

## CHAPTER 9.

# RECREATIONAL RESOURCES

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### 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/Overseas Environmental Impact Statement (EIS/OEIS), 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/OEIS, but is suggested as a potential 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 that manage the War in the Pacific National Historical Park.

##### 9.2.1.2 Determination of Significance

For the purpose of the EIS/OEIS, 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 installation personnel and guests only. Access to MWR facilities, which include softball/baseball fields, cabana, tennis courts, and indoor recreational facilities may be impeded during construction activities at Polaris Point. Comparable and alternate forms of recreational resources are available outside of the base in adjoining villages and popular tourist locations, albeit at the cost of inconveniencing the personnel associated with the proposed action (e.g., finding transportation to the recreational resources). Therefore, Alternative 1 Polaris Point (referred to as 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.

#### 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 installation personnel and guests is situated east of the proposed location of the proposed wharf and adjacent to the MWR facilities 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 mitigate the potentially significant impacts to the existing recreational resources at Polaris Point, it is suggested that additional shuttle bus services and taxis be made available on-base to offer transportation services for the Sailors to other popular sites on the island including Tumon/Tamuning villages, which offer recreational, shopping, and entertainment resources. By providing comparable and/or alternate recreational resources available and accessible to Sailors and airmen, the impacts to the resources at Apra Harbor may be alleviated. Therefore, by applying the proposed mitigating measures, the potentially significant impacts to the recreational resources at Apra Harbor may be mitigated to a level of less than significance.

### 9.2.2.2 Offshore

#### Construction

The Outer Apra Harbor hosts sunken historical relics and vessels from World War 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, 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 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 channel. Dredging would result in an estimated one to two barges per day for an estimated 8 to 18 months. No impacts on recreational uses in Outer Apra Harbor are anticipated. No recreational sites are located within the shipping channel. Alternative 1 would result in less than significant impacts to onshore 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 Apra Harbor may be impeded during construction activities
	Operation	Reduction in recreational opportunities; potential displacement of users
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 Potential Mitigation Measures

To alleviate impacts to the limited recreational resources at Apra Harbor during carrier visits, provide additional on-base shuttle bus and taxi services to ensure Sailors and airmen have the ability to access comparable and/or alternate recreational resources off-base.

### 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 SRF site. Therefore, Alternative 2 Former SRF (referred to as Alternative 2) would result in no impacts to recreational resources.

##### Operation

The proposed action would produce similar results as Alternative 1. Although there are no existing MWR facilities on-site, shuttle services are available to transport ship personnel to sites on and off base. Alternative 2 is closer to Naval Base Guam recreational activities and there may be less reliance on shuttle services. Therefore, Alternative 2 would result in no impacts to recreational resources.

#### 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
	Operation	No impacts
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 Potential Mitigation Measures

No mitigation measures are required for Alternative 2.

### 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>
<b>Onshore: Construction</b>		
LSI <ul style="list-style-type: none"> <li>Access to recreational resources at Apra Harbor may be impeded during the construction period</li> </ul>	NI <ul style="list-style-type: none"> <li>No impacts expected</li> </ul>	NI <ul style="list-style-type: none"> <li>No impacts expected</li> </ul>
<b>Onshore: Operation</b>		
SI-M <ul style="list-style-type: none"> <li>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 potential mitigation measures.</li> </ul>	NI	NI <ul style="list-style-type: none"> <li>No impacts expected</li> </ul>
<b>Offshore: Construction</b>		
LSI <ul style="list-style-type: none"> <li>Western Shoals dive sites would be impacted during dredging. Other sites available for use.</li> </ul>	LSI <ul style="list-style-type: none"> <li>Western Shoals dive sites would be impacted during dredging.</li> </ul>	NI <ul style="list-style-type: none"> <li>No impacts expected</li> </ul>
<b>Offshore: Operation</b>		
NI <ul style="list-style-type: none"> <li>No impacts expected</li> </ul>	NI <ul style="list-style-type: none"> <li>No impacts expected</li> </ul>	NI <ul style="list-style-type: none"> <li>No impacts expected</li> </ul>

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

**9.2.6 Summary of Potential Mitigation Measures**

Table 9.2-4 summarizes the potential mitigation measures.

**Table 9.2-4. Summary of Potential Mitigation Measures**

<i>Area</i>	<i>Alternative 1</i>	<i>Alternative 2</i>
Onshore	<b>Construction</b>	
	<ul style="list-style-type: none"> <li>To alleviate impacts to the limited recreational resources at Apra Harbor during carrier visits, provide additional on-base shuttle bus and taxi services to ensure Sailors and airmen have the ability to access comparable and/or alternate recreational resources off-base.</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Onshore	<b>Operation</b>	
	<ul style="list-style-type: none"> <li>To alleviate impacts to the limited recreational resources at Apra Harbor during carrier visits,</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

Area	Alternative 1	Alternative 2
	provide additional on-base shuttle bus and taxi services to ensure Sailors and airmen have the ability to access comparable and/or alternate recreational resources off-base.	
Offshore	<b>Construction</b>	
	• None	• None
	<b>Operation</b>	
	• 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 Apra Harbor during carrier visits, it is suggested that additional on-base shuttle bus and taxi services be made available to ensure Sailors and airmen have the ability to access comparable and/or alternate recreational resources off-base. 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 could be provided to assist the public in planning their recreational activities. Dredging would proceed as rapidly as practicable to minimize the impact.