CHAPTER 19.
ENVIRONMENTAL JUSTICE AND THE PROTECTION OF CHILDREN

This chapter focuses on the potential for racial and ethnic minorities, low income populations, or children to be disproportionately affected by project-related impacts. Normally an analysis of environmental justice is initiated by determining the presence and proximity of these segments of the population relative to the specific locations that would experience adverse impacts to the human environment. The situation on Guam is unique in this regard because racial or ethnic minority groups (as defined by the U.S.) comprise a majority of the Guam population, and the proportions of people living in poverty or who are under 18 years of age are also substantially higher than in the general U.S. population. The analysis is further complicated by the fact that Guam is a relatively small and isolated island, and certain types of impacts would be experienced island-wide. Accordingly, the analysis of environmental justice described in this chapter acknowledges the unique demographic characteristics of the island population and assumes that the project effects could disproportionately affect disadvantaged groups and children because they comprise relatively high proportions of the population. By the same logic, potential mitigation measures that would reduce the severity of any significant project impacts to a less than significant level would be expected to effectively mitigate the associated environmental justice impacts to a less than significant level. Consequently, a distinction is made between potential significant impacts that would be mitigated and those for which no potential mitigations have been identified. The focus of this analysis is on the latter type of impacts.

19.1 INTRODUCTION

This chapter contains a discussion of the potential environmental consequences of the proposed action with regard to environmental justice and protection of children. For a description of the affected environment and a definition of the resource, refer to the respective chapter of Volume 2 (Marine Corps Relocation – Guam). The locations described in that volume include the region of influence (ROI) for the aircraft carrier berthing component of the proposed action and the chapters are presented in the same order as the resource areas contained in this Volume.

The Environmental Justice chapter focuses on disproportionate impacts to racial minorities, low-income populations, and children. For an analysis of potential island-wide impacts to these populations, please see the Socioeconomics Chapter of this Volume (Chapter 16).

19.2 ENVIRONMENTAL CONSEQUENCES

19.2.1 Approach to Analysis

19.2.1.1 Methodology

Volume 4 of this EIS/OEIS examines the potential impacts that each alternative would potentially have on various environmental and human resources. Based on the conclusions reached in each resource chapter, the analysis of environmental justice sought to identify the adverse impacts that would disproportionately affect racial minorities, children, and/or low-income populations, based on the following assumptions.
Environmental justice policies are intended to analyze disproportionate impacts of potentially harmful environmental impacts on minority or other special status populations. However, the island of Guam is unique in that the majority of the population is a racial or ethnic minority, and low-income and child populations also comprise a relatively large proportion of the population (compared to the U.S.). Consequently, in this analysis it is assumed that any adverse impact that would affect the island as a whole, and any localized adverse impact that would affect a particular concentration of special-status residents, would have a disproportionate effect in terms of environmental justice.

The ROI is defined as the area in which the principal effects arising from the implementation of the proposed action or alternatives are likely to occur. Those who may be affected by the consequences of the alternatives are often those who reside or otherwise occupy areas immediately adjacent to the alternative locations.

Because the proposed action is related either to construction or operation, impacts to the ROI would likely be either “spill over” effects that extend beyond an installation’s boundary line into the surrounding community, or impacts that directly affect minority populations in the ROI.

The analysis involved the application of three tiers of criteria to assess the environmental justice implications of each adverse effect identified in the relevant resource chapters:

• Tier 1: Are there any racial minorities, low-income, or children populations adjacent to the proposed action site?
• Tier 2: Are the applicable disadvantaged groups disproportionately affected by the negative environmental consequences of the proposed action(s)?
• Tier 3: Would the disproportionate adverse effects be significant?

19.2.1.2 Determination of Significance

According to Section 1508.27 of the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (CEQ 1979), determining the level of significance of an environmental impact requires that both context and intensity be considered. These are defined in Section 1508.27 as follows:

• “Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.”
• “Intensity. This refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:
  o Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect would be beneficial.
  o The degree to which the proposed action affects public health or safety.
  o Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
  o The degree to which the effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.
19.2.1.3 Issues Identified during Public Scoping Process

As part of the analysis, concerns relating to environmental justice or the protection of children that were mentioned by the public, including regulatory stakeholders, during scoping meetings were addressed. These included:

- Concerns that disruption to family lives and cultural values would ultimately, “jeopardize the future of [indigenous] children.”
- Concerns from the Micronesian Youth Services Network about ensuring that, “the transition of personnel on our islands will not disrupt our family lives and our cultural values...”
- Concerns that indigenous people of Guam are treated as second-class citizens. One commenter from Saipan indicated that, “these are their islands, and the locals’ culture and related artifacts which still can be found...are also deserving of respect.”
- Sanctuary, Incorporated, a non-profit organization focused on youth and their families, recommended using the Social Impact Assessment Guide and Principles as a basis for conducting the social impact study for this EIS/OEIS.
- The Chamorro Studies Association requested, “protect the people of Guam and their human rights.”
- The CMTF Social and Cultural Subcommittee submitted a comprehensive paper on the subject of Chamorro interests (see Appendix G). That subcommittee recommends that the EIS identify issues and concerns that must be addressed to minimize negative social impacts and allow local and military communities to live in harmony.

19.2.1.4 Best Management Practices

The following measures are designed to address issues that often complicate the public participation of low-income people. These issues include lack of transportation, language barriers, and internet/computer access. The following measures are recommended for public meetings and participation for actions proposed in this Volume. In addition, potential mitigation measures identified in Chapter 4 of this Volume are recommended.

- Public meetings should be held in locations along major public transportation routes so they are accessible to people without a car.
- Public meeting notices, announcements, and documents should be posted in paper form as well as online and be located in multiple, frequently accessed public places.
Written materials would be provided in the Chamorro language and a Chamorro-speaking interpreter would be used during meetings.

19.2.2 Alternative 1 Polaris Point (Preferred Alternative)

19.2.2.1 Onshore

Alternative 1 Polaris Point (referred to as Alternative 1) proposes to construct a wharf and supporting infrastructure and facilities at Polaris Point on Naval Base Guam. This section focuses on the adverse impacts anticipated from onshore construction of supporting infrastructure and facilities.

Noise

The proposed action at Polaris Point includes site clearing and construction of a staging area at the back of the wharf and construction of temporary Morale, Welfare, and Recreation (MWR) facilities and infrastructure. According to Chapter 2 of this Volume, the project would use specialized heavy equipment, including a dredger and a large floating crane barge with pile driving equipment (if piles are specified in the final design), and smaller cranes, concrete pumps, small barges, tugboats, and other excavation equipment. According to Chapter 6 of this Volume, the construction-related noise would not be above acceptable thresholds and would not have any long-term adverse impacts. Therefore, construction-generated noise impacts would be less than significant and no significant environmental justice impacts would be generated.

Traffic

The major roadway leading to Apra Harbor is Route 1. According to the FHWA study, construction-related traffic along Route 1 is not projected to reach the level of congestion by 2014. Therefore, the construction-related traffic impact would be less than significant for racial minorities and low-income populations living along Route 1. There would be no disproportionate impact to children.

19.2.2.2 Offshore

According to Chapter 6 of this Volume, proposed offshore actions include dredging and pile driving that would last for at least 8 to 18 months and up to 24 hours a day. The village in proximity to the harbor is Piti. Offshore recreational impacts may occur that are inter-related with socioeconomics and are discussed below.

Socioeconomics

Chapters 4, 9, and 16 of Volume 4 discuss potential impacts to local recreational tourism as a result of Alternative 1. Potential impacts are related to ocean-based recreation and tourism in the local area due to the silting from dredging that clouds and degrades the water environment and due to increased congestion in Apra Harbor. These are construction-related impacts that are considered short-term. With implementation of potential mitigation measures in Chapter 4 of this Volume, impacts due to dredging would be reduced to less than significant. Chapter 16 of this Volume describes a range of socioeconomic impacts, most of which are beneficial or less than significant. Chapter 16 also describes potential impacts related to crime and social order issues and community cohesion, but recommended potential mitigation measures would reduce impacts to a less than significant level. Accordingly, these impacts would not have a corresponding impact with regard to environmental justice and protection of children.

19.2.2.3 Summary of Alternative 1 Impacts

Table 19.2-1 summarizes the environmental justice impacts of Alternative 1.
Table 19.2-1. Summary of Alternative 1 Impacts

<table>
<thead>
<tr>
<th>Potential Impacts on Guam by Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
</tr>
<tr>
<td>While there would be construction-generated noise under Alternative 1, Chapter 6 of this Volume determined that the impact would be less than significant, including with regard to environmental justice and protection of children.</td>
</tr>
<tr>
<td>Onshore Traffic</td>
</tr>
<tr>
<td>The FHWA study predicts that construction-related traffic would not increase traffic to the level of congestion along Route 1 by 2014. Therefore, the impact would be less than significant for the racial minorities and low-income populations living near Route 1. There would be no disproportionate impact to children.</td>
</tr>
<tr>
<td>Socioeconomics</td>
</tr>
<tr>
<td>A mix of adverse and beneficial impacts associated with socioeconomics (some stemming from water quality and recreational resource issues) would result from the proposed action. None of the impacts would be significant (in some cases due to implementation of potential mitigation measures) There would be no significant environmental justice impacts to disadvantaged populations or children.</td>
</tr>
</tbody>
</table>

**Alternative 1**

Impact Summary:
- **Onshore Noise**
  - LSI (Racial Minorities)
  - LSI (Low-Income)
  - NI (Children)
- **Onshore Traffic**
  - LSI (Racial Minorities)
  - LSI (Low-Income)
  - NI (Children)
- **Socioeconomics**
  - SI-M (Racial Minorities)
  - SI-M (Low-Income)
  - NI (Children)

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

19.2.2.4 Alternative 1 Potential Mitigation Measures

The following potential mitigation measures would limit impacts to a less than significant level: potential mitigations identified in Chapter 4, Water Resources in this Volume to reduce impacts to offshore water quality, and potential mitigations identified in Chapter 16 with regard to social order issues and community cohesion.

19.2.3 Alternative 2 Former Ship Repair Facility (SRF)

19.2.3.1 Onshore

The effects would be the same as Alternative 1.

19.2.3.2 Offshore

The effects would be the same as Alternative 1.

19.2.3.3 Summary of Alternative 2 Impacts

Table 19.2-2 summarizes the environmental justice impacts of Alternative 2.
### Table 19.2-2. Summary of Alternative 2 Impacts

<table>
<thead>
<tr>
<th>Potential Impacts by Area</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>No-Action Alternative</th>
</tr>
</thead>
</table>
| **Onshore Noise**        | • LSI (Racial Minorities)  
                          • LSI (Low-Income)  
                          • NI (Children)  
|                          | • Impacts are the same as for Alternative 1. | • Impacts are the same as for Alternative 1. | NI |
| **Onshore Traffic**      | • LSI (Racial Minorities)  
                          • LSI (Low-Income)  
                          • NI (Children)  
|                          | • Impacts are the same as for Alternative 1. | • Impacts are the same as for Alternative 1. | NI |
| **Socioeconomics**       | • SI-M (Racial Minorities)  
                          • SI-M (Low-Income)  
                          • NI (Children)  
|                          | • Impacts are the same as for Alternative 1. | • Impacts are the same as for Alternative 1. | NI |
| **Offshore Traffic**     | • LSI (Racial Minorities)  
                          • LSI (Low-Income)  
                          • NI (Children)  
|                          | • Impacts are the same as for Alternative 1. | • Impacts are the same as for Alternative 1. | NI |

Notes: SI = Significant impact; SI-M = Significant impact mitigable to less than significant; LSI = Less than significant impact; NI = No impact; BI = Beneficial impact

In summary, this chapter examined potentially adverse environmental effects related to noise and traffic impacts during construction and socioeconomic impacts (related to water quality/dredging issues, social order issues and community cohesion) that could affect local businesses near the harbor. However, with
implementation of potential mitigation measures described in Chapter 4, 9, and Chapter 16 of this Volume, the impacts would be reduced to less than significant. Chapter 6 of this Volume and the FHWA study indicate that noise and traffic impacts would be less than significant. There would be no significant environmental justice impacts associated with the proposed carrier berthing action.

19.2.6 Summary of Potential Mitigation Measures

There would be no mitigation measures required aside from those measures that were identified in Chapter 4, Water Resources, Chapter 9, Recreation, and Chapter 16, Socioeconomics, in this Volume. These potential mitigation measures would mitigate impacts to less than significant.