

CHAPTER 6

ADDITIONAL CONSIDERATIONS REQUIRED BY NEPA

Table of Contents

CHAPTER 6 ADDITIONAL CONSIDERATIONS REQUIRED BY NEPA	I
ACRONYMS AND ABBREVIATIONS	II
6.1 INTRODUCTION.....	6-1
6.2 CONSISTENCY WITH OTHER FEDERAL, COMMONWEALTH, AND LOCAL LAND USE PLANS, POLICIES, AND CONTROLS	6-1
6.3 UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS	6-3
6.4 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES.....	6-5
6.5 RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND LONG- TERM PRODUCTIVITY	6-6

List of Tables

6.3-1 Unavoidable and Irreversible Significant Adverse Impacts	6-4
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Acronyms and Abbreviations

CJMT	Commonwealth of the Northern Mariana Islands Joint Military Training	NEPA	National Environmental Policy Act
CNMI	Commonwealth of the Northern Mariana Islands	OEIS	Overseas EIS
EIS	Environmental Impact Statement	RTA	Range and Training Area
		U.S.	United States

CHAPTER 6 ADDITIONAL CONSIDERATIONS REQUIRED BY NEPA

6.1 INTRODUCTION

This chapter addresses additional considerations required by the National Environmental Policy Act (NEPA) and possible conflicts between the proposed action and the objectives of existing land use plans, policies, and controls; irreversible and irretrievable commitment of resources; and short-term use versus long-term productivity. The cumulative impacts analysis is presented in Chapter 5.

6.2 CONSISTENCY WITH OTHER FEDERAL, COMMONWEALTH, AND LOCAL LAND USE PLANS, POLICIES, AND CONTROLS

The proposed action alternatives have been assessed to determine their consistency and compliance with applicable environmental regulations and other plans, policies, and controls. In summary, this analysis indicates that the proposed action alternatives would not conflict with the objectives of applicable federal regulations, but there may be inconsistencies with the Commonwealth of the Northern Mariana Islands (CNMI) and local land use plans and policies (Section 4.7, *Land and Submerged Land Use*).

6.2.1 Federal Plans

Throughout the Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) process, other federal agencies (including cooperating agencies) were provided opportunities to identify potential conflicts with their plans and policies. No conflicts were identified to date.

The proposed action on Tinian is compatible with the present and reasonably foreseeable United States (U.S.) military training actions described in Chapter 5, *Cumulative Impacts*.

There are no federal plans, policies, or controls currently associated with Pagan. The U.S. Geological Survey is best suited to maintain monitoring equipment for volcanic activities on the island; however, stable support for these efforts is yet to be identified. This activity would not present any significant inconsistencies with proposed military training.

The management of the ranges and training areas (RTAs) proposed in this EIS/OEIS would be linked to the overall management by the Commander Naval Installations Command, Joint Region Marianas. As the Marine Corps Forces Pacific is the Executive Agent for this action, Marine Corps policies and procedures would likely provide the basis for joint and multi-national range and training area management. Marine Corps Order P3550.10 *Policies and Procedures for Range and Training Area Management*, establishes Marine Corps responsibilities and prescribes policies and procedures concerning safety and management of Marine Corps operational ranges and training areas, to include associated training facilities (Department of the Navy [DoN] 2005). An organization such as a Marine Corps Guam Range Management Division is envisioned as the designated range control facility organization with responsibility for the Tinian and Pagan ranges. This organization would provide safety,

control, maintenance, environmental compliance, and administrative functions for aviation, ground, and combined arms training events within RTAs, to include both live-fire and non-live-fire events.

The management of all ranges would be coordinated to avoid conflicts among the various U.S. military training activities. If the proposed action were implemented, the existing Joint Region Marianas Integrated Natural and Integrated Cultural Resource Management Plans would be updated to include Pagan military lands and all new activities associated with the proposed action.

6.2.2 Regional and Local Land Use Plans

As described in Section 3.7, *Land and Submerged Land Use*, the CNMI Public Land Use Plan (Marianas Public Land Corporation 1989) is the current land use planning guidance.

6.2.2.1 Tinian

On Tinian, military use is identified for the Military Lease Area, the Tinian International Airport and the Port of Tinian. Future land use planning goals on Tinian include continued military use of lease areas; development of casinos and hotels as infill, rather than sprawling resort with golf course-style development; 533 homesteads by 2015; preservation of conservation lands; continued agriculture; and an increase in fisheries productivity.

The Tinian alternatives are consistent with this planned U.S. military use within the Military Lease Area and with planned use of the Tinian airport and seaport with additional airspace modifications due to proposed military training. Additional acreage would be leased from the CNMI at the Tinian International Airport with the purpose of using the area for military aviation purposes compatible with existing and future commercial aviation, and at the Port of Tinian with the purpose of using the area for military operations compatible with future commercial marine operations at the seaport. No reasonably foreseeable competing land uses (other than the federal actions mentioned in the previous section) are identified for these two areas within the reasonably foreseeable timeframe (2026). The proposed land uses, therefore, would be consistent with the CNMI government airport and harbor land uses.

The proposed action would remove 2,375 acres (961 hectares) within the Military Lease Area from agricultural use. The new restriction in land use is consistent with the terms and conditions of the lease agreements. However, there would be an impact to the total land available for agricultural land use on Tinian. The DoN has identified an area east of Broadway Avenue, within the Military Lease Area, that could be made available for agricultural use.

6.2.2.2 Pagan

The 1989 *CNMI Public Land Use Plan* does not mention Pagan specifically and refers to all islands north of Saipan collectively as the "Northern Islands." It states that "public lands in the Northern Islands will remain in their current designation as conservation areas (Marianas Public Land Corporation 1989)." Conservation lands are public lands that are set aside to protect critical habitats, forests, wetlands and historic/cultural sites. The proposed action is inconsistent with the land use designation of conservation.

As discussed in Section 3.7, *Land and Submerged Land Use*, the CNMI prepared a Five-Year Land Use Plan. There is no recent land use plan for Pagan that has been officially adopted by the CNMI government. Public Law 16-50 states that lands in the northern islands (including Pagan) may be

designated for homesteading, public/private facilities, and commercial activities. The 2013 CNMI Department of Public Lands' Pagan land use planning effort generated three potential land use plan options for consideration. The CNMI Department of Public Lands has not selected any of these options or officially adopted any land use plans for Pagan. There are no reasonably foreseeable CNMI investments in infrastructure or public services on Pagan. Therefore, the proposed action is consistent with the existing land use. However, the proposed action is not consistent with Public Law 16-50 as it precludes the CNMI legislative mandate to provide homesteads on Pagan. Full time residential land use would not be compatible with the proposed U.S. military training.

6.2.3 Applicable Federal and Local Regulations

The U.S. military must comply with all applicable federal environmental laws, regulations, and Executive Orders, including, those introduced in Chapters 3 and 4 under each resource section and summarized in Appendix E, *Applicable Federal and Local Regulations*. The EIS/OEIS process has provided federal and local agencies opportunities to review and comment on the proposed action, and the requisite coordination and consultation activities have been initiated.

6.3 UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Chapter 4, *Environmental Consequences* identifies the significant adverse impacts of the proposed action. Many of these impacts are mitigable to less than significant adverse impacts, but the impacts listed in [Table 6.3-1](#) are unavoidable. Either mitigation is not proposed or the mitigation proposed would not reduce the impact to less than significant. The unavoidable impacts are similar among the action. Briefly, the unavoidable significant impacts related to the Tinian alternatives would be to the following resources:

- Geology and Soils
- Noise
- Land and Submerged Land Use
- Recreational Resources
- Visual Resources
- Socioeconomics

In addition, unavoidable adverse impacts related to the Tinian alternatives would occur due to: removal of native vegetation including limestone forest wildlife habitat; permanent loss of marine habitat including coral during construction and operations; and degradation of marine habitats through runoff and munitions. These would be irreversible/irretrievable impacts.

The unavoidable significant impacts related to the Pagan alternatives would be to the following resources:

- Land and Submerged Land Use
- Socioeconomics and Environmental Justice

Table 6.3-1. Unavoidable and Irreversible Significant Adverse Impacts

<i>Resource Area</i>	<i>Unavoidable Impact</i>	<i>Irreversible/Irretrievable? (Yes/No)</i>
Tinian		
Geology and Soils	Operations in the High Hazard Impact Area would result in permanent loss of prime farmland soils.	Yes
Noise (similar for all alternatives)	Noise generated at the RTA by large-caliber weapons, during unfavorable weather conditions, could result in increased risk of complaints from locations outside, and south of the Military Lease Area on Tinian, and to the north of the Military Lease Area from locations in the southwestern portion of Saipan.	No
Land and Submerged Land Use	<ul style="list-style-type: none"> • Additional federal land acquired under long-term real estate agreement. • New and more frequent restrictions on public access to Military Lease Area and submerged lands. • Landing beach would impact two CNMI Areas of Particular Concern: Shoreline and Lagoon and Reefs. • Federal land acquisition and development at the port would impact the CNMI Port and Industrial Area of Particular Concern. • Port development would be within the Coastal Hazards CNMI Area of Particular Concern. • Land uses within the Military Lease Area would change to U.S. military training and may preclude agricultural and grazing use of the area. DoN has identified some areas that could be set aside for grazing, but a U.S. commitment to agricultural use is pending. 	Yes
Recreational Resources	<ul style="list-style-type: none"> • New and more frequent restrictions on public access to recreational resources within the Military Lease Area and submerged lands. • Year-round loss of access to cultural sites within the High Hazard Impact Area. 	To be determined pending Section 106
Visual Resources	Views from Mount Lasso permanently altered.	Yes
Socioeconomics and Environmental Justice	Increased population and number of children on island attending schools.	No

Table 6.3-1. Unavoidable and Irreversible Significant Adverse Impacts

<i>Resource Area</i>	<i>Unavoidable Impact</i>	<i>Irreversible/Irretrievable? (Yes/No)</i>
Pagan		
Land and Submerged Land Use	<ul style="list-style-type: none"> • Additional federal land acquired under long-term lease. • New restrictions on public access to Pagan and submerged lands. • Landing beach would impact two CNMI Areas of Particular Concern: Shoreline and Lagoon and Reefs. • The High Hazard Impact Areas would be permanently off-limits to visitors, even when there are no training events. • U.S. military use would be incompatible with conservation land use designation of Pagan. • U.S. military use would preclude extended visits and permanent residents. 	Yes
Socioeconomics and Environmental Justice	Decreased access to recreational and cultural activity, and decreased likelihood that former Pagan residents or their ancestors would be able to re-settle or homestead the island.	No

In addition, unavoidable adverse impacts related to the Pagan alternatives would occur due: removal of native vegetation including forest wildlife habitat; permanent loss or marine habitat including coral during construction and operations; and degradation of marine habitats through runoff, munitions and noise. These would be irreversible/irretrievable impacts.

6.4 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA requires a detailed statement on “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented” (40 Code of Federal Regulations § 1502.1). Irreversible effects are related to the permanent use of a non-renewable resource (such as minerals or energy) and the effects that the use of those resources have on future generations. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site).

Irreversible and irretrievable commitments of resources would occur under all alternatives. There would be no appreciable difference among the Tinian alternatives or between the Pagan alternatives with respect to irreversible and irretrievable commitment of resources.

General irreversible and irretrievable commitment of resources related to the construction and operation of the proposed action on Tinian and Pagan would include the following:

- Consumption of fossil fuels and energy for construction and training equipment, transportation and facility operation by U.S. military.
- Use of raw materials (i.e., wood, metal, components of concrete, asphalt, fabricated building materials) for construction of new facilities.
- Increases in the demand for potable water. While there is sufficient capacity of groundwater resources, the use does represent an irreversible use of the resource that is not available for other users.
- Expenditures of time (labor) and money.

In addition to the U.S. military fuel and time expenditures, civilians may also experience a greater expenditure of resources when they are required to travel greater distances to accommodate new airspace and marine navigation restrictions.

As summarized in the last column of [Table 6.3-1](#), most of the unavoidable significant impacts would be irreversible. In addition, there are unavoidable impacts that would be reversible when the military training ends. But because the training would continue well into future generations, there is less certainty that the impact would be completely reversible. If these additional unavoidable impacts are included, only the unavoidable noise and socioeconomic impacts to Tinian would be reversible. None of the unavoidable impacts to Pagan would be reversible.

Under the no-action alternative, current military-approved training activities would continue. These activities include limited non-tactical live-fire and other non-live-fire training as well as the construction and operation of four ranges on Tinian (see Section 2.4.5, *Tinian No-Action Alternative*). Therefore, under the no-action alternative there would also be irreversible and irretrievable commitments of resources that were described in the 2010 *Guam and CNMI Military Relocation EIS* (DoN 2010b). The only U.S. military training that occurs on Pagan under the no-action alternative is infrequent search and rescue type training exercises following coordination and approval from the CNMI government. However, under the no-action alternative this would represent irreversible and irretrievable commitments of resources.

6.5 RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

NEPA states in Section 102 (42 U.S. Code 4332) that the lead agency provide a detailed statement on "... the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity." This requirement is aimed at implementing NEPA Section 101 (b) (1) that states the Nation should "...fulfill the responsibilities of each generation as trustee of the environment for succeeding generations."

It is important to note that this assessment of short-term use and long-term productivity is based on short-term use not impact. Short-term use, in the context of generations, is defined by the life of the

proposed action which is currently unknown. However, the U.S. military lease terms would be a minimum of 50 years (minimum two generations).

There would be benefits and gains over the life of the proposed action, as well as costs and impacts. This section presents an evaluation of the short-term use of the environment in relation to adverse effects on the maintenance or enhancement of long-term productivity. The discussion is from the standpoint of a trustee for future generations and explains the decision to incur lasting losses in potential productivity in exchange for meeting short-term goals.

Benefits achieved through the proposed action could limit the range of opportunities for the enhancement of long-term productivity of the affected environment. At the same time there will usually be costs, side effects, and loss of natural resources that have long-term productive value. Long-term productivity refers to valuable uses for existing environment (e.g., wetlands, open space, visual resources, recreation areas, floodplains, wildlife habitat, groundwater recharge, areas that support valued species, or cultural practices and sites) and renewable resources (e.g., agriculture, fisheries, water supply, socioeconomics). Long-term productivity also refers to environmental quality such as low ambient noise levels, clean air, clean water, and low levels of other kinds of pollutants.

6.5.1 Benefits of Short-Term Use

As stated in Section 1.3, *Purpose of and Need for the Proposed Action*, the purpose for the proposed action is to reduce training deficiencies for U.S. military services in the Western Pacific. Existing U.S. military live-fire, unit and combined RTAs are insufficient to support U.S. Pacific Command Service Components' training requirements in the Western Pacific. The proposed action is needed to enable U.S. Pacific Command forces to meet their Title 10 requirements to maintain, equip and train combat and humanitarian forces in the Western Pacific. The primary benefit of this short-term use is a well-trained military force and improved national security.

Regionally, the CNMI government and citizens would benefit from the short-term U.S. military training use due to an increase in revenue from lease payments and from the proposed infrastructure (i.e., roadways, airport) improvements that would benefit both the short-term proposed use and long-term productivity of the environment. There would be additional socioeconomic benefits due to increased employment opportunities during construction and operation.

6.5.2 The Cost of Short-Term U.S. Military Training Use

Under all alternatives, the utilization of irretrievable and irreplaceable resources of labor, federal expenditures, construction/operation materials and supplies, and fossil fuels would not be available for use by future generations.

The trade-offs associated with short-term use are related to the unavoidable significant impacts ([Section 6.3, Unavoidable Significant Adverse Impacts](#)) and irreversible and irretrievable commitment of resources ([Section 6.4, Irreversible and Irretrievable Commitment of Resources](#)), both of which adversely affect the long-term productivity of the environment and impact future generations. In addition, actions that would be precluded by the proposed action also represent tradeoffs in long-term productivity.

There would be no appreciable difference among the three Tinian or between the two Pagan proposed action alternatives with respect to the impacts to short-term uses and long-term productivity of the environment.

6.5.3 Tinian

The area on Tinian leased by the U.S. military would be expanded under the proposed action. No private competing land use plans were identified for the new lease areas or the existing Military Lease Area in the Five-Year Land Use Plan (1989). The new lease areas would be available for other land uses at the end of the life of the proposed action.

There are existing agricultural land uses within the Military Lease Area that would be precluded; however, there are ongoing efforts to mitigate this impact to long-term agricultural productivity by designating specific areas for cattle grazing within the Military Lease Area. In addition, there are lands outside of the Military Lease Area that could potentially be suitable for grazing and agricultural productivity to mitigate for the impacts of the short-term military use. Future Tinian land use plans would need to address the changes in land use.

Another cost of the proposed action would be related to the short-term use of the Military Lease Areas due to new public access restrictions, but these access restrictions are reversible at the end of the life of the proposed action and during non-training periods. The U.S. military training access restrictions would not affect the long-term productivity of the environment, except there may be discrete areas that remain restricted, for health and safety reasons, beyond the life of the proposed action, representing a loss of land available for future generations.

The irreversible and irretrievable commitment of resources associated with the short-term use (U.S. military training) would adversely affect the long-term productivity of the environment for the following resources (see [Table 6.3-1](#)): airspace, water resources, terrestrial biology, marine biology, cultural resources, and visual resources.

There have been land use proposals for Tinian that did not meet the criteria for reasonably foreseeable in the cumulative impact analysis in Chapter 5, *Cumulative Impacts*, but they are relevant to the discussion of trade-offs associated with the proposed short-term U.S. military use and environmental productivity for future generations. Most of the large-scale land use proposals identified are tourism related and would increase the hotel room capacity. Each of the proposals would have their own “short-term” tradeoffs that would impact long-term environmental productivity; however, there are no environmental impact documents for these proposals to rely upon for a comparison of the trade-offs among the proposals and the proposed action. The proposals for land use outside of the Military Lease Area could proceed concurrently with the proposed action and would not be precluded. However, the limited public access to prime tourist sites (e.g., historic, recreational) within the Military Lease Area could diminish the tourist experience during the life of the proposed action and have long-term impacts to economic productivity.

6.5.4 Pagan

The CNMI government did not identify U.S. military use of Pagan in their *Five-Year Land Use Plan* (1989). There have been competing land use ideas for Pagan that did not meet the criteria for reasonably foreseeable in the cumulative impact analysis in Chapter 5, *Cumulative Impacts*, but they are relevant to the discussion of trade-offs associated with the proposed short-term use and environmental productivity for future generations. Homesteading, thermal energy, mining, aquaculture and agriculture proposals have all been considered for Pagan. Increases to temporary ecotourism visits are considered reasonably foreseeable and would be scheduled to avoid training events. Each or any combination of these proposals would have their own “short-term” opportunity costs impacting long-term environmental productivity; however, there are no environmental impact documents for these proposals to rely upon for a comparison of the trade-offs among the proposals and the proposed action. Proposals that would require full-time resident populations on Pagan would be precluded by the limited public access imposed during training. Ecotourism is one example of an activity that could continue during non-training periods, with no loss to the long-term productivity or success of the venture. Aquaculture also could proceed to a limited extent with restrictions on siting the aquaculture facilities and island access during U.S. military training. All land use proposals that are precluded in the short-term could resume on termination of the federal lease for U.S. military training. However, with the passage of time and generations over the long-term U.S. military lease, the delays in homesteading could represent a cultural loss to future generations that is not reversible because cultural ties to Pagan by former residents would not be maintained.

The irreversible and irretrievable commitment of resources associated with the short-term use (U.S. military training) of Pagan would adversely affect the long-term productivity of the environment for the following resources (see [Table 6.3-1](#)): terrestrial biology, marine biology, and cultural resources.

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