6.0 OTHER CONSIDERATIONS REQUIRED BY NEPA

This section addresses other topics required by NEPA in an EIS. These include: an analysis of significant unavoidable adverse impacts to the environment; the relationship between local short-term uses of the environment and long-term productivity; the identification of any irreversible and irretrievable commitments of resources; a discussion of Executive Order 12898 (Environmental Justice, 59 Fed. Reg. 7629 [Feb. 11, 1994]); and a discussion of Executive Order 13045 (Environmental Health and Safety Risks to Children, 62 Fed. Reg. 19885 [April 21, 1997]).

6.1 SIGNIFICANT UNAVOIDABLE ADVERSE EFFECTS

An EIS must describe any significant unavoidable impacts for which either no mitigation or only partial mitigation is feasible. The impact analysis presented in Chapters 4 and 5 of this EIS indicates that significant unavoidable adverse effects would occur only under Alternative 2.

Implementation of Alternative 2 would require demolition of Building 2 and Building 3 on Treasure Island, buildings eligible for listing on the NRHP. This would result in the loss of significant historic resources. This adverse effect can be lessened or reduced by recording the affected resources to the standards of HABS/HAER, but recordation would not eliminate the adverse effect caused by the demolition of NRHP-eligible resources.

6.2 RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

NEPA requires that an EIS consider the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. The analysis covers the extent to which both disposal and reuse involve tradeoffs between short-term environmental gains at the expense of long-term losses, or vice versa.

Because most of NSTI has been developed, redevelopment under any of the three reuse alternatives would do little to negatively affect the short or long-term productivity of the area. Disposal and subsequent reuse of NSTI could however result in both short- and long-term environmental gains that would enhance productivity of the site. Improved vehicle access and increased public recreation opportunities along the San Francisco Bay shoreline under reuse would be both a short- and long-term gain. Long-term gains would also include increases in jobs and housing and generation of sufficient revenue to support the investment necessary to upgrade the Treasure Island perimeter dike and undertake other facility ground improvements that would improve the seismic safety of the site.

Disposal and reuse of NSTI could result in potential environmental impacts, as identified in Chapters 4 and 5 of this EIS, such as those to transportation, biological resources, and water resources. If not mitigated, these impacts could result in decreases in the long-term productivity of the environment on NSTI.

6.3 IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA requires that an EIS analyze the extent to which the proposed alternatives' primary and secondary effects would commit nonrenewable resources to uses that future generations

probably would be unable to reverse. Disposal and subsequent reuse of Navy property and structures would constitute an irreversible or irretrievable commitment of military resources and land uses.

Reuse of the property would provide for responsible long-term resource management and, except for Alternative 2, makes no irreversible resource commitments. Alternative 2 would include the planned removal of historic Building 2 and Building 3 on Treasure Island, which would be a permanent loss of these resources.

Implementing any of the reuse alternatives would require short-term commitments of both renewable and nonrenewable energy and material resources for demolition, and commitments for construction of the structures and infrastructure improvements required for implementation. These developments would represent a very large commitment of financial resources but would not represent an irreversible commitment of NSTI surplus property to the proposed uses.

Equipment used during construction and demolition activities at NSTI would consume petroleum fuels, such as gasoline and diesel. This temporary energy expenditure would occur over the short term and would not substantially increase the overall demand for electricity or natural gas. Implementing the reuse alternatives would consume large volumes of nonrenewable fossil fuel as a result of increased trips generated by automobile, bus, and ferry trips. Additional energy would also be expended at the wastewater treatment plant. The increase in development likely would result in an increase in the annual amount of energy consumed in heating, air conditioning, and other operational uses of energy. Infrastructure improvements would be provided corresponding to each new phase of development to meet increased demand.

6.4 ENVIRONMENTAL JUSTICE

This section summarizes potential impacts from disposal and reuse of the site on issues of environmental justice, as mandated by Executive Order 12898. The Executive Order on "Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations," issued on February, 11, 1994, requires that the impacts of federal actions on minority and low-income populations be addressed to avoid disproportionate adverse impacts to these groups.

On April 21, 1995, the Secretary of Defense submitted a formal environmental justice strategy and implementation plan to the EPA. To comply with the executive order, this EIS included the following actions:

- Gathering economic, racial, and demographic information generated from the 1990 census to identify areas of low-income and high minority populations in San Francisco and Alameda counties that would potentially be exposed to project impacts;

- Assessing the disposal and reuse alternatives for disproportionate impacts resulting from on-site activities associated with reuse of project site facilities; and

- Encouraging community participation and input through public hearings and meetings and extensive public notification, which are described in Chapter 1 and Chapter 7 of this document.

6.4.1 Criteria and Methodology

Under the provisions of Executive Order 12898, "[m]itigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed federal actions on minority communities and low-income communities." Relative to environmental justice, a significant impact would occur if the proposed action, including the consideration of all resource issues, would result in disproportionate negative effects on minority populations or low-income populations. To determine whether low-income or minority populations could be disproportionately affected by the disposal and reuse of NSTI, low-income and minority populations were first identified. Potential effects in areas where these populations live were next identified and these effects were further evaluated to determine if there would be any disproportionate effect. The area considered in this analysis includes NSTI, San Francisco, and Alameda County.

6.4.2 Minority Population and Low-income Population Overview

As presented in Table 6-1, the population of NSTI in 1990 was predominately White (65 percent), as it was in the Bay Area region (69 percent), in San Francisco (54 percent), and in Alameda County (60 percent). The residential population of NSTI in 1990 was entirely composed of military personnel and their dependents. The non-white (i.e., racial minority) population at NSTI was roughly proportional to the region and in the surrounding communities of San Francisco and Alameda counties.

Median income of NSTI households in 1990 was about 16 percent lower than the San Francisco median income and 25 percent lower than Alameda County's (see Table 3.3-4 in section 3.3, Socioeconomics). At the time of the 1990 census approximately nine percent of all households in the Bay Area, 13 percent of San Francisco households, and 11 percent of Alameda County households were below the poverty level.

6.4.3 Potential Disproportionate Impacts to Minority Populations or Low-income Populations

The potentially affected area adjacent to NSTI does not include disproportionately high minority populations or low-income populations compared to adjacent communities. In addition, impacts under any of the three reuse alternatives would either not be significant or, if significant, would be adequately mitigated such that no disproportionate impact would be expected to occur. As a result, none of the reuse alternatives appear likely to have a disproportionate impact on minority populations or low-income populations to warrant further analysis beyond that conducted in each of the environmental issue areas.

Table 6-1
Racial Composition of NSTI, Bay Area, San Francisco, and Alameda County Population, 1980 and 1990

Location		*White*		*Black*		*American Indian*		*Asian Pacific Islander*		*Other*		*Hispanic*	
		1980	1990	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990
NSTI	#	2,565	2,911	321	718	44	38	794	702	211	140	293	389
	%	65.2	64.6	8.2	1.6	1.1	0.8	20.2	15.5	5.4	3.1	7.4	8.6
Bay Area	#	3,940,084	4,147,971	466,274	533,188	37,187	39,035	462,890	919,279	273,349	384,104	632,640	899,243
	%	76.0	68.9	9.0	8.9	0.7	0.6	8.9	15.3	5.3	6.4	12.2	14.9
San Francisco	#	395,081	388,341	86,414	78,931	3,548	3,354	147,426	211,000	46,505	42,333	83,373	96,640
	%	58.2	53.6	12.7	10.9	0.5	0.5	21.7	29.1	6.8	5.8	12.3	13.3
Alameda County	#	740,612	762,557	203,612	229,316	7,446	8,354	85,899	193,282	67,810	85,673	129,962	176,017
	%	67.0	59.6	18.4	17.9	0.6	0.7	7.8	15.1	6.1	6.8	11.8	13.8

Note: Percentages may not add to 100 due to rounding. Hispanic origin is for information only and is not considered a separate race. Persons of Hispanic origin are also counted under one of the other race columns.

Source: U.S. Department of Commerce 1980, 1990.

Socioeconomic impacts under any of the reuse alternatives would not occur or would not be considered significant if they were to occur, and would not be expected to disproportionately affect minority or low-income populations (see section 4.3). Each of the reuse alternatives would create a net gain in employment, and jobs that would be provided at the theme park should offer opportunities for minority populations and low-income populations. In addition, TIHDI's Notice of Interest for NSTI includes homeless housing, support services, employment, and economic development programs and services for the homeless, which would benefit low-income populations.

Under the No Action Alternative, the caretaker program would provide employment for approximately 50 personnel on the site, which would represent a decrease of 700 jobs from the operational baseline. While most of the lost jobs would be from relocation of military personnel to other installations, some would be local, civilian support jobs. Given the number of jobs available in the region, this would be a less than significant impact. There is no indication that the workers in these jobs would be predominantly minority or low-income and therefore would be disproportionately affected.

The significant and not mitigable environmental impact of reuse Alternative 2 identified in this EIS would affect cultural resources, as summarized in section 6.1. Under Alternative 2, the loss of Buildings 2 and 3 on Treasure Island, which meet the criteria for listing in the National Register, would have localized impacts at the individual sites and potential cumulative regional impacts throughout the Bay Area, but would not have a disproportionate adverse impact on minority populations or low-income populations.

There may be potentially significant but mitigable on-site health and safety implications resulting from exposure to environmental contamination/hazardous materials on the site during reuse (as discussed in section 4.13), but there is no indication that any such potential impacts would disproportionately accrue to minority populations or low-income populations. Health and safety impact concerns could also extend off-site under the reuse alternatives. Air quality is one such issue, but given that any such impacts would be experienced on a regional basis, no disproportionate impacts to minority populations or low-income populations are anticipated.

Some unauthorized fishing has historically taken place at Pier 23 and other areas on NSTI; it is possible that under the reuse plan public access for fishing would be broadened. Under these circumstances, therefore, minority or low-income populations that conduct subsistence fishing might gain increased access to fishing opportunities. It should be noted that California EPA has identified possible health consequences from eating fish caught in San Francisco Bay, due to high levels of the following chemicals: mercury, dioxins, PCBs, DDT, dieldrin, and chlordane (California EPA 2001). It is recommended that under the selected alternative, warning signs in a variety of languages be posted in areas that provide public access for fishing to warn of possible health risks from consuming fish caught in San Francisco Bay.

6.5 PROTECTION OF CHILDREN FROM ENVIRONMENTAL HEALTH RISKS AND SAFETY RISKS

On April 17, 1997 Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, was signed by President Clinton. The policy of the Executive Order states that:

> A growing body of scientific knowledge demonstrates that children may suffer disproportionately from environmental health risks and safety risks. These risks arise because: children's neurological, immunological, digestive, and other bodily systems are still developing; children eat more food, drink more fluids, and breathe more air in proportion to their body weights than adults; children's size and weight may diminish their protection from standard safety features; and children's behavior patterns may make them more susceptible to accidents because they are less able to protect themselves. Therefore, to the extent permitted by law and appropriate, and consistent with the agency's mission, each federal agency:
>
> - shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and
>
> - ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.
>
> Under the definitions provided in Executive Order 13045, covered regulatory actions included those that may be "economically significant" (under Executive Order 12866) and "concern an environmental health risk or safety risk that an agency has reason to believe may disproportionately affect children." Further, Executive Order 13045 defines "environmental health risks and safety risks" [to] "mean risks to health and safety that are attributable to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to).

Environmental health risks and safety risks mean risks to health or to safety that are attributable to products or substances that the child is likely to come into contact with or to ingest. To comply with Executive Order 13045, this section of the EIS discusses child-specific environmental health risk and safety risk issues.

Areas on NSTI where there may be potentially high concentrations of children include schools, day care centers, and residential areas. The only school on NSTI is the Treasure Island Elementary School, leased to the SFUSD by Navy. This school has a capacity of up to a total of 1,000 students, kindergarten through 5th grade. The former child development center in Building 502 closed in mid-1997, but was re-opened in March 2003.

Under Alternatives 1 and 3, the existing school would be retained and a child development center would re-occupy Building 502. Residential development is also proposed under the

three reuse alternatives. The largest amount of residential development would occur under Alternatives 1 and 3, where new residences would be developed in the northern half of Treasure Island and on Yerba Buena Island. Under Alternative 2, residences would only be developed on Yerba Buena Island.

There may be potentially significant, but mitigable on-site health and safety impacts resulting from exposure to environmental contamination/hazardous materials on the site during reuse (as discussed in section 4.13), but there is no indication that any such potential impacts would disproportionately accrue to children. Areas of contamination are scheduled for cleanup prior to reuse, with restoration to levels appropriate to subsequent reuse categories. Children would not be expected to be exposed during the cleanup process.

Health and safety impact concerns could also extend off-site with the reuse alternatives. Air quality impacts (as discussed in section 4.6) are a potential concern, but given that any such impacts would be of a small incremental level and would be experienced on a regional basis rather than a localized basis, no disproportionate impacts to children are anticipated.

As explained for environmental justice, a significant and not mitigable impact to historic resources under Alternative 2 would not disproportionately affect children. For all significant and mitigable environmental impacts identified in this EIS, implementing identified mitigation measures as described would ensure that no disproportionate impacts to environmental health risks and/or safety risks to children would occur under any of the reuse alternatives.

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