

## **CHAPTER 8.**

### **LAND AND SUBMERGED LAND USE**

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#### **8.1 INTRODUCTION**

This section relies on the Volume 2 affected environment description of land and submerged land ownership and use for both civilian and Department of Defense (DoD) property. Submerged lands refer to areas in coastal waters extending from the Guam coastline into the ocean 3 nautical miles (nm) (5.6 kilometers [km]), which is the limit of territorial jurisdiction. The focus of Chapter 8 is to address the land ownership and land use impacts associated with the proposed action for an Army Air and Missile Defense Task Force (AMDTF) on Guam.

Relative to the Marine Corps proposed action, the Army proposed action is small and would not require land acquisition. Land use planning for the Army was conducted concurrently with the Marine Corps planning to identify opportunities for maximum land use efficiency. The potential impacts are described by alternatives and components. The chapter concludes with identification and discussion of possible mitigation measures.

The region of influence (ROI) for land and submerged land is land and ocean in the Territory of Guam within 3 nm (5.6 km) of shore.

#### **8.2 ENVIRONMENTAL CONSEQUENCES**

This description of environmental consequences addresses all components of the proposed actions for the Army AMDTF. This includes the headquarters/housing component and the munitions storage component, each of which has three alternatives. A full analysis of each alternative is presented beneath the individual headings of this chapter. The weapons emplacement component has four alternatives. Detailed information on the weapons emplacements is contained in a Classified Appendix (Appendix L). A summary of impacts specific to each set of alternatives (including an unclassified summary of weapons emplacement impacts) is presented at the end of this chapter.

##### **8.2.1 Approach to Analysis**

###### **8.2.1.1 Methodology**

Land and submerged land ownership and use is organized into two categories: 1) land and submerged lands ownership and management (here after referred to as just land and submerged lands ownership); and 2) land and submerged land use. There are different criteria for assessing potential impacts under these two categories and they are discussed below.

Specific resource categories such as noise, terrestrial biological resources, public health and safety, and recreational resources address the potential indirect impacts that are due to changes in land ownership and use.

Federal actions on federal lands are not subject to local zoning or land management regulations; however, consistency with surrounding non-federal land uses is an important consideration in land use planning. A Coastal Zone Management Act consistency determination assessment is being prepared for all Guam proposed actions and the correspondence will be included in the Final Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) appendices.

### Land Ownership Category

There are two criteria applied for assessing impacts on land and submerged land ownership:

- Acquisition by the federal government
- Changes in current access policy due to a change in ownership

The impact assessment for land and submerged land ownership is not based on regulatory authority or permit requirements. Assumptions are made for this analysis and the basic premise is that releases of federal lands and submerged lands to the Government of Guam (GovGuam) or individuals have beneficial impacts on the new landowners. Conversely, land acquisition (e.g., through purchase, lease, etc.) by the federal government is considered an adverse impact on the entities that are losing ownership. There may be some property owners who are motivated to sell or lease land to the federal government and would perceive the federal acquisition of their property as a beneficial impact. However, the conservative assumption is that current land and submerged land owners (including GovGuam) would prefer to retain their property and leases.

### Land Use Category

There are three criteria applied for assessing impacts on land and submerged land use:

- Consistency with the Farmland Protection Policy Act (FPPA) of 1981 (not applicable to submerged lands)
- Consistency with current or documented planned land and submerged land use
- Access restriction on DoD lands

#### *Land Use Criterion 1: FPPA*

The FPPA is intended to minimize the impact of federal programs on the unnecessary and irreversible conversion of land to non-agricultural uses. Actions inconsistent with this Act are considered to have an adverse impact though determination of significance is a qualitative assessment based on the value of the farmland affected. The DoD lands on Guam are not currently used or planned for farming; therefore, there would be no impact associated with changes in land use.

#### *Land Use Criterion 2: Consistency with current or documented planned land use*

Land use plans are intended to guide future development. Potential adverse land use impacts would result from proposed land uses which are inconsistent with the existing land use, planned land use, or if vacant land and open space is developed. Potential adverse impacts would also result from incompatible changes in use within submerged lands.

Federal actions on federal lands and submerged lands are subject to Base Command approval, but are not required to conform to state/territory land use plans or policies. The proposed action alternatives of this EIS/OEIS have been developed in consultation with Base Command planners and approved by Base Commands. As a result, a finding of no impacts would occur.

Proposed land uses on newly acquired lands would have an adverse impact if inconsistent with existing or proposed land uses at that site. Similarly, a change in use within non-DoD submerged land could have an adverse impact. The test for significance is qualitative and concerns the related degree of incompatibility. For example, proposed military housing would be consistent with existing or planned civilian residential communities, and would not adversely impact land use. A proposed industrial facility in an area designated for public park use would be a significant adverse impact, while the same facility in an area designated for heavy commercial land use would have no significant adverse impact.

While proposed land use under the alternatives may be consistent with existing land use, potential adverse impacts may arise due to changes in land use intensity (e.g., a training range use increasing from once monthly to daily). Intensity of land use is an important consideration. The resultant potential impacts on other resource categories are the criteria for significance; therefore, it is discussed in those other resource chapters. Intensity in land use is mentioned in this chapter, but is not assigned specific significance criteria.

#### *Land Use Criterion 3: Restrictions on access*

Additional restrictions on public access would be a potential adverse impact. The test for significance is subjective and based on the geographic area affected, the schedule or timing of the access restrictions (permanent or occasional), and the population affected.

#### 8.2.1.2 Issues Identified During Public Scoping Process

As part of the analysis, concerns relating to land ownership and use that were mentioned by the public, including regulatory stakeholders, during scoping meetings were addressed. The following are public, including regulatory agency, preferences:

- No increases in federal land ownership (although some land owners were interested in selling)
- No re-acquisition of lands that have been or are in the process of being released by the federal government
- All land uses proposed on federal land should be consistent with GovGuam land use plans. Specifically, civilian housing should not be adjacent to industrial or training uses on the Base (Yigo and Dededo were areas of concern)
- Federal government release of South Finegayan and Andersen South
- Current public rights-of-way retained

There was concern that the Army AMDTF would be located at Barrigada and be incompatible with surrounding uses. Presumably, the concern was the siting of missile launch and other operational facilities, not for family housing and community support.

#### **8.2.2 Headquarters/Housing Alternatives**

This description of environmental consequences addresses all components of the proposed actions for the Army AMDTF. This includes the headquarters/housing component and the munitions storage component, each of which has three alternatives. A full analysis of each alternative is presented beneath the individual headings of this chapter. The weapons emplacement component has four alternatives. Detailed information on the weapons emplacements is contained in a Classified Appendix (Appendix L). A summary of impacts specific to each set of alternatives (including an unclassified summary of weapons emplacement impacts) is presented at the end of this chapter.

##### 8.2.2.1 Headquarters/Housing Alternative 1 (Preferred Alternative)

Alternative 1 would have the AMDTF co-located with the Marine Corps at Naval Computer and Telecommunications Station (NCTS) and South Finegayan.

## North

### *NCTS Finegayan*

*Construction.* Existing DoD land would be used; therefore, there would be no change in land ownership. In isolation of the Marine Corps proposed action, the construction footprint could potentially be limited to previously developed, and therefore not FPPA protected, areas. Construction impacts would be consistent with current and documented land use since it would be limited to the project area and adjacent previously disturbed area. There would be no new restrictions on access. This would result in no change to land use. Consequently, there would be no impacts to land ownership or use.

*Operation.* Existing DoD land would be used so there would be no change in land ownership. The proposed land use is consistent with FPPA, current and proposed land use, and there would be no new restriction on access. Consequently, there would be no impacts to land ownership or use.

### *South Finegayan*

*Construction.* Existing DoD land would be used; therefore, there would be no change in land ownership. In isolation of the Marine Corps proposed action, the construction footprint could potentially be limited to previously developed, and therefore not FPPA protected, areas. Construction impacts would be consistent with current and documented land use since it would be limited to the project area and adjacent previously disturbed area. There would be no new restrictions on access. This would result in no change to land use. Consequently, there would be no impacts to land ownership or use.

*Operation.* Existing DoD land would be used, therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA, current and proposed land use, and there would be no new restriction on access. Consequently, there would be no impacts to land ownership or use.

## Central

### *Navy Barrigada*

*Construction.* Under Alternative 1, no construction activities for the Army AMDTF would occur at Navy Barrigada. Therefore, there would be no land ownership or use impacts from construction.

*Operation.* Under Alternative 1, no operational activities for the Army AMDTF would occur at Navy Barrigada. Therefore, there would be no land ownership or use impacts from operation.

### *Air Force Barrigada*

*Construction.* Under Alternative 1, no construction activities for the Army AMDTF would occur at Air Force Barrigada. Therefore, there would be no land ownership or use impacts from construction.

*Operation.* Under Alternative 1, no operational activities for the Army AMDTF would occur at Air Force Barrigada. Therefore, there would be no land ownership or use impacts from operation.

## Alternative 1 Potential Mitigation Measures

No impacts to land and submerged land ownership or use were identified under Alternative 1; therefore, no mitigation is necessary or proposed.

### 8.2.2.2 Headquarters/Housing Alternative 2

Alternative 2 would have the AMDTF located at Navy Barrigada.

## North

### *NCTS Finegayan*

*Construction.* Under Alternative 2, no construction activities for the Army AMDTF would occur at NCTS Finegayan. Therefore, there would be no land ownership or use impacts from construction.

*Operation.* Under Alternative 2, no operational activities for the Army AMDTF would occur at NCTS Finegayan. Therefore, there would be no land ownership or use impacts from operation.

### *South Finegayan*

*Construction.* Under Alternative 2, no construction activities for the Army AMDTF would occur at South Finegayan. Therefore, there would be no land ownership or use impacts from construction.

*Operation.* Under Alternative 2, no operation activities for the Army AMDTF would occur at South Finegayan. Therefore, there would be no land ownership or use impacts from operation.

## Central

### *Navy Barrigada*

*Construction.* Existing DoD land would be used; therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA, current and proposed land use, and there would be no new restriction on access. Consequently, there would be no impacts to land ownership or use.

*Operation.* Existing DoD land would be used so there would be no change in land ownership. The proposed land use is consistent with FPPA. Vacant land and open space would be replaced with housing and community service facilities on DoD land. The housing and community service facilities would be compatible with the existing Navy golf course, NCTS Finegayan, and Army administrative facilities. The proposed development on the boundary of Navy Barrigada is consistent with adjacent residential communities. Consequently, there would be no impacts to land ownership or use.

### *Air Force Barrigada*

*Construction.* Under Alternative 2, no construction activities for the Army AMDTF would occur at Air Force Barrigada. Therefore, there would be no land ownership or use impacts from construction.

*Operation.* Under Alternative 2, no operation activities for the Army AMDTF would occur at Air Force Barrigada. Therefore, there would be no land ownership or use impacts from operation.

## Alternative 2 Potential Mitigation Measures

No impacts to land and submerged land ownership or use were identified under Alternative 2; therefore, no mitigation is necessary or proposed.

### 8.2.2.3 Headquarters/Housing Alternative 3

Alternative 3 would have the AMDTF co-located with the Marine Corps at NCTS Finegayan, Navy Barrigada, and Air Force Barrigada.

## North

### *NCTS Finegayan*

*Construction.* Existing DoD land would be used; therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA, current and proposed land use, and there would be no new restriction on access. Consequently, there would be no impacts to land ownership or use.

*Operation.* Existing DoD land would be used; therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA, current and proposed land use, and there would be no new restriction on access. Consequently, there would be no impacts to land ownership or use.

#### *South Finegayan*

*Construction.* Under Alternative 3, no construction activities for the Army AMDTF would occur at South Finegayan. Therefore, there would be no land ownership or use impacts from construction.

*Operation.* Under Alternative 3, no operation activities for the Army AMDTF would occur at South Finegayan. Therefore, there would be no land ownership or use impacts from operation.

### Central

#### *Navy Barrigada*

*Construction.* Existing DoD land would be used; therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA. Vacant land and open space would be replaced with housing and community service facilities on DoD land. The housing and community service facilities would be compatible with the existing Navy golf course, NCTS Finegayan, and Army administrative facilities. The proposed development on the boundary of Navy Barrigada is consistent with adjacent residential communities. Consequently, there would be no impacts to land ownership or use.

*Operation.* Existing DoD land would be used; therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA. Vacant land and open space would be replaced with housing and community service facilities on DoD land. The housing and community service facilities would be compatible with the existing Navy golf course, NCTS Finegayan, and Army administrative facilities. The proposed development on the boundary of Navy Barrigada is consistent with adjacent residential communities. Consequently, there would be no impacts to land ownership or use.

#### *Air Force Barrigada*

*Construction.* Under Alternative 3, no construction activities for the Army AMDTF would occur at Air Force Barrigada. Therefore, there would be no land ownership or use impacts from construction.

*Operation.* Under Alternative 3, no operation activities for the Army AMDTF would occur at Air Force Barrigada. Therefore, there would be no land ownership or use impacts from operation.

### Alternative 3 Potential Mitigation Measures

No impacts to land and submerged land ownership or use were identified under Alternative 3; therefore, no mitigation is necessary or proposed.

## **8.2.3 Munitions Storage Alternatives**

### **8.2.3.1 Munitions Storage Alternative 1 (Preferred Alternative)**

Two magazines would be demolished and replaced with eight climate controlled earth-covered magazines (ECM) on DoD land within the Munitions Storage Area (MSA) 1.

#### Construction

Existing DoD land would be used; therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA. The existing storage at the site would be relocated within the MSA. Construction impacts would be consistent with current and documented land use since it would be limited

to the project area and adjacent previously disturbed area. There would be no new restriction on access. Consequently, there would be no impacts to land ownership or use.

### Operation

Existing DoD land would be used; therefore, there would be no change in land ownership. The proposed land use is consistent with FPPA. The new ECMs would not alter the existing Explosive Safety Quantity Distance (ESQD) arcs generated by the existing ECMs thus they would not result in a change in consistency with current or documented land use. There would be no new restrictions on access. Consequently, there would be no impacts to land ownership or use.

#### 8.2.3.2 Munitions Storage Alternative 2

Existing conditions do not vary between the three munitions storage alternatives at MSA 1. Therefore, impacts for Munitions Storage Alternative 2 are identical to those described for Munitions Storage Alternative 1.

#### 8.2.3.3 Munitions Storage Alternative 3

Existing conditions do not vary between the three munitions storage alternatives at MSA 1. Therefore, impacts for Munitions Storage Alternative 3 are identical to those described for Munitions Storage Alternative 1.

### 8.2.4 Weapons Emplacement Alternatives

Detailed information on the weapons emplacements is contained in a Classified Appendix (Appendix L). An unclassified summary of impacts specific to each set of alternatives is presented at the end of this chapter.

### 8.2.5 No-Action Alternative

Under the no-action alternative, the Army AMDTF would not be established on Guam. No construction or operation would occur. Existing operations on Guam would continue; therefore, the no-action alternative would have no impact on land or submerged land ownership or use on Guam.

### 8.2.6 Summary of Impacts

Tables 8.2-1, 8.2-2 and 8.2-3 summarize the potential impacts of each major component – headquarters/housing, munitions storage, and weapons emplacement, respectively. A text summary is provided below.

**Table 8.2-1. Summary of Headquarters/Housing Impacts – Alternatives 1, 2, and 3**

| <i>Alternative 1</i>  | <i>Alternative 2</i>  | <i>Alternative 3</i>  |
|---|---|---|
| <b>Construction</b>   |   |   |
| NI <ul style="list-style-type: none"> <li>No impact to land or submerged land ownership or use</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> |
| <b>Operation</b>  |   |   |
| NI <ul style="list-style-type: none"> <li>No impact to land or submerged land ownership or use</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> |

*Legend:* NI = No impact.

**Table 8.2-2. Summary of Munitions Storage Impacts – Alternatives 1, 2, and 3**

| <i>Alternative 1</i>  | <i>Alternative 2</i>   | <i>Alternative 3</i>   |
|---|--|--|
| <b>Construction</b>   |  |  |
| NI <ul style="list-style-type: none"> <li>No impact to land or submerged land ownership or use</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul>  | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul>  |
| <b>Operation</b>  |  |  |
| NI <ul style="list-style-type: none"> <li>No impact to land or submerged land ownership or use</li> </ul> | LSI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> | LSI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> |

Legend: LSI = Less than significant impact, NI = No impact.

**Table 8.2-3. Summary of Weapons Emplacement Impacts – Alternatives 1, 2, 3 and 4**

| <i>Alternative 1</i>  | <i>Alternative 2</i>  | <i>Alternative 3</i>   | <i>Alternative 4</i>   |
|---|---|--|--|
| <b>Construction</b>   |   |  |  |
| NI <ul style="list-style-type: none"> <li>No impact to land or submerged land ownership or use</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul>  | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul>  |
| <b>Operation</b>  |   |  |  |
| NI <ul style="list-style-type: none"> <li>No impact to land or submerged land ownership or use</li> </ul> | NI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> | LSI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> | LSI <ul style="list-style-type: none"> <li>The impacts would be the same as Alternative 1</li> </ul> |

Legend: LSI = Less than significant impact, NI = No impact.

The proposed land ownership and uses under each alternative are within DoD lands and consistent with FPPA. The proposed action would also be consistent with current and documented land use, as well as adjacent land use designations and there would be no new restrictions on access. Consequently, there would be no impacts to land ownership or use.

**8.2.7 Summary of Potential Mitigation Measures**

Table 8.2-4 summarizes the potential mitigation measures proposed for each alternative.

**Table 8.2-4. Summary of Potential Mitigation Measures**

| <i>Headquarters/Housing Alternatives</i> | <i>Munitions Storage Alternatives</i> | <i>Weapons Emplacement Alternatives</i> |
|--|---------------------------------------|---|
| <b>Construction</b>                      |                                       |   |
| • No mitigation required                 | • No mitigation required              | • No mitigation required                |
| <b>Operation</b>                         |                                       |   |
| • No mitigation required                 | • No mitigation required              | • No mitigation required                |