

4 ENVIRONMENTAL CONSEQUENCES

This chapter describes potential direct, indirect, and cumulative environmental consequences associated with the No Action, and Proposed Action Alternative 1 and Alternative 2. This chapter is divided into 14 resource areas as discussed in Chapter 3. Management measures are described as appropriate in each and how they serve to lessen impacts. Management measures include avoidance and minimization measures, best management practices, and standard operating procedures. Management measures would be incorporated into the Proposed Action and are common to all alternatives (refer to Appendix D).

4.1 Public Access

Public access to the Military Lease Area on Tinian has been identified as an economic issue of importance to the local community, as it supports subsistence activities, tourism, recreation, ranching, and cultural traditions. The Proposed Action would involve conducting training events in the Military Lease Area throughout the year that vary in size, frequency, and duration (Table 2.1-1) and that take place in different training areas (Figure 2.1-2). In general, small events would occur most frequently throughout the year and have a relatively short duration (approximately one to two weeks or less), medium events would occur less frequently (approximately once per quarter) and also last approximately one to two weeks, and large events would be the least frequent (approximately 2 to 4 times per year) but have a longer duration of approximately two to four weeks. Small, medium, and large training events may overlap, with up to 1,000 service members participating in training on Tinian at any one time. While training events would necessitate temporary and controlled access restrictions for public safety, these limitations would be intermittent, and efforts would be made to minimize disruptions. This chapter examines the potential impacts of the Proposed Action on public access and outlines measures designed to reduce disruptions while supporting military training objectives.

4.1.1 Approach to Analysis

This analysis focuses on the effects of military training on public access within the Military Lease Area and offshore surface danger zones associated with training at the Multi-Purpose Maneuver Range. This analysis of public access considers the potential impacts of temporary access controls on fishing, boating, subsistence, tourism and recreation, ranching, and cultural activities given training frequency, duration, and geographic extent.

4.1.2 No Action Alternative

Under the No Action Alternative, there would be no change to the type, frequency, or duration of ground and aviation training within the Military Lease Area. The public would be able to access the Military Lease Area with current restrictions, and training events would be conducted with the same advanced notice provided to the public as currently occurs. Subsistence activities, tourism, recreation, ranching, and cultural practices could continue to be conducted as needed with no change to the existing availability of the Military Lease Area for public access.

4.1.3 Alternative 1

4.1.3.1 Training

Under Alternative 1, land-based training events would continue and would increase over the No Action Alternative by approximately 15 percent. This alternative would introduce temporary and controlled access restrictions to the training areas and live-fire ranges within the Military Lease Area to ensure public safety during military training events. Because training units need the ability to operate in darkness and low-light conditions, training events could extend over a 24-hour period. All controlled access restrictions would be temporary and intermittent, lasting only as long as required for the training activity taking place in that area.

As described in Chapter 2 of this Final EIS, the Military Lease Area would be divided into eight smaller training areas (Figure 2.1-2) to allow Range Control to designate selective closures to safely accommodate both training and public access. On any given day, the location and duration of controlled access could vary considerably with some training areas in the Military Lease Area remaining accessible to the public even while training is being conducted in others. For example, larger training events could result in controlled access to multiple and/or adjacent training areas at one time and/or for portions of multiple days. Medium and smaller events could require controlled access to one training area or even require no access restrictions. The duration of restrictions to access could range from hours within one day to multiple full days, depending on training requirements. The USMC anticipates that some non-live fire ground training could be safely accomplished without any restrictions within the Military Lease Area.

When live-fire training is scheduled at the Multi-Purpose Maneuver Range, the USMC would activate a surface danger zone that extends over both land and offshore waters at the northern tip of Tinian (Figure 4.1-1). These restrictions are necessary to protect public safety, particularly when live ammunition is in use. The surface danger zone in effect would depend on the type of ammunition used:

- 5.56 millimeter ammunition: surface danger zone extends about 1.1 miles offshore (used approximately 70 percent of the time)
- 7.62 millimeter ammunition: surface danger zone extends about 2.5 miles offshore (used approximately 20 percent of the time)
- 0.50 caliber ammunition: surface danger zone extends about 3.2 miles offshore (used approximately 10 percent of the time)

This tiered surface danger zone approach ensures that only the minimum necessary area is restricted during each event. A combination of radar feeds and/or spotters would be used during training events. Should spotters observe a non-participating boater, vehicle, or person approaching the surface danger zone, or an aircraft approaching in the overlying airspace, all live-fire training in the Multi-Purpose Maneuver Range would cease until the non-participant is out of the area. When the Multi-Purpose Maneuver Range is active, access restrictions would include:

- Access restrictions when the Multi-Purpose Maneuver Range is active include controlled entry into training area D and portions of training area C (Figure 2.1-2), with temporary limitations on hunting, foraging, and recreational use.
- Fishing and boating restrictions in the offshore surface danger zones would require vessels to reroute around the surface danger zone (Figure 4.1-1).



Figure 4.1-1 Surface Danger Zones

Similarly, when the Explosives Training Range is in use, the areas surrounding the surface danger zone would be closed to public access (Figure 4.1-1). In some of these cases, other areas of the Military Lease Area could be open to the public but would require a different access route to avoid the surface danger zone. When the Explosives Training Range is active, access restrictions could include:

- Temporary access restrictions on subsistence activities such as hunting and foraging in training areas B2 and A2.
- Controlled access to some tourism and recreational areas in training areas B2 and A2.

The ammunition holding areas are designated sites within the Military Lease Area where live ammunition and explosives are temporarily staged before being used in training exercises. Due to the potential hazards associated with staging live ordnance, explosive safety quantity distance arcs are established around the ammunition holding areas to protect the public. These restrictions would be temporary and localized to the explosive safety quantity distance arcs surrounding the holding areas. Staging live ammunition at the Base Camp ammunition holding area (AHA 2) would not result in additional public access restrictions because the explosive safety quantity distance arcs are fully within the boundary of the Base Camp. When live ammunition is staged at the ammunition holding area near the Multi-Purpose Maneuver Range (AHA 1), the areas encompassing the explosive safety quantity distance arc would be closed to public access (Figure 4.1-2). When live ammunition is staged at AHA 1, access restrictions could include:

- Controlled access within the explosive safety quantity distance arcs.
- Temporary restrictions on subsistence activities (e.g., hunting, foraging, and gathering of culturally significant plants) within the explosive safety quantity distance arcs.
- Temporary closures or detours of roads located within the explosive safety quantity distance arcs.

Fishing and Boating

As discussed above, when live-fire training is occurring in the Multi-Purpose Maneuver Range, the military would activate one of three surface danger zones that extend over the ocean surface northwest of Tinian. This results in restrictions on fishing and boat traffic in that area for the duration of the training event (Figure 4.1-1). The temporary closure of offshore waters during live-fire events could result in rerouting vessel traffic by approximately 2 to 4 miles, potentially increasing fuel use, travel time, and exposure to rougher seas. However, local mariners often already avoid these nearshore areas due to natural hazards, including shallow reef structures and strong currents and around Puntan Taddong (also known as Ushi Point) at the northern tip of the island (Marianas Visitors Authority 2025; R. Dela Cruz Jr., Personal Communication, 2025; R. Sablan, Joint Region Marianas, Personal Communication, 2025). Many boats typically navigate at safe distances ranging from 500 feet to over a mile offshore, which often coincides with or exceeds the boundaries of the smallest surface danger zone used. To minimize these impacts, the USMC would provide a Notice to Mariners, published weekly by the U.S. Coast Guard, to identify when the danger zone would be active. Other forms of communication identified through public meeting input include multilingual notices, physical posting of schedule and other pertinent information at marinas, and use of social media or radio. In addition, USMC would collaborate with the CNMI and Tinian leadership to identify dates and locations for fishing tournaments or other events requiring use of the offshore areas surrounding the Military Lease Area.

Restored Public Access

During operation of the USAGM facility on Tinian, shore fishing along Lamanibot Bay from Puntan Lamanibot Sanhilo (Sanhilo) to Puntan Lamanibot Papa was restricted due to hazards from electromagnetic radiation. With USAGM closing operations and USMC utilizing the site for Base Camp, access to fishing in these areas would no longer be restricted.

Subsistence

Subsistence activities occur throughout the Military Lease Area and locations vary depending on seasons and weather. Access to hunting and foraging areas may be temporarily restricted when training events are active, which could temporarily affect the ability to gather coconut crabs, wild yams, medicinal plants, and other culturally significant resources, depending on the training area closed and the location of these natural resources. To minimize disruptions, access controls would be lifted as soon as possible after training concludes, and coordination with the local community would ensure training schedules align as much as possible with important subsistence activities. For more information about scheduling and temporary closures see section 2.1.8.3.

Tourism and Recreation

Live-fire training at the Multi-Purpose Maneuver Range would not restrict public access to the historic Atomic Bomb Loading Pits and beach access areas would remain largely open, such as Tachogna beach, Unai Chulu, and Unai Chiget. However, there may be brief and infrequent disruptions during active training periods. The surface danger zones would not affect popular dive sites around the island. However, as described in the Fishing and Boating section above, the temporary closure of offshore waters during live-fire events may result in rerouting vessel traffic by approximately 2 to 4 miles further offshore to safely navigate around restricted areas, resulting in minor increases in travel time and fuel use.

Tourism events such as the Tinian Hot Pepper Festival in February, the San Jose Fiesta in May, the Chief Taga Festival in October, and World War II commemorative events may utilize the Military Lease Area for hunting and gathering of food leading up to the event or for specific activities in the Military Lease Area during the event. USMC would collaborate with the CNMI and Tinian leadership to identify dates and locations for significant events requiring use of the Military Lease Area.

Agriculture and Ranching Activities

Current ranching activities would be minimally affected by training events. Ranchers would continue to have access to their cattle, and training operations would not alter or interfere with actively used agriculture areas. To minimize disruptions, the USMC would ensure that training activities do not interfere with grazing cattle and would provide clear detour information to affected ranchers during active training periods.

Access to Memorials, Sacred Sites, and Traditional Event Locations

Access to memorials, sacred sites, and traditional event locations in the Military Lease Area that are used by the community may be temporarily restricted when training is underway, depending on the type of training being conducted and the need to safely separate civilian access. For example, during live-fire training at the Multi-Purpose Maneuver Range, the public would be unable to access the memorial at Puntan Taddong (also known as Ushi Point). Some access-

controls may alter travel routes to avoid locations of military training. To reduce public access impacts to memorials, sacred sites, and traditional event locations, the on-island Range Control staff would work with local leaders to schedule training around major cultural events and ensure that access is restored as quickly as possible. For additional information on impacts to Cultural Resources, please see Section 4.5.

Minimizing Impacts to Public Access

The Proposed Action was developed by first identifying the training requirements necessary to support joint military operations. In coordination with the CNMI, the USMC then refined the training approach to minimize the effects of temporary and intermittent controlled access restrictions on civilian use of the Military Lease Area during training. Specifically:

- The Multi-Purpose Maneuver Range and the Explosives Training Range were sited within the Military Use Area such that public access would be allowed to the atomic bomb loading pits within the North Field National Historic Landmark. Public access to recreational beaches (e.g., Unai Chulu) within the Military Lease Area would be allowed when such access could be safely accommodated.
- The division of the Military Lease Area into eight separate range areas (Figure 2.1-2) would allow Range Control to schedule discreet areas of the Military Lease Area while allowing safe public access in all other areas where training activities would not be occurring.
- The establishment of an on-island Range Control would provide centralized management of the Military Lease Area. Range Control would be responsible for scheduling training, monitoring the conduct of training, and communicate the training schedule within the Military Lease Area to the community through various media. Public access to the specific training areas or zone within the Military Lease Area would be allowed and only restricted when access cannot be safely accommodated.
- During live-fire activities at the Multi-Purpose Maneuver Range, the surface danger zone activated would be based on the types of ammunition that would be used. It is anticipated that the smallest surface danger zone corresponding to 5.56 ammunition would be the most frequently activated because 5.56 ammunition is the most consistent training requirement. Should a non-participating boater, vehicle, or person approach the surface danger zone, or an aircraft approach in the overlying airspace, a combination of surface radar and spotters would notify the Officer in Charge to cease live-fire training until the non-participant is safely out of the surface danger zone.
- The USMC would employ an adaptive management approach—a structured and flexible decision-making process that allows for adjustments over time based on new information and changing conditions. This approach would be used to refine the scheduling of training within the Military Lease Area.

Summary

In summary, under Alternative 1, training would continue and would increase over the No Action Alternative by approximately 15 percent. The size of a training event and the type of training to be conducted would be some of the factors that Range Control would use in determining the locations within the Military Lease Area that the public could safely access when training is actually occurring. Larger training events, which would occur only two to four times per year,

would require larger portions of the Military Training Area and would likely involve the most controlled access. Some training could be conducted without any access controls.

With advanced notification of where, when, and how long training would occur, the public would be aware of and could plan around any temporary access controls imposed in the Military Lease Area. In addition, the local government would be able to work with Range Control to identify holidays, festivals, or other important days for which public access is needed. Moreover, the use of adaptive management by Range Control in scheduling training would allow the military to efficiently and effectively balance safe public access with military training needs. The DoD would maintain paved and unpaved roadways used for training within the Military Lease Area to address any deterioration related to training, which would have a beneficial impact for the public who would also use these roadways.

The Proposed Action would not introduce new military training activities at the Saipan USAGM site. As this area is already subject to access restrictions due to its existing use and security requirements, no changes to current public access limitations are anticipated. The intended use of the site would remain similar, and the level of access restrictions would remain consistent with current conditions. In summary, there would be less than significant impacts to public access from training, with implementation of Alternative 1.

4.1.3.2 Construction

Construction under Alternative 1 would be completed in phases over approximately 10-15 years. Construction would be dispersed throughout the Military Lease Area with most work occurring at the ranges and the Base Camp. Construction activities would slightly increase vehicular delays on roadways and would include temporary detours and/or road closures within the Military Lease Area. These temporary detours and/or road closures would reduce or delay access to publicly used sites in the Military Lease Area. However, any delays would be temporary, intermittent, coordinated with the community, and notice provided in advance. It is anticipated the public would still have access to recreation and cultural sites, agricultural use areas within the Military Lease Area, and roads for hiking, biking, or vehicle use during the construction period. The clearing and improvement of roads in the Military Lease Area would provide additional access to all parts of the Military Lease Area and would enhance both visitor and local experiences driving, hiking, or biking in the Military Lease Area. No construction would be required at the USAGM site on Saipan. As such, Alternative 1 would result in less than significant impacts to public access during construction.

4.1.4 Alternative 2

4.1.4.1 Training

Under Alternative 2, training would continue and would increase over the No Action Alternative by approximately 5 percent and impacts to public access would be similar in type and nature to those described for Alternative 1. As Alternative 1 would have less than significant impacts to public access during training events, and Alternative 2 would have 10 percent fewer training events than Alternative 1, Alternative 2 would result in less than significant impacts to public access during training. Additionally, the minimization measures described for Alternative 1 such as would apply under Alternative 2, which would reduce potential impacts related to public access to the

Military Lease Area for tourism, recreation, and subsistence uses. Therefore, Alternative 2 would result in less than significant impacts to public access during training events.

4.1.4.2 Construction

Because there would be no difference in the proposed facilities between Alternative 1 and Alternative 2, construction impacts would be the same for Alternative 2 as described for Alternative 1.

4.2 Land Use and Recreation

4.2.1 Approach to Analysis

The analysis of land use and recreation impacts focuses on the compatibility and consistency of the Proposed Action with existing land use plans and policies and recreational uses in and outside of the Military Lease Area.

Compatibility and consistency with existing land use plans, policies, and other agreements was analyzed by comparing land use and management under the Proposed Action to the requirements of: (1) *The Covenant to Establish a Commonwealth of the Northern Mariana Islands in Political Union with the United States of America* (The Covenant), which was approved and became effective on March 24, 1976; (2) the *Technical Agreement Regarding Use of Land to Be Leased by the United States in the Northern Mariana Islands* (Technical Agreement) signed on February 15, 1975; (3) the 1983 Lease Agreement, subsequently amended in 1988, 1994, 1999, and 2023, (4) the 1999 Conservation Agreement in relation to Fish and Wildlife Service Biological Opinion 1-2-98-F-07 and signed in conjunction with the 1999 Lease Amendment, and (5) the 2019 Commonwealth Ports Authority Lease as amended in 2023. This analysis considered proposed land uses identified in the 2019 and 2021 CNMI Public Land Use Plan Update as the baseline for comparison. Analysis of impacts to recreation considered restrictions on public access to the Military Lease Area from training, along with potential disruptions from construction activities.

4.2.2 No Action Alternative

Under the No Action Alternative, impacts of training on land use would continue consistent with The Covenant, Technical Agreement, and leases. Public access for recreation would not change. As a result, there would be no impact on land use or recreation.

4.2.3 Alternative 1

4.2.3.1 Compatibility and Consistency with Existing Land Use Plans and Policies

Training

Under Alternative 1, training events would continue and would increase over the No Action Alternative by approximately 15 percent. Ground and aviation training events that would occur in the Military Lease Area would be the same or similar to those currently authorized for Tinian under prior environmental analyses. Alternative 1 would expand training infrastructure to include two live-fire ranges (Multi-Purpose Maneuver Range and an Explosives Training Range), improvements to North Field, 13 Landing Zones throughout the Military Lease Area, and the establishment of a Base Camp, surface radar towers, and other supporting infrastructure.

Non-live-fire training could occur throughout the Military Lease Area. Live-fire training would only occur in the Multi-Purpose Maneuver Range and the Explosives Training Range. No training