

CHAPTER 9.

RECREATIONAL RESOURCES

9.1 INTRODUCTION

This chapter contains the discussion of the potential environmental consequences associated with implementation of the alternatives to accommodate the proposed transient berthing of an aircraft carrier within the region of influence (ROI) for recreational resources. For a description of the affected environment, refer to the respective chapter of Volume 2 (Marine Corps Relocation – Guam). The locations described in that Volume include the ROI for the aircraft carrier berthing component of the proposed action (Apra Harbor), and the chapters are presented in the same order as the resource areas contained in this Volume.

9.2 ENVIRONMENTAL CONSEQUENCES

9.2.1 Approach to Analysis

9.2.1.1 Methodology

Information on recreational resources on Guam and public access was collected through stakeholder meetings in April 2007, geographic information system data compiled and reviewed for this Environmental Impact Statement (EIS), literature review, personal communications, and the limited visitor data that are available at a few specific locations on the island. A comprehensive recreational carrying capacity analysis, assessing the number of individuals that could be supported in a given area within natural resource limits without degrading the natural social, cultural, or economic environment (Global Development Research Center 2008), was not conducted as part of this EIS, but is suggested as a proposed mitigation measure to better quantify potential impacts to recreational resources and their users. Existing baseline data for conducting recreational resource impact analyses are somewhat limited because the Government of Guam (GovGuam), Department of Parks and Recreation does not collect visitor data (e.g., user counts, visitor satisfaction, user conflicts, visitor demands, etc.) for its recreational facilities (Department of Parks and Recreation 2009). Consequently, the analysis in this chapter relied considerably on information obtained through site reconnaissance and communications with natural resource planners at Andersen Air Force Base (AFB) and park rangers at the National Park Service (NPS) that manage the War in the Pacific National Historical Park.

9.2.1.2 Determination of Significance

For the purpose of the EIS, the proposed action and alternatives would cause a significant impact to recreational resources if they:

- Would impede access to recreational resources
- Would substantially reduce recreational opportunities
- Would cause substantial conflicts between recreational users
- Would cause substantial physical deterioration of recreational resources

9.2.1.3 Issues Identified during Public Scoping Process

As part of the analysis, concerns regarding the potential impact of the project mentioned by the public, including regulatory stakeholders, during the public scoping meetings were addressed. These include:

civilian access to Department of Defense (DoD) facilities, recreation areas, Apra Harbor, and other locations, both in terms of the impact of construction activity and actual implementation of the proposed action.

9.2.2 Alternative 1 Polaris Point (Preferred Alternative)

9.2.2.1 Onshore

Construction

There are existing Morale, Welfare, and Recreation (MWR) facilities at Polaris Point with access restricted to DoD personnel and guests only. Access to and the use of MWR facilities, which include the beach at Polaris Point, softball/baseball fields, cabana, tennis courts, and indoor recreational facilities would be impeded during construction activities at Polaris Point. Comparable and alternate forms of recreational resources are available outside of the base in adjoining villages, popular tourist locations, and on DoD lands. Therefore, Alternative 1 would result in less than significant impacts to onshore recreational resources and users at Polaris Point during the construction phase of the project.

The peak construction total impact would peak at 1,478 people in 2012. By 2015, the increase would stabilize at 386 people, related to economic activity created by the spending of transient personnel. Many of these foreign workers would be housed in workforce housing. Review to date of the workforce housing applications indicates that most of them would be providing recreational resources. Many of these workers would not have their own transportation and would be relying on employer buses for transportation, limiting their access to other public recreational resources. Because most persons relocating would be primarily occupied with employment and/or school, the degree of recreational resource uses is likely to be higher on weekends and holidays. This work force is temporary in nature and would not have long term impacts.

Operation

Under Alternative 1, there would be a cumulative total of up to 63 transient carrier visit days per year, with an anticipated length of 21 days or less per visit. One of the primary reasons for extended port visits is to provide the liberty for Sailors and Airmen deployed for extended periods of time to the Western Pacific. As such, personnel involved with the proposed action are considered potential users of recreational resources on Guam during aircraft carrier visit days. No housing would be provided on-shore and the ship would continue to support the ship's personnel. Popular existing MWR facilities, such as gyms, bowling alleys, baseball fields, cabanas, and swimming pools would experience increased use. A beach that is used exclusively by DoD personnel and guests is situated east of the location of the proposed wharf and adjacent to the MWR facilities and this beach would also experience increased use. Although the impacts to these resources would be short-term, recreational resource users—existing and new—would experience crowding and increased competition for the available recreational resources.

To alleviate impacts to the limited recreational resources at Polaris Point during carrier visits, it is suggested that additional on base shuttle bus services to Dadi Beach, Gabgab Beach, and other DoD recreational facilities be provided to ensure Sailors and Airmen have the ability to access comparable and/or alternate recreational resources. For off base resources, Sailors would be able to take commercial shuttles and taxis. The Sailors and Airmen would also have the use of the new quality of life (QOL) facilities at the Main Cantonment, thereby helping to reduce the burden on non-DoD resources. Alleviating the recreational demands by the visiting Sailors and Airmen in the manners described above is likely to produce the unintended effect whereby recreational resources in other areas may experience sudden increase in the number of visitors and users. Therefore, by applying the proposed mitigating

measures, the potentially significant impacts to the recreational resources at Apra Harbor would be mitigated to a level of less than significant impact.

Increase in users to Guam's recreational resources during the carrier visits would likely result in increased competition for recreational opportunities and space. For instance, beaches would likely experience crowding. Other non-DoD recreational features that are popular and unique to the region (e.g., outdoor concerts at Ypao Park, snorkeling at the beaches in Tumon Bay, water parks at hotels, day use resorts, NPS units) could also be affected during the carrier visits. As is the case for the Government of Guam and DoD recreational resource administrators, the NPS has inadequate staffing (see Appendix G of the EIS on NPS comments); increase in the number of visitors to the Park and its assets is likely to exacerbate the described effects of the proposed action. However, the proposed action would involve an increase the number of in-port days for the aircraft carrier from approximately 16 to a cumulative total of up to 63 visit days per year. The remaining days would not have an increase in Sailors and Airmen population on Guam. Therefore, Alternative 1 would result in less than significant impacts to non-DoD recreational resources and users.

9.2.2.2 Offshore

Construction

Outer Apra Harbor hosts sunken historical relics and vessels from World Wars I and II and as a result, many dive sites exist today. The existing southward channel bend is between Jade and Western Shoals and in the vicinity of one dive site.

The proposed action would widen the channel at the bend and require dredging. The area of dredging is small and dredging would likely be completed within one to two days for a specific dredge section before moving into another dredging section, based on dredging production estimates. A conservative assumption of a week of dredging in the area to include silt curtain set up and interruptions in work due to Inner Apra Harbor transiting traffic, would result in an adverse impact on recreation. This impact would be less than significant because only the Western Shoals dive site would be impacted, and there are numerous recreational dive sites in Outer Apra Harbor and around Guam that could be used as alternatives. The short-term duration of the construction impact would not result in dive pressure on other Guam sites. No recreational sites were identified in the turning basin or proposed wharf area.

The east-west portion of the existing shipping channel in Outer Apra Harbor would be shared by the aircraft carrier and other ship traffic. No dredging would be required along this portion of the shipping channel. Dredging would result in an estimated one to two barges per day using this portion of the channel for an estimated 8 to 18 months. No impacts on recreational uses in Outer Apra Harbor are anticipated as there are no recreational sites located within the east-west portion of the shipping channel.

Alternative 1 would result in less than significant impacts to offshore recreational resources during construction. As a public awareness measure and to assist the public in planning its recreational activities near the project area, public notice of dredging activities would be provided. Dredging would proceed as rapidly as practicable to minimize the impact.

Operation

During aircraft carrier visits, a security clearance zone serving as a buffer to the ships would be enforced throughout the length of stay as a measure of force protection. The buffer distance is subject to change according to the force protection levels, with the minimum distance being 450 feet (ft) (137 meters [m]). Neither of the proposed wharves is in an area of offshore recreational water activities. The security

barriers would not impact recreational uses in Outer Apra Harbor (Table 9.2-1). Therefore, Alternative 1 would result in no impacts to offshore recreational resources during operation.

9.2.2.3 Summary of Alternative 1 Impacts

Table 9.2-1 summarizes Alternative 1 impacts.

Table 9.2-1. Summary of Alternative 1 Impacts

<i>Area</i>	<i>Project Activities</i>	<i>Project Specific Impacts</i>
Onshore	Construction	Access to recreational resources at Polaris Point may be impeded during construction activities, public recreational resources may see increased use from workforce growth
	Operation	Reduction in recreational opportunities; potential displacement of users; public recreational resources may see increased use
Offshore	Construction	Western Shoals dive sites would be impacted during dredging; other dive sites available for use
	Operation	No impacts

9.2.2.4 Alternative 1 Proposed Mitigation Measures

To alleviate impacts to the limited recreational resources at Polaris Point during carrier visits, one potential mitigation measure would be to provide additional on base shuttle/bus services to Dadi Beach, Gabgab Beach, and other DoD recreational facilities to ensure Sailors and Airmen have the ability to access comparable and/or alternate recreational resources. For off base recreational resources, Sailors would be able to take commercial shuttles and taxis.

Volume 7, Chapter 2 describes two additional mitigation measures; force flow reduction and adaptive program management of construction. Implementing either of these mitigation measures would further reduce impacts to recreational resources by lowering peak population levels during construction.

9.2.3 Alternative 2 Former Ship Repair Facility (SRF)

9.2.3.1 Onshore

Construction

At present, there are no recreational resources occurring at the Former Ship Repair Facility (SRF) site. Therefore, Alternative 2 Former SRF (referred to as Alternative 2) would result in no impacts to recreational resources at this site. However, as discussed in Alternative 1, some increase in pressure on public recreational resources could result from work force growth.

Operation

The proposed action would produce similar results as Alternative 1. There would be increased pressure on public recreational resources during the duration of aircraft carrier visits but also from work force growth. Although there are no existing MWR facilities on-site, additional shuttle services could be made available to transport ship personnel to recreation sites located elsewhere on base. Alternative 2 is closer to Naval Base Guam recreational activities and there may be less reliance on shuttle services. For off base resources, Sailors would be able to take commercial shuttles and taxis. Therefore, by relying on these proposed mitigating measures, the potentially significant impacts to recreational resources on and off base would be mitigated to a level of less than significant impact.

9.2.3.2 Offshore

Construction

The proposed action would produce identical results as Alternative 1. Therefore, Alternative 2 would result in less than significant impacts to recreational resources.

Operation

The proposed action would produce identical results as Alternative 1. Therefore, Alternative 2 would result in no impacts to recreational resources.

9.2.3.3 Summary of Alternative 2 Impacts

Table 9.2-2 summarizes Alternative 2 impacts.

Table 9.2-2. Summary of Alternative 2 Impacts

<i>Area</i>	<i>Project Activities</i>	<i>Project Specific Impacts</i>
Onshore	Construction	No impacts to SRF but public recreational resources may see increased use from work force growth
	Operation	Reduction in recreational opportunities; potential displacement of users; public recreational resources may see increased use
Offshore	Construction	Western Shoals dive sites would be impacted during dredging; other dive sites available for use
	Operation	No impacts

9.2.3.4 Alternative 2 Proposed Mitigation Measures

Mitigation measures would be the same as described for Alternative 1.

9.2.4 No-Action Alternative

Under the no-action alternative, no construction, dredging, or operations associated with the aircraft carrier berthing would occur. Existing operations at Polaris Point, as a military training and recreational facility, and the Former SRF, as a commercial SRF, would continue. When an aircraft carrier is berthed at Kilo Wharf, there are restrictions to recreational uses including dive sites in the vicinity of the wharf. Kilo Wharf would not be able to accommodate the planned tempo of visits, but the current port visit schedule would be accommodated and there would continue to be impacts on recreational uses. The no-action alternative would have impacts on recreation, but there are sufficient alternative recreational areas that the impact is minimized to less than significant levels.

9.2.5 Summary of Impacts

Table 9.2-3 summarizes the potential impacts.

Table 9.2-3. Summary of Impacts

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>No-Action Alternative</i>
Onshore: Construction		
LSI <ul style="list-style-type: none"> Access to recreational resources at Polaris Point may be impeded during the construction period. Public recreational resources may see increased use from workforce growth. 	NI <ul style="list-style-type: none"> No impacts to SRF expected. Public recreational resources may see increased use from workforce growth. 	NI <ul style="list-style-type: none"> No impacts expected
Onshore: Operation		
SI-M <ul style="list-style-type: none"> Increased users at the existing MWR facilities. Crowding at other recreational resources on non-DoD lands; competition for space/opportunity. Impacts may be alleviated with the application of proposed mitigation measures. 	SI-M <ul style="list-style-type: none"> Increased users at the existing MWR facilities. Crowding at other recreational resources on non-DoD lands; competition for space/opportunity. Impacts may be alleviated with the application of proposed mitigation measures. 	NI <ul style="list-style-type: none"> No impacts expected
Offshore: Construction		
LSI <ul style="list-style-type: none"> Western Shoals dive sites would be impacted during dredging. Other sites available for use. 	LSI <ul style="list-style-type: none"> Western Shoals dive sites would be impacted during dredging. Other sites available for use. 	NI <ul style="list-style-type: none"> No impacts expected
Offshore: Operation		
NI <ul style="list-style-type: none"> No impacts expected 	NI <ul style="list-style-type: none"> No impacts expected 	NI <ul style="list-style-type: none"> No impacts expected

Legend: SI-M = Significant impact mitigable to less than significant, LSI = Less than significant impact, NI = No impact

9.2.6 Summary of Proposed Mitigation Measures

Table 9.2-4 summarizes the proposed mitigation measures.

Table 9.2-4. Summary of Proposed Mitigation Measures

<i>Area</i>	<i>Alternative 1</i>	<i>Alternative 2</i>
Onshore	Construction	
	<ul style="list-style-type: none"> To alleviate impacts to the limited recreational resources at Polaris Point during construction, additional on-base shuttle bus services to Dadi Beach, Gabgab Beach, and other DoD recreational facilities would be provided to ensure Sailors and airmen have the ability to access comparable and/or alternate recreational resources. For off-base recreational resources, Sailors and airmen would be able to take commercial shuttles and taxis. 	<ul style="list-style-type: none"> Same as Alternative 1
	Operation	
	<ul style="list-style-type: none"> To alleviate impacts to the limited recreational resources at Polaris Point during carrier visits, additional on-base shuttle bus services to Dadi Beach, Gabgab Beach, and other DoD recreational facilities would be provided to ensure Sailors and Airmen have the ability to access comparable and/or alternate recreational resources. For off-base recreational resources, Sailors and Airmen would be able to take commercial shuttles and taxis. 	<ul style="list-style-type: none"> Same as Alternative 1
Offshore	Construction	
	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None
	Operation	
	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None

During aircraft carrier visits, bus and tour transport of ship personnel would be limited to tourist spots with higher carrying capacities than smaller and remote areas. To alleviate potentially significant impacts to the existing recreational resources at Polaris Point during carrier visits, it is suggested that additional on base shuttle services to Dadi Beach, Gabgab Beach, and other DoD recreational facilities be provided to ensure Sailors and Airmen have the ability to access comparable and/or alternate recreational resources. For off base recreational resources, Sailors would be able to take commercial shuttles and taxis. Other than the suggested use of alternative recreation sites in Outer Apra Harbor, no mitigation is proposed for the one week of restricted access due to construction at Western Shoals. For public awareness purposes, advance public notice of when that area would be dredged would be provided to assist the public in planning their recreational activities. Dredging would proceed as rapidly as practicable to minimize the impact.

Volume 7, Chapter 2 describes two additional mitigation measures; force flow reduction and adaptive program management of construction. Implementing either of these mitigation measures would further reduce impacts to recreational resources by lowering peak population levels during construction.