

3.11 ENVIRONMENTAL JUSTICE

This section assesses the effects of the non-native cordgrass treatment on environmental justice near the treatment areas. The Region of Influence for environmental justice consists of communities near the treatment areas in the nine-county Bay Area (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties) and Sacramento County. Anglers who fish for recreation and subsistence, and others who use the intertidal area for recreation were also considered in this analysis.

3.11.1 Environmental Setting

The objectives of Executive Order (EO) 12898, Environmental Justice, include identification of disproportionately high and adverse health and environmental effects on minority populations and low-income populations that could be caused by a proposed Federal action. Accompanying EO 12898 was a Presidential Transmittal Memorandum that referenced existing Federal statutes and regulations, including the National Environmental Policy Act (NEPA), to be used in conjunction with the EO. The Council on Environmental Quality (CEQ) issued *Guidance Under NEPA* in December 1997 (CEQ 1997). Minority populations include all persons identified by the U.S. Census of Population and Housing to be of Hispanic origin, regardless of race, and all persons not of Hispanic origin other than White (i.e., Black, American Indian, Eskimo or Aleut, Asian or Pacific Islander, or other race). Income levels vary widely in neighborhoods near treatment areas.

The treatment areas would occur in communities with low-, middle-, and high-income residents. The treatment areas would be in both minority dominated, and non-minority communities. Recreationalists using potential treatment areas also come from all income levels and ethnicities.

However, according to the California Office of Environmental Health Hazard Assessment, the environmental organization, Save the Bay, conducted a survey in 1995 of 228 anglers at fishing piers in the Central and North Bays. (*Fishing for Food in San Francisco Bay, Part II*), and found that most anglers were male and over 70 percent non-Caucasian. Asians were the predominant ethnic group of anglers, comprising about 36 percent of those interviewed.

3.1.2 Analysis of Potential Effects

Resource impacts identified in this EIS/R were considered to determine the potential for high and adverse health and environmental impacts to human populations. If impacts were identified, an analysis of the potential for disproportionately high and adverse impacts to minority and low-income populations was conducted.

Significance Criteria

No formal, commonly accepted significance criteria have been adopted for Environmental Justice impacts. However, the Presidential Memorandum accompanying the EO directs Federal agencies to include measures to mitigate disproportionately high and adverse environmental effects of proposed Federal actions on minority and low-income populations. Federal agencies also are required to give affected communities opportunities to provide input into the NEPA process, including identification of mitigation measures. No specific significance thresholds have been developed.

1 Application of EO 12898 to NEPA documentation suggests two questions should be examined:

- 2 • Is a Federal project with significant adverse environmental impacts being proposed in a
- 3 community comprised largely of minority or low-income persons?
- 4 • Would any significant adverse human health or environmental effects of the project
- 5 disproportionately affect minority or low-income persons?

6 **ALTERNATIVE 1: Proposed Action/Proposed Project. Regional Eradication Using All**

7 **Available Control Methods**

8 *Impacts*

9 The treatment areas would occur in communities with low-, middle-, and high-income residents
10 that are composed of minorities and non-minorities; no disproportionate impacts to minority or
11 low-income populations would result from Alternative 1. In addition, as described elsewhere in
12 Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, health risks and other long-term
13 impacts to visitors of the treatment areas and residents would be less than significant after
14 implementation of mitigation measures identified in this EIS/R. Glyphosate and surfactants have
15 not been shown to bioaccumulate, and therefore, impacts to low-income and minority fishermen
16 would not be significant.

17 *Mitigation Measures*

18 No mitigation measures are required.

19 **ALTERNATIVE 2: Regional Eradication Using Only Non-Chemical Control Methods**

20 *Impacts*

21 Environmental Justice impacts for Alternative 2 would be similar to those described above for
22 Alternative 1, except that human health and safety impacts associated with herbicide applications
23 would not occur. As with Alternative 1, Alternative 2 would not result in any disproportionately
24 high or adverse impacts to minority or low-income populations.

25 *Mitigation Measures*

26 None required.

27 **ALTERNATIVE 3: No Action – Continued Limited, Regionally Uncoordinated Treatment**

28 *Impacts*

29 Under Alternative 3, localized treatment would occur but invasive cordgrasses would continue to
30 spread. As with Alternative 1, there would not be disproportionately high or adverse impacts on
31 minority or low-income populations from treatment under Alternative 3. Continued spread of
32 invasive cordgrasses would not disproportionately affect any specific income level or ethnic
33 groups.

34 *Mitigation Measures*

35 None required.

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