

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 Tinian is unique in this regard because racial or ethnic minority groups (as defined by the United States [U.S.]) comprise almost all of the Tinian 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 Tinian is a relatively small and isolated island, and certain types of impacts would be experienced islandwide. 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, proposed mitigation measures would be expected to effectively mitigate potential environmental justice impacts. Consequently, a distinction is made between potential impacts that would be mitigated and those for which no mitigations have been identified. The focus of this analysis is on the latter type of impacts. If a resource area did not have significant impacts, or were mitigable to less than significant, as analyzed in each individual chapter in Volume 2, then it was not further analyzed in this chapter. These resources are: geology and soils, water resources, air quality, noise, airspace, recreation, terrestrial and marine biological resources, visual, marine transportation, cultural resources, and hazardous materials and waste.

19.1 AFFECTED ENVIRONMENT

19.1.1 Definition of Resource

In 1994, President Clinton issued Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, in response to growing concern that minority and low-income populations bear adverse health and environmental effects disproportionately. EO 12898 requires federal agencies to assess the potential for their actions to have disproportionately high and adverse environmental and health impacts on minority and low-income populations. In 1997, EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks* required a similar analysis for children. Federal agencies must identify and assess environmental health risks and safety risks that may disproportionately affect children.

EO 12898 authorized the creation of an Interagency Working Group on Environmental Justice, overseen by the United States Environmental Protection Agency (USEPA), to implement the EO's requirements. The Interagency Working Group and the USEPA developed guidance for terms contained in the EO. The USEPA (2009) defines environmental justice as, "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

The USEPA (1995) defines "fair treatment" as follows: "No group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local,

and tribal programs and policies.” A “disproportionate share of the negative environmental consequences” is an adverse effect or impact that is predominately borne by any segment of the population, including a minority population or a low income population. It can also mean that the suffering experienced by a minority population or low income population is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by a non-minority or non-low-income population (USEPA 2009).

The USEPA defines “meaningful involvement” as follows:

- Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that would affect their environment and/or health
- The public’s contribution can influence the regulatory agency’s decision
- The concerns of all participants involved would be considered in the decision making process
- The decision makers seek out and facilitate the involvement of those potentially affected

The Presidential Memorandum that accompanies EO 12898 cites the importance of National Environmental Policy Act (NEPA) in identifying and addressing environmental justice concerns. The memorandum states that, “each federal agency shall analyze the environmental effects, including human health, economic and social effects, of federal actions, including effects on minority communities and low-income communities, when such analysis is required by NEPA” (Presidential Documents 1994). The memorandum emphasizes the importance of NEPA’s public participation process, directing that, “each federal agency shall provide opportunities for community input in the NEPA process.” Agencies are directed to identify potential impacts and mitigations in consultation with affected communities and ensure the accessibility of meetings, crucial documents, and notices.” The Presidential Memorandum includes four provisions that identify ways agencies should consider environmental justice under NEPA:

- Each federal agency should analyze the environmental effects, including human health, economic, and social effects of federal actions, including effects on minority populations and low-income populations, and Indian tribes, when such analysis is required by NEPA.
- Mitigation measures identified as part of an Environmental Assessment, a Finding of No Significant Impact, an Environmental Impact Statement (EIS), or a Record of Decision (ROD) should, whenever feasible, address significant and adverse environmental effects of proposed federal actions on minority populations, low-income populations, and Indian tribes.
- Each federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices.
- Review of NEPA compliance must ensure that the lead agency preparing NEPA analyses and documentation has appropriately analyzed environmental effects on minority populations, low-income populations, or Indian tribes, including human health, social, and economic effects.

Neither the EO nor Council on Environmental Quality (CEQ) prescribes a specific format for environmental justice assessments in the context of NEPA documents. However, CEQ (1997) identifies the following seven general principles intended to guide the integration of environmental justice assessment into NEPA compliance, and that are applicable to the proposed project:

- Agencies should consider the composition of the affected area to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the

- proposed action and, if so, whether there may be disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or Indian tribes.
- Agencies should consider relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards, to the extent such information is reasonably available. For example, data may suggest there are disproportionately high and adverse human health or environmental effects on a minority population, low-income population, or Indian tribe from the agency action. Agencies should consider these multiple, or cumulative effects, even if certain effects are not within the control or subject to the discretion of the agency proposing the action.
 - Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the agency's proposed action. These factors should include the physical sensitivity of the community or population to particular impacts; the effect of any disruption on the community structure associated with the proposed action; and the nature and degree of impact on the physical and social structure of the community.
 - Agencies should develop effective public participation strategies. Agencies should, as appropriate, acknowledge and seek to overcome linguistic, cultural, institutional, geographic, and other barriers to meaningful participation, and should incorporate active outreach to affected groups.
 - Agencies should assure meaningful community representation in the process. Agencies should be aware of the diverse constituencies within any particular community when they seek community representation and should endeavor to have complete representation of the community as a whole. Agencies also should be aware that community participation must occur as early as possible if it is to be meaningful.
 - Agencies should seek tribal representation in a manner that is consistent with current procedures and protocols between the U.S. and tribal governments, the federal government's trust responsibility to federally-recognized tribes, and any treaty rights.
 - CEQ (1997) states that the identification of a disproportionately high and adverse human health or environmental effect on a low-income or minority population does not preclude a proposed agency action from going forward with an action, or compel a finding that a proposed project is environmentally unacceptable. Instead, the identification of such effects is expected to encourage agency consideration of alternatives, mitigation measures, and preferences expressed by the affected community or population.

The following assumptions apply to this chapter:

- This chapter defines a racial minority according to the 2005 Commonwealth of the Northern Mariana Islands (CNMI) Department of Commerce Household Income and Expenditure Survey's definition of ethnicity (the survey does not refer at all to race). This includes Chamorro, Filipino, Chinese, Asian, Pacific Islander, and Caucasian. The 2005 CNMI survey used U.S. Census racial and ethnic categories.
- Children are defined as people under the age of 18. However, because the CNMI Department of Commerce (2005) collected data from age 20 and younger, the discussion of children would involve this age group.

- According to the 2005 CNMI Department of Commerce Household Income and Expenditure Survey, the largest single ethnic group in the CNMI is Filipino (30%), followed by Chamorro (23%), and Chinese (16%). The Carolinians are about 5% of the population. Asians comprise more than 53% of the CNMI's total population, Pacific Islanders approximately 37%, and Caucasian less than 2%. About 8% of the CNMI's total population is comprised of people with multiple ethnicities.
- According to the U.S. Census 2000, "Native Hawaiian and Other Pacific Islander" refers to any of the original peoples of Guam, Hawaii, Samoa, or other Pacific Islands. This category includes people who indicated their race or races as Native Hawaiian, Chamorro, Samoan, Carolinian, Chuukese, Tahitian, Mariana Islander, Kosraean, Marshallese, Palauan, Pohnpeian, Yapese, or Other Pacific Islander (Grieco and Cassidy 2001, U.S. Department of Commerce 2003).

The location of the proposed actions and alternatives is Tinian, an island in the CNMI. With an estimated total population of 2,829, Tinian contains about 4% of the CNMI's total population (CNMI Department of Commerce 2005). Tinian's population is concentrated in three villages in the southern portion of the island: San Jose, Marpo, and Carolinas (Figure 19.1-1). According to the CNMI Department of Commerce (2005), the majority of Tinian residents live in San Jose (76%), while about 20% live in Marpo and less than 3% in Carolinas. This section provides an overview of the racial composition, percentage of households in poverty, and relative percentage of children in each village.

Racial or Ethnic Minorities

The largest racial/ethnic group on Tinian is Chamorro (44%), followed by Filipino (32%) and Chinese (9%) (CNMI Department of Commerce 2005). Asians comprise about half (49%) of Tinian's total population, Pacific Islanders nearly the other half (42%), and Caucasians only 1%. People with multiple ethnicities comprise about 5% of Tinian's population (CNMI Department of Commerce 2005).

Low-Income Population

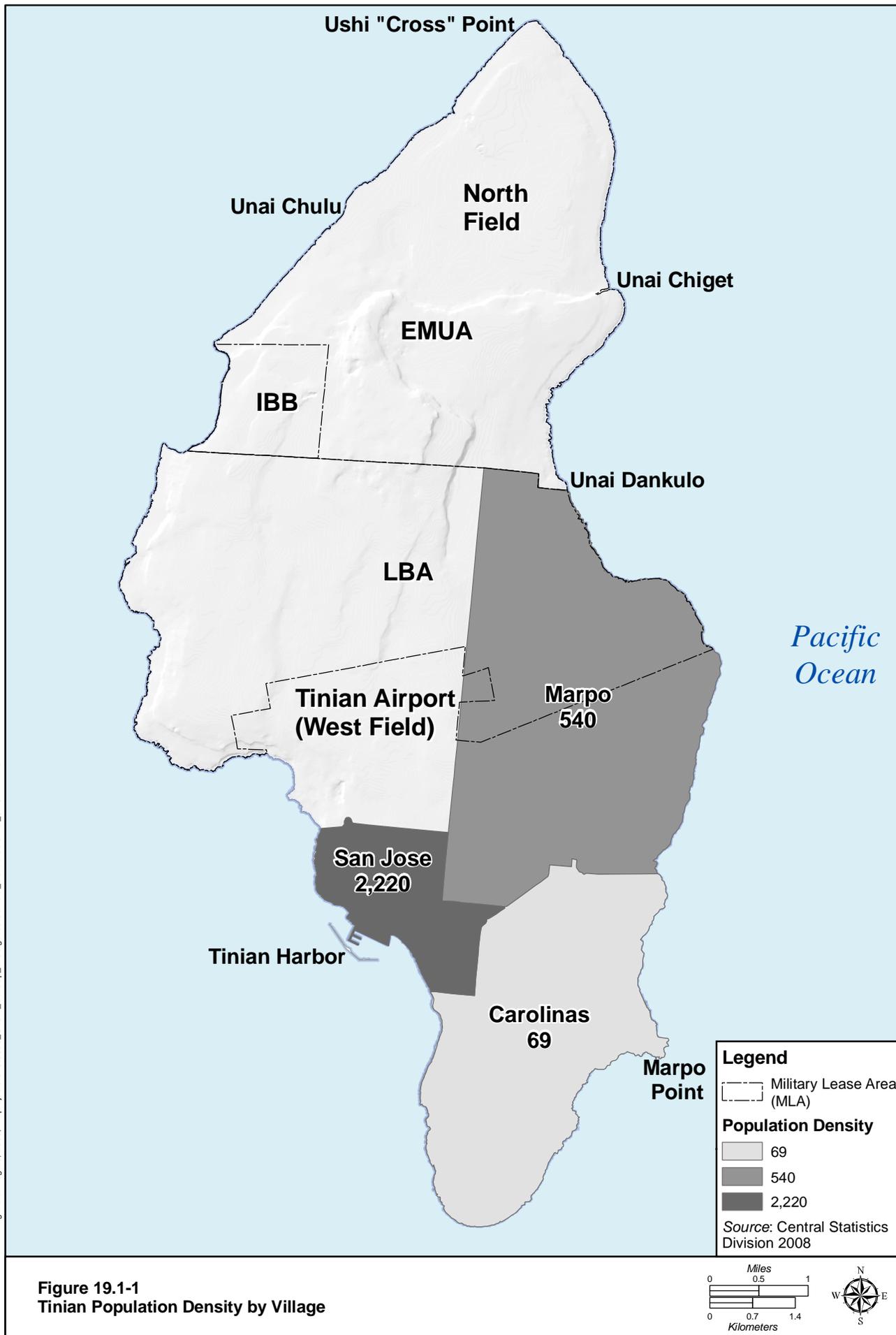
Of over 650 Tinian households that responded to the 2005 CNMI Department of Commerce Household Income and Expenditure Survey, 48% have an income less than \$20,000 per year, and 22% of those households have a household income below \$10,000. In the year that the CNMI survey was conducted (2004), the federal poverty line for a family of four was \$18,850 (U.S. Department of Health and Social Services 2004). Therefore, nearly half of the households of Tinian were living near or below the federal poverty line in 2004, and almost one quarter of those households had an income of only \$10,000 (CNMI Department of Commerce 2005). Table 19.1-1 outlines the poverty rate on Tinian is nearly double that of Dededo, and more than four times the rate of the U.S.

Table 19.1-1. Comparison of Poverty on Tinian

<i>Tinian</i>	<i>Dededo</i>	<i>U.S.</i>
48%	25.8%	11.3%

Notes: Data for Dededo and the U.S. are for 2000. This is the most recent demographic data available for Dededo.

Sources: U.S. Census Bureau 2000, CNMI Department of Commerce 2005.



Children

Approximately 28% of Tinian's population is age 20 or younger, and nearly 53% of Tinian's population is between the ages of 20–44 (CNMI Department of Commerce 2005). This is because there were a large number of migrant workers on Tinian who fell into the 20-44 age category when the CNMI Department of Commerce 2005 study was conducted. Compared to many villages on Guam, including Dededo, Tinian does not have a high percentage of children; however, it has a higher percentage of children than the U.S. (Table 19.1-2).

Table 19.1-2. Comparison of Percent of Children on Tinian

<i>Tinian</i>	<i>Dededo</i>	<i>U.S.</i>
28%	36%	21.4%

Notes: Data for Dededo and the U.S. are for 2000. This is the most recent demographic data available for Dededo.

Sources: U.S. Census Bureau 2000, CNMI Department of Commerce 2005.

In summary, when compared to a village on Guam with a similar demographic profile (Dededo), and the U.S. population as a whole, Tinian has a high percentage of racial minorities and households living in poverty.

19.2 ENVIRONMENTAL CONSEQUENCES

19.2.1 Approach to Analysis

19.2.1.1 Methodology

Volume 3 of this EIS 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 and Protection of Children policies require a federal agency to analyze whether its proposed action would adversely affect a minority, low-income, and child population disproportionately to the rest of the community. The island of Tinian is unique in that a majority of the population of Tinian meets the criteria for being an Asian Pacific minority group in the context of the overall U.S. population. As a result, where the EIS identifies significant impacts for a particular resource, there would be a corresponding, island-wide adverse effect to minority populations on Tinian, compared to the U.S. population. However, because of international agreements that require the proposed action to focus on Guam and CNMI, and not other locations within the U.S., the evaluation of environmental justice would be on whether there are disproportionate adverse effects within the context of alternatives for facility location on Tinian. Because of this, it would be impossible for there to be a disproportionate effect from an identified adverse impact based solely on the impact affecting a minority population. Therefore, the analysis for environmental justice on Tinian must consider whether there is a disproportionate adverse effect on a low-income population or children. For example, if there is a low-income population that is being impacted by a potential reduction in Public Health and Social Services, that impact would be considered a significant impact because the population, as a given, is a minority population and it is being disproportionately affected because it is a low-income population. As a result, some resource areas may have effects on a minority

- population, but because they do not impact a low-income or child population in a disproportionate manner they will not be considered as causing an environmental justice adverse effect.
- The region of influence (ROI) is defined as the area that the principal effects arising from the implementation of the proposed action or alternatives are likely to occur. Those who potentially may be affected by the consequences of the alternatives are those who reside or otherwise occupy areas immediately adjacent to the alternative locations.
 - Because the proposed actions are related either to construction or operations, 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 for each significant impact identified in the relevant resource chapters. In some cases if the analysis shows that the requirements for the specific criteria have not been met, then a discussion on the next tier may not be required. For instance, if an applicable disadvantaged group is not disproportionately affected in Tier 2, then a discussion on significant effects under environmental justice would not be warranted.

- *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 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:
 - 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.
 - The degree that the proposed action affects public health or safety.
 - 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.
 - The degree that the effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.
 - The degree that the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- The degree that the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
- The degree that the action may adversely affect an endangered or threatened species or its habitat that has been determined critical under the Endangered Species Act of 1973.
- Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.”

19.2.1.3 Issues Identified During Public Scoping Process

No issues specific to environmental justice or protection of children were mentioned by the public, including regulatory stakeholders, during the public scoping meetings.

19.2.1.4 Public Involvement

Public involvement measures were implemented to address issues that often complicate the public participation of disadvantaged groups. These issues include lack of transportation, language barriers, and internet/computer access. To ensure that non-English speakers and low-income people were involved in the EIS process and were able to voice their concerns about the military relocation, the following outreach measures were taken during the scoping and Draft EIS comment periods:

- Public meeting notices, announcements, and documents were posted in paper form as well as online and were located in public libraries.
- Scoping meeting notices and comment forms were mailed to elected officials, agencies and organizations encouraging comments on the proposed action .
- Scoping meeting materials (handouts, posters, etc) were in English and Chamorro.
- The Draft EIS Executive Summary was made available online and at public hearings in English, Chamorro, and Carolinian.
- Chamorro and Carolinian interpreters were present at public hearings.
- Verbal public comments in Chamorro and Carolinian taken at public hearings were translated into English and included in transcripts.

19.2.2 Alternative 1 (Preferred Alternative)

19.2.2.1 Tinian

Construction

The construction associated with this project should be minimal because proposed actions are focused on intermittent training operations that would be set up impromptu and would not have permanent support structures associated with them. Further, any construction that does occur would be done north of San Jose, and thus would not be in proximity to the local population. Therefore, there would be no impacts associated with construction.

Operation

Proposed operations as described in Volume 3, Chapter 2 include introducing live-fire weapons training into the Tinian Military Lease Area. There would be no permanent support facilities, equipment, or

ammunition storage because the type of training conducted would require Marines to bring their own equipment and remove it when they are finished. During range operations, Marines would set up manned traffic control points, range flags, and Safety Distance Zone (SDZ) observation points. Controlled access would be allowed to historic sites and northern beaches during training activities in accordance with procedures described in Section 2.3.4.4.

Marines who participate in the training would be transported to Tinian from Guam for the proposed one week per month company-level training exercises. Approximately 200-400 Marines would be expected to train at any one time.

As Chapter 2 describes, it is estimated that civilian access to and through the Range Training Area (RTA) would be affected approximately 12 to 16 weeks per year. The limit of the restrictions would depend on the training uses scheduled:

- For use of the weapons ranges, portion of the RTA would be closed for safety reasons. Locations of traffic control points are presented in Section 2.5 for each action alternative.
- For larger exercises, the entire RTA would be closed to use; however, access to northern beaches and the International Broadcasting Bureau (IBB) property would not be restricted.
- Periods of closure would last from a day before the scheduled event to ensure clearance, through post-event clean up and transport back to Guam.
- According to Chapter 2, during periods of non-military use, it is anticipated that the RTA would be available for civilian purposes consistent with RTA policies, subject to management restrictions to protect public safety, property, and the environment. These uses include the proposed landfill, the proposed wastewater treatment plant, and agency personnel access for natural and cultural resource surveys on Tinian. Periods of potential civilian use would need to be defined within RTA management procedures.

Land Use

According to Chapter 8, the Tinian Leaseback Area (LBA) is approximately 7,779 ac (3,148 ha) and located in the middle third of the island. The CNMI government issues permits for LBA lands to Tinian residents for grazing and agricultural uses. There are 35 lessees, leasing 48 parcels in the LBA for a total agriculture/grazing permit area estimated at 2,552 ac (1,032 ha). Only an estimated 134 ac (55 ha) of the total agricultural lease area would be terminated because these areas would be located within the proposed Alternative 1 range footprints and associated SDZs.

The LBA is used for ground element training including MOUT-type training, command and control, logistics, bivouac, vehicle land navigation, convoy training, and other field activities. Under Alternative 1, permits within the LBA located in the range footprints or SDZs would be terminated, causing less than significant impact to land ownership, but significant impact to agricultural land use.

Tier 1: Are there any racial minorities, low-income, or children populations adjacent to the proposed action site?

Nearly 99% of the Tinian population is a racial minority, and the island has a very high percentage of people living in poverty relative to the U.S. and Dededo (refer to Table 19.1-2). The disadvantaged populations are not adjacent to the site, but they access the leased lands for their work.

Tier 2: Are the applicable disadvantaged groups disproportionately affected by the negative environmental consequences of the proposed action(s)?

Tinian ranchers would be disproportionately impacted by the proposed actions because their grazing rights in the leased land areas would end. Local workers who currently collect and sell wild chili-peppers in the leased area (most of whom are presumably part of the low-income population of the island) would also be disproportionately impacted by the proposed operations because their access to these resources would be restricted. The health and safety of children would not be disproportionately affected.

Tier 3: Would the disproportionate adverse effects be significant?

The impacts on the agricultural land uses would result in disproportionately high and adverse effects on low-income populations, and these effects would be significant. Grazing opportunities in the more densely-developed south are limited, and the movement of grazing animals to other areas may be restricted by the need to protect native forest habitat of concern for ESA-listed species (refer to Chapter 10, Terrestrial Biological Resources).

Socioeconomics

Restricted access to the military leased land areas would also impede the work of Tinian ranchers and other local agricultural workers. The grazing rights of Tinian ranchers with leases within the range footprints and associated SDZs would be terminated and incomes of local workers who currently collect and sell wild chili-peppers in the leased area would be affected.

Tier 1: Are there any racial minorities, low-income, or children populations adjacent to the proposed action site?

Nearly 99% of the Tinian population is a racial minority, and the island has a very high percentage of people living in poverty relative to the U.S. and Dededo (refer to Table 19.1-2). The disadvantaged populations are not adjacent to the site, but they access the leased lands for their work.

Tier 2: Are the applicable disadvantaged groups disproportionately affected by the negative environmental consequences of the proposed action(s)?

Tinian ranchers would be disproportionately impacted by the proposed actions because their grazing rights in the leased land areas would end, adversely affecting their income. Local workers who currently collect and sell wild chili-peppers in the leased area (most of whom are presumably part of the low-income population of the island) would also be disproportionately impacted by the proposed operations because their access to these resources that they sell for income would be restricted. The health and safety of children would not be disproportionately affected.

Tier 3: Would the disproportionate adverse effects be significant?

The impacts on the agricultural land uses would result in disproportionately high and adverse effects on low-income populations, and these effects would be significant. Grazing opportunities in the more densely-developed south are limited, and the movement of grazing animals to other areas may be restricted by the need to protect native forest habitat of concern for ESA-listed species (refer to Chapter 10, Terrestrial Biological Resources).

19.2.2.2 Summary of Alternative 1 Impacts

Table 19.2-1 summarizes Alternative 1 impacts.

Table 19.2-1. Summary of Alternative 1 Impacts

<i>Potential Impacts on Tinian by Resource</i>
Land Use and Socioeconomics
Ranchers and agricultural workers would lose access to leased lands needed to perform their work. This would result in a disproportionately high and adverse impact to low-income groups, and this impact would be significant. There would be no disproportionate health and safety impacts to children.
Alternative 1
<u>Land Use and Socioeconomics</u>
<ul style="list-style-type: none"> • SI (low-income) • NI (children)

Legend: SI = Significant impact, NI = No impact.

19.2.2.3 Alternative 1 Proposed Mitigation Measures

Implementation of the mitigation measures in Chapter 16 for impacts related to socioeconomics would also reduce associated impacts related to environmental justice.

19.2.3 Alternative 2

19.2.3.1 Tinian

Construction

The impacts for this alternative are the same as for Alternative 1.

Operation

The impacts for this alternative are the same as for Alternative 1.

19.2.3.2 Summary of Alternative 2 Impacts

Table 19.2-2 summarizes Alternative 2 impacts.

Table 19.2-2. Summary of Alternative 2 Impacts

<i>Potential Impacts on Tinian by Resource</i>
Land Use and Socioeconomics
The potential impacts for Alternative 2 are the same as for Alternative 1.

19.2.3.3 Alternative 2 Proposed Mitigation Measures

Mitigation measures are the same as Alternative 1.

19.2.4 Alternative 3

19.2.4.1 Tinian

Construction

The impacts for this alternative are the same as for Alternative 1.

Operation

The impacts for this alternative are the same as for Alternative 1.

19.2.4.2 Summary of Alternative 3 Impacts

Table 19.2-3 summarizes Alternative 3 impacts.

Table 19.2-3. Summary of Alternative 3 Environmental Justice Impacts

<i>Potential Impacts on Tinian by Resource</i>
Land Use and Socioeconomics
The potential impacts for Alternative 3 are the same as for Alternative 1.

19.2.4.3 Alternative 3 Proposed Mitigation Measures

Mitigation measures are the same as Alternatives 1.

19.2.5 No-Action Alternative

Under the no-action alternative, no new construction or new training activities associated with the Marine Corps relocation to Guam would occur in Tinian, and the Marine Corps would not meet training needs and requirements in support of the proposed action. The purpose and need for training in Tinian as described in Chapter 1 would not be met. Existing operations at the proposed project areas would continue. Ranchers would continue to utilize the more ample grazing land opportunities in the leased area. Therefore, the no-action alternative would have no impacts to minority, low-income, or child populations.

19.2.6 Summary of Impacts

Table 19.2-4 summarizes the potential impacts of each action alternative and the no-action alternative. The proposed action would have disproportionate impacts to low-income population on the island of Tinian related to land use and socioeconomics. Significant land use and economic impacts may be experienced by Tinian ranchers and locals who pick and sell wild chili-peppers from the leased land because they would be restricted from accessing the land needed to perform their work. Mitigation measures discussed in Chapter 16 would reduce impacts to low-income people of Tinian.

Table 19.2-4. Summary of Volume 3 Environmental Justice Impacts

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>	<i>No-Action Alternative</i>
<u>Land Use /Socioeconomics:</u> SI • Low-income	<u>Land Use /Socioeconomics:</u> SI • Low-income	<u>Land Use /Socioeconomics:</u> SI • Low-income	<u>LandUse/ Socioeconomics:</u> NI

Legend: SI = Significant impact, NI = No impact.

19.2.7 Summary of Proposed Mitigation Measures

Table 19.2-5 summarizes the proposed mitigation measures.

Table 19.2-5. Summary of Proposed Mitigation Measures

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>
<u>Land Use/Socioeconomics:</u> • Mitigation measures discussed in Chapter 16	<u>Land Use/Socioeconomics:</u> • Mitigation measures discussed in Chapter 16	<u>Land Use/Socioeconomics:</u> • Mitigation measures discussed in Chapter 16