures to avoid, minimize, and mitigate adverse effects. The 2011 PA requires consultation with the public and the PA Parties, which include the Guam SHPO, the ACHP, NPS, GPT, and the DCA.
- Section 5(c)(4) of the 2011 PA requires development of a Range Mitigation Plan (RMP) for the construction and operation of the LFTRC. The plan will stipulate mitigation measures such as data recovery for archaeological sites, development of public education and interpretive materials, and coordination with knowledgeable traditional practitioners for culturally important natural resources.
- Partial mitigation of significant impacts resulting from changes in use and reduced access will be accomplished through the RMP, which will identify and evaluate potentially appropriate noise-reducing measures. Access will be coordinated through the existing access plan and in consultation with the USFWS.

## **Mitigation Measures for Additive Impacts: Combination of Alternative E and Alternative 5**

### **Cultural Resources**

- Measures outlined in the 2011 PA will reduce additive impacts to a level below significance.

## **Ground Transportation**

To reduce impacts to less than significant levels on roadway segments, the following eight roadway widening projects are recommended for implementation when determined to be eligible through the Defense Access Roads program and when funding is available:

- Route 1, from Route 3 to Route 34
- Route 1, from Route 34 to Route 16
- Route 3, from Route 3A/9 to Finegayan Main Gate
- Route 3, from Finegayan Main Gate to Finegayan Residential Gate
- Route 3, from Finegayan Residential Gate to Route 28
- Route 3, from Route 28 to South Finegayan Main Gate
- Route 3, from South Finegayan Main Gate to Route 1
- Route 28, from Chalan Balako to Route 3

In addition, the DON acknowledges that to reduce impacts to less than significant levels on intersections, improvement projects are recommended at the following intersections:

- Route 3/3A/9
- Route 3/Royal Palm Drive
- Route 1/Route 3
- Route 1/Route 27
- Route 1/Route 26
- Route 16/Route 27
- Route 16/Route 10A
- Route 1/Route 14A
- Route 1/Route 10A

## **Mitigation Measures for Cumulative Impacts**

### **Terrestrial Biological Resources**

- No additional mitigation is proposed for cumulative impacts to terrestrial biological resources. GovGuam reviews public, private, and commercial development proposals for potential impacts to terrestrial biological resources. The USFWS monitors GovGuam, private and commercial development proposals and periodically adjusts the acreage of available recovery habitat island-wide. This adjustment is used to determine the impact of federal development proposals that must comply with section 7 of the ESA and may result in mitigation for federal development proposals.
- The DON completed section 7 ESA consultation with the USFWS on July 31, 2015. This consultation included the potential cumulative direct and indirect effects of the proposed military relocation.

### **Cultural Resources**

- Support Guam SHPO's update of the Guam Historic Preservation Plan.

- Update, beginning in 2017, the Guam Synthesis with information from DoD studies in concert with the Guam Historic Preservation Plan.
- Nominate two or more historic properties on DoD land per year for listing in the NRHP.
- In accordance with the 2011 PA, the \$12 million appropriated under the FY 2012 Consolidated Appropriations Act (Pub. L. No. 112-74) for a Guam Cultural Repository facility to mitigate cumulative impacts remains in place. The appropriation provides funding for a repository for curation of archaeological collections on Guam and to serve as a source of information on Guam history and culture. Guam Cultural Repository is included in the EAC Implementation Plan, which addresses public infrastructure requirements necessary to support the preferred alternative. The EAC Implementation Plan details description of work, cost, and schedule for completion of construction of the Guam Cultural. After the release of this ROD, the EAC Implementation Plan will be submitted to the congressional defense committees as part of a reporting requirement.

## **AGENCY COORDINATION AND CONSULTATION:**

### **Cooperating Agency Coordination**

The following agencies participated in the preparation of this SEIS as Cooperating Agencies: U.S. Air Force, FAA, Federal Highway Administration, EPA Region 9, U.S. Department of Interior (DOI) – Office of Insular Affairs, and the U.S. Department of Agriculture. As defined in 40 CFR § 1508.5, a cooperating agency “means any federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major federal action significantly affecting the quality of the human environment.” A cooperating agency’s responsibilities include participation in the NEPA process as early as possible, participation in the scoping process, and, upon the lead agency’s request, development of information to be included in the EIS and staff support during EIS preparation (40 CFR § 1501.6). Under 40 CFR § 1501.6, federal agencies with jurisdiction by law shall be cooperating agencies if requested by the lead agency.

Each agency signed a letter of agreement indicating its willingness to be a cooperating agency, and agreed to specific roles and responsibilities for the lead and cooperating agencies (see the 2015 SEIS, Appendix C, *Agency Correspondence*). As the lead agency, the DON has met its obligations to the cooperating agencies, including routine and periodically frequent coordination throughout the SEIS process. The cooperating agencies have also fulfilled their obligations as stipulated in their agreement.

### **Agency Consultations**

#### **Endangered Species Act**

In accordance with section 7 of the ESA, the DON initiated and concluded formal consultation with the USFWS on the potential impacts of the proposed military relocation on eight listed species: the Mariana fruit bat (threatened), the Mariana crow (endangered and extirpated), the Guam rail (endangered and extirpated), the Guam Micronesian kingfisher (endangered and extirpated), the green sea turtle (threatened), the hawksbill sea turtle (endangered), the Hayun lagu (*Serianthes nelsonii* endangered), and the Mariana gray swiftlet (endangered). The consultation also included analysis of potential impacts to designated critical habitat for the fruit bat, crow, and kingfisher. The USFWS provided the DON its BO on July 31, 2015. This BO concurred in the DON determination that the proposed action would not likely adversely affect the Mariana gray swiftlet, the green sea turtle, and the hawksbill sea turtle. The BO concluded that the proposed military relocation would adversely affect the Mariana fruit bat and the

Hayun lagu, but not likely appreciably reduce the likelihood of both survival and recovery of the Mariana fruit bat, the Mariana crow, the Guam rail, the Guam Micronesian kingfisher, and the Hayun lagu. The BO also concluded that the proposed action would not adversely affect critical habitat for the fruit bat, crow, and kingfisher.

In accordance with section 9 of the ESA, the BO includes an incidental take statement for the Mariana fruit bat. The USFWS anticipates that the proposed action will potentially result in the repeated incidental take of up to 30 Mariana fruit bats at Andersen AFB and Finegayan in the form of harassment leading to injury from loud aircraft noise, operation of the LFTRC, construction noise, and other human disturbance. In response to this anticipated incidental take, the BO contains additional mitigations in the form of reasonable and prudent measures, and terms and conditions for minimizing the anticipated incidental take of 30 Mariana fruit bats in the form of repeated harassment. The DON commits to all the conservation measures, BMPs, reasonable and prudent measures, and terms and conditions as expressed in the BO (section B, pages 36-46, and sections K & L pages 156-159). The BO also provides conservation recommendations to further minimize or avoid adverse impacts to listed species. At this time, DON will not be implementing any of the conservation recommendations as additional mitigation.

The DON and the USFWS entered into a MOA in May 2015 to address Guam Micronesian kingfisher conservation goals on Guam. The MOA was negotiated during the ESA section 7 consultation and also informed DON's decision for the selected alternative. In the MOA, the DON agreed to designate approximately 5,234 acres (2,118 ha) of land under the custody and control of the DoD in northern Guam to a status that will provide durable habitat protection needed to support native habitat restoration and land management for the survival and recovery of the kingfisher. Consistent with the Joint Region Marianas Integrated Natural Resources Management Plan developed in accordance with section 101 of the Sikes Act, the DON agreed to actively restore native habitat and manage, in collaboration with the USFWS, the 5,234 acres (2,118 ha) to support the reintroduction and recovery of the kingfisher. These 5,234 acres (2,118 ha) have been identified by the USFWS as habitat for the kingfisher and are necessary to offset impacts of the proposed actions. The DON and USFWS recognize that the designation of the 5,234 acres (2,118 ha) may also provide a conservation benefit to other ESA-listed species with similar habitat requirements (e.g., Mariana crow, Mariana fruit bat). This MOA became in effect upon the signing of this ROD, and commitments made within the MOA will be carried out by the DON.

On December 10, 2014, pursuant to section 7 of the ESA, the DON requested informal consultation with NMFS Pacific Islands Regional Office regarding the effects of the proposed action on ESA-listed marine species: the threatened scalloped hammerhead shark and four species of threatened coral (*Acropora globiceps*, *Acropora retusa*, *Pavona diffluens*, and *Seriatopora aculeata*). Based on further consultation with NMFS, the DON determined that only three of these recently listed coral species could occur in the vicinity of the proposed action (*Acropora globiceps*, *Acropora retusa*, and *Seriatopora aculeata*), and accordingly, the DON requested informal consultation to address potential effects to these three recently listed species. The consultation was for two separate proposed action elements, which may have the potential to affect the scalloped hammerhead shark and the three species of threatened coral identified above, and include:

- The effects of the projected increase of effluent from the Northern District WWTP outfall, a GWA facility, and
- The effects of constructing the Amphibious Vehicle Laydown Area (AVLA) in Inner Apra Harbor.



The DON determined that the projected increase of effluent from the Northern District WWTP outfall may affect, but is not likely to adversely affect *Acropora globiceps*, *Acropora retusa*, and *Seriatopora aculeata*, and the scalloped hammerhead shark because the effects are insignificant.

The AVLA includes a vehicle ramp that is the only in-water project not completed from the original 2010 EIS and associated ESA section 7 consultation with NMFS. The DON determined that the AVLA project may affect, but is not likely to adversely affect the scalloped hammerhead shark because the effects are discountable.

Consultation with NMFS concluded with a letter of concurrence on May 18, 2015 (see Appendix F.5 of the 2015 Final SEIS). NMFS agreed with the DON conclusion that the proposed action is not likely to adversely affect the scalloped hammerhead shark or the ESA-listed corals.

NMFS also agreed that the proposed action would have no effect on critical habitat. In its letter of concurrence, NMFS provided five conservation recommendations that it deemed prudent.

### **Magnuson-Stevens Fishery Conservation and Management Act**

In accordance with the MSA, the DON initiated informal consultation with the National Oceanic and Atmospheric Administration's NMFS Pacific Islands Regional Office in May 2014 to determine the potential effects of construction and operations of DON's proposed action on EFH. Under the MSA, federal agencies are required to consult with NMFS when their actions may adversely impacts EFH. NMFS determined that adverse effects to EFH would occur unless seven recommended conservation measures are implemented to avoid and minimize impacts to EFH. The DON plans to implement six of the seven identified conservations recommendations. The seventh conservation recommendation addressing development and implementation of the Adaptive Management Plan for the watershed will be considered by DON and as appropriate individual components of the conservation recommendation may be addressed in the INRMP. The DON does not plan to implement the majority of these conservation measures. The NMFS EFH effects determination letter of April 27, 2015, containing the complete list of recommendations and the DON's response to the determination letter are located in Vol. 2, Appendix F.5 for the 2015 Final SEIS.

### **Coastal Zone Management Act**

The Coastal Zone Management Act (CZMA) coordination between Guam Bureau of Statistics and Plans and JRM has been completed. Pursuant to the CZMA, the DON assessed reasonably foreseeable direct and indirect effects of the proposed military relocation on Guam's defined coastal zone and resources and reviewed relevant management programs included within the Guam Coastal Management Program. The CZMA requires that federal activities that affect the coastal zone be undertaken in a manner that is consistent, to the maximum extent practicable, with the Guam Coastal Management Program's enforceable coastal policies (which include land use and environmental policies). The DON has integrated the CZMA and NEPA processes by incorporating where necessary the accepted Guam Coastal Management Program's conditions into the 2015 Final SEIS as BMPs, if they were not already addressed elsewhere as a BMP or as a mitigation measure. In accordance with provisions for phased determinations in 15 CFR § 930.36, the DON will continue to submit future project-specific determinations to the Guam Bureau of Statistics and Plans for review as design-level information becomes available.

### **National Historic Preservation Act**

Pursuant to section 106 of the NHPA, the 2011 PA established a program alternative to govern the implementation of programs or complex project situations, particularly when potential effects to historic properties are not fully known in advance (36 CFR § 800.14(b)). The relocation action addressed in the

2010 ROD was just such a situation, given that numerous projects making up the relocation had not been defined enough to fully evaluate effects to historic properties, and a decision on the LFTRC was deferred. In order to address responsibilities under section 106 and related requirements for the relocation action, the DON consulted with the public, key agencies, and non-governmental organizations to develop a PA. These consultation resulted in execution of the 2011 PA. To ensure adequate consideration of historic preservation requirements for the relocation action, the 2011 PA was developed consistent with 36 CFR § 800.14(b)(3) as a program alternative to satisfy section 106 responsibilities, with explicit flexibility to address changes in the undertaking.

The 2011 PA includes procedures for consulting on the identification of historic properties as specific projects are developed. Data gathered during the in-fill studies conducted for the 2015 Final SEIS and information available in other previous cultural resource investigations will contribute to the review procedures in the 2011 PA. Under the 2011 PA, the DoD conducts annual reviews of proposed projects for the purpose of seeking information from the signatories, invited signatories, concurring parties, and the public regarding historic properties in project areas as part of the process for identifying historic properties and completing determinations of eligibility. Individual project reviews are conducted via a PA memo process for the purpose of soliciting additional comments regarding the DoD's determination of effect. If adverse effects are identified, DoD solicits input on its plan for resolving the adverse effects. When new information is received regarding the potential presence of historic properties, the 2011 PA outlines a process for consideration of supplemental identification measures. The 2011 PA also includes a detailed review process for avoiding, minimizing, and mitigating adverse effects specific to the construction and operation of a LFTRC on Guam, including preparation of a Training Ranges Review and Analysis (TRRA) and a RMP. Once the identification, evaluation, and determination of effect processes summarized above have been completed, the 2011 PA outlines general and project or area-specific mitigation measures. Mitigation is generally defined as taking specific steps designed to lessen the adverse effects of a DoD action on a historic property. Mitigation for adverse effects to archaeological sites includes preparation of a mitigation plan, which is submitted to the Guam SHPO for review. All mitigation work is documented in draft reports submitted to Guam SHPO for review prior to being finalized.

The DON has consulted with the parties to the 2011 PA and the public on the Draft TRRA. Consistent with the 2011 PA, the TRRA provided planning level information on potential direct and indirect effects to historic properties within areas that may be selected in the DON's ROD for the LFTRC, including the selected LFTRC alternative. The Draft TRRA includes information on the locations, orientations, and designs of each proposed LFTRC location. In addition to receipt of written comments, DON cultural resources professionals conducted three consultation sessions with the parties to the PA to discuss the analysis. The DON considered all comments in its preparation of the Final TRRA, which was published shortly after the 2015 Final SEIS. Comments and considerations developed during the Draft TRRA consultation process were incorporated in the 2015 Final SEIS and informed the Draft RMP, which is currently undergoing consultation with the PA Parties. The RMP will be finalized based on this ROD.

### **National Wildlife Refuge System Administration Act**

The Ritidian Unit of the Guam NWR is managed by the USFWS and under its custody and control. As discussed above, under the authority provided in Section 2822 of the FY 2015 NDAA, the DON will pursue an agreement with the USFWS to establish and operate a surface danger zone that overlays portions of the Ritidian Unit. The agreement will allow for the continued management of the Ritidian Unit consistent with the purposes for which it was established.

**RESPONSES TO COMMENTS RECEIVED ON THE 2015 FINAL SEIS:** The DON reviewed and considered all comments that were received during the 30-day waiting period, initiated with publication of the 2015 Final SEIS NOA (80 FR 42491) on July 17, 2015. Two comment letters were received—one from the GPT containing 7 comments and the other from the EPA Region 9 containing 16 comments. No additional mitigation measures are required as a result of comments on the Final SEIS. Following is a summary of the comments received from the GPT and EPA, many of which were received on the Draft SEIS.

GPT – All of the comments received from the GPT are covered in the 2015 Final SEIS. Specific comments from GPT included:

- Continued strong opposition to any LFTRC location on Guam; supports providing input to the RMP;
- Observed that DoD has shown a “greater expression to show sensitivity towards cultural resources”;
- Concerned about limestone forest impacts and that impacts be mitigated in the RMP
- Advocates for public access to cultural sites and an agreement between DoI and DoD to mitigate access impacts;
- Recommends funding public education, outreach and awareness to address cultural resource impacts and loss;
- Agrees with 2015 Final SEIS mitigation to fund a cultural repository; and
- Looks forward to partnering with DoD to promote historic preservation and awareness in Guam.

The DON commits continued coordination and partnership with the GPT as a Concurring Party to the 2011 PA and the RRMP to adequately address impacts associated cultural resource protection and mitigation. The DON will update GPT and other parties to the 2011 PA on DOI-DoD progress establishing Guam NWR Agreement in accordance with section 2822 of the 2014 NDAA and associated cultural resources management (including access), continued development of information on cultural resources in accordance with 2011 PA and RMP, and strive to secure authorization for construction of a Cultural Repository.

EPA – All of the comments received from EPA are covered in the 2015 Final SEIS. Specific comments from EPA included:

- Appreciates DoD support for the EAC Implementation Plan;
  - Appreciates DoD efforts to obtain funding for GWA wastewater system;
- Provided Recommendations for ROD;
  - Provide DoD funding for hydrologic data collection network improvements, monitoring for 10 years and to support the GWRDGD;
  - Specify the stringency of DoD’s Range Environmental Vulnerability Assessment (REVA) and Operational Range Clearance Programs, the receptors to be evaluated and if munitions would be allowed to accumulate in groundwater and discharge to the ocean; and
  - Diverts all green waste through composting/mulching and in conformance with DoD's ISWMP and its support of Guam's Zero Waste Plan.

The DON commits to providing clarification, additional detail and funding updates as information becomes available and project and mitigation designs are finalized.

## CONCLUSION:

After careful consideration of the purpose and need for the proposed action, the analysis contained in the 2015 Final SEIS, and comments received on the Draft and Final SEIS from federal agencies, Guam agencies, non-governmental organizations and the public, mitigation and other factors discussed above, the DON has decided to proceed with implementation of the preferred alternatives as identified in the 2015 Final SEIS: Alternative E for the cantonment/family housing component and Alternative 5 for the LFTRC component of the proposed action, with mitigation as described in this ROD. The LFTRC also includes a stand-alone hand grenade range at Andersen South. In addition, the exact configuration of the SUA associated with this alternative is subject to ongoing actions between DoD and the FAA. The preferred alternatives best meet current and future military training requirements on Guam.

The proposed action and selected alternatives differ significantly from those analyzed in the 2010 Final EIS and addressed in the 2010 ROD in a number of important ways. In addition to the significantly reduced number of Marines and their dependents relocating to Guam, the proposed action selected in this ROD will be implemented at a more gradual pace over 13 years compared to 7 years for the original proposed action considered in the 2010 ROD thus avoiding short-term population and construction tempo peaks and associated environmental impacts. Construction of the cantonment at Finegayan will impact approximately 850 fewer acres than was projected in 2010 and, unlike 2010, the cantonment, family housing and LFTRC construction will occur only on land currently under the custody and control of the DoD. The selected cantonment alternative maintains a natural buffer area between developed areas and nearby sensitive coastal resources and, by placing the family housing at AAFB, leverages the availability of an existing family housing area and supporting infrastructure at AAFB.

9/28/15

**Date**

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