

Chapter 1 Purpose of and Need for Action

1.1 Introduction

The National Park Service (NPS) and the Golden Gate Bridge Highway and Transportation District (GGBHTD) are working in partnership to plan and conduct the environmental analysis for the Alexander Avenue/Danes Drive Intersection Improvement Project (proposed project) within Golden Gate National Recreation Area (GGNRA). The NPS Pacific West Region is providing funding for the proposed project through the Federal Lands Highway Program (FLHP).

This Environmental Assessment (EA) evaluates the No Action Alternative and three action alternatives. For this analysis NPS is serving as the lead agency for National Environmental Policy Act (NEPA) compliance and GGBHTD is serving as the lead agency for California Environmental Quality Act (CEQA) compliance. An Initial Study (IS) was prepared under CEQA and is included in this document as Appendix A.

1.2 Purpose

The purpose of the proposed project is to correct existing deficiencies and substandard roadway conditions at the Alexander Avenue left-turn lane to Danes Drive. The proposed project would also help to reduce offsite transportation impacts associated with intensified operation of Fort Baker by improving the Alexander Avenue/Danes Drive intersection functionality and enhancing multi-modal use opportunities along Alexander Avenue. For the proposed project to be successful, it must accomplish the following project objectives:

- Enhance the safety of the Alexander Avenue/Danes Drive intersection by providing additional turn lane storage capacity and improved geometric configuration;
- Support the overall goals and objectives of the Draft Alexander Avenue Planning Study to enhance multi-modal access through and within the Alexander Avenue corridor;
- Contribute to the improvement of the GGNRA Marin Headlands area transportation network as envisioned in the Marin Headlands and Fort Baker Transportation Infrastructure and Management Plan (TIMP); and
- Respect the special natural and visitor attributes of the GGNRA and minimize adverse effects to natural, scenic, and historic resources associated with the Alexander Avenue corridor to the greatest extent possible.

1.3 Need

Under existing conditions, the left-turn lane from Alexander Avenue onto Danes Drive does not provide sufficient deceleration length and queuing capacity to accommodate peak hour traffic. As a result, vehicles tend to encroach into the main travel lane of Alexander Avenue. Further, the combination of narrow shoulders along the section of Alexander Avenue between the US 101

interchange and Danes Drive, and frequent bicycle and pedestrian use, creates the potential for conflict between these user groups. Additionally, it was anticipated that the expansion of visitor services at Fort Baker, as evaluated in the Fort Baker Plan Environmental Impact Statement (EIS), would result in an increase in vehicular and non-vehicular traffic both onsite and throughout the GGNRA Marin Headlands area. The existing deficiencies associated with traffic flow and safety conditions at the Alexander Avenue/Danes Drive intersection would be exacerbated by increased transportation demand related to the Fort Baker Plan and the TIMP. As such, improvement of both Alexander Avenue and the Alexander Avenue/Danes Drive intersection is needed to enhance the operational safety of the intersection and minimize conflicts among the various user groups present.

During initial scoping, key stakeholders raised several issues and concerns regarding multi-modal use of Alexander Avenue, including specific location issues and larger corridor-wide issues. The following problems illustrate the need for the proposed improvements in the corridor, particularly at the Alexander Avenue/Danes Drive intersection:

- Increased traffic volumes due to the Fort Baker redevelopment, increased park visitation, and increased bicycle use (including commuter and recreational riders);
- Conflicts among bicycle, pedestrian, transit, and vehicle access and movements;
- Variable demands between weekday and weekend peaks for commuter, daily, and recreational users, with congested conditions on many weekends;
- Limited sight distance due to existing intersection geometry; and
- Narrow roadway shoulders along Alexander Avenue that provide insufficient travel width for bicyclists and pedestrians (see Figure 1-1).



1.4 Background

The proposed project is part of a larger program to provide improved access to and within the GGNRA Marin Headlands area. In 2000, NPS issued a Record of Decision (ROD) on the Final EIS for the Fort Baker Plan. The ROD included improvement of the Alexander Avenue/Danes Drive intersection as an offsite transportation enhancement to improve existing conditions at the intersection.

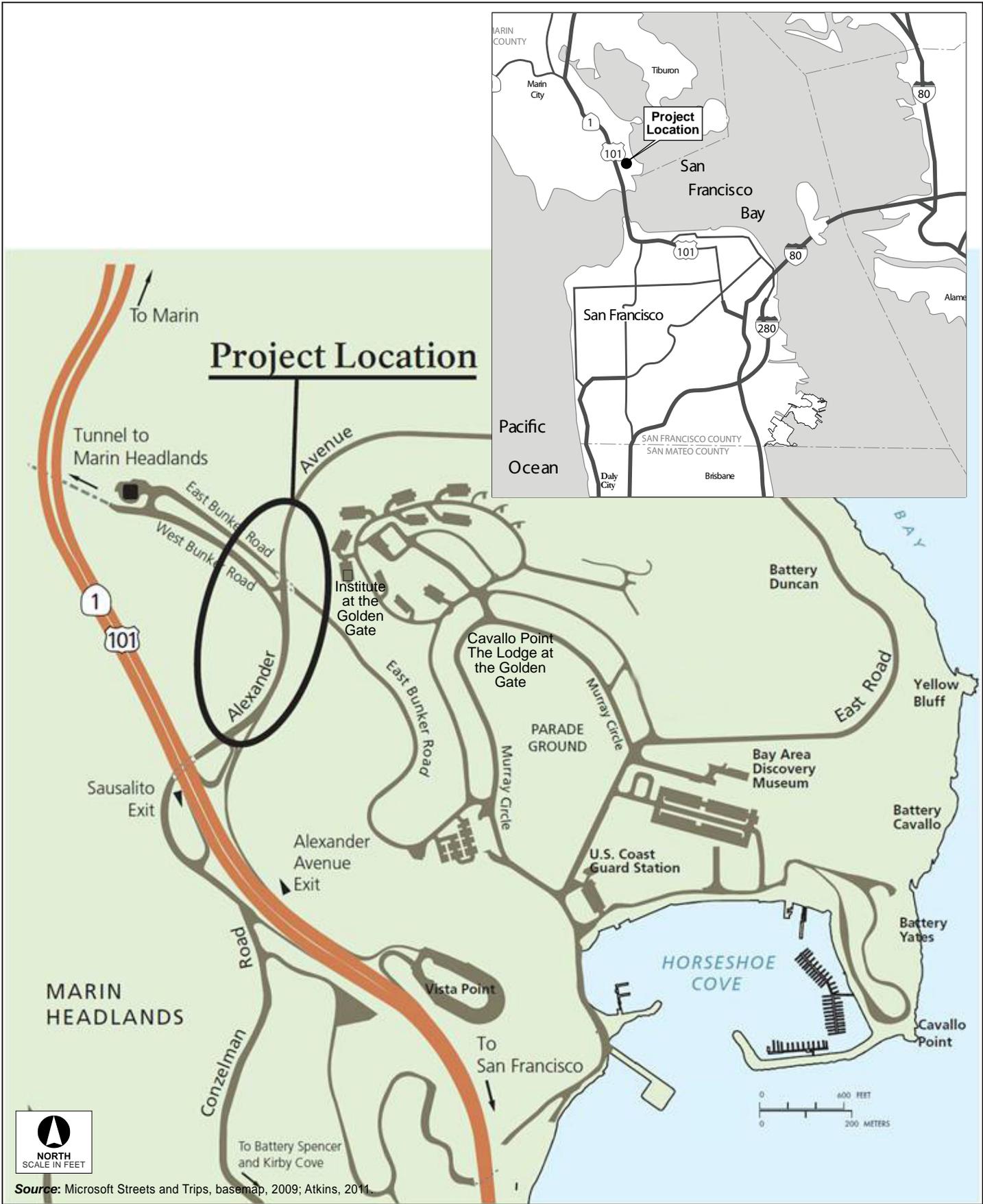
In addition to the Fort Baker Plan, further transportation improvements for the GGNRA Marin Headlands area are contained in the TIMP, including additional improvements to the Alexander Avenue/Danes Drive intersection. The Final EIS for the TIMP was completed in 2009. The Final EIS evaluated a number of individual multi-modal transportation improvement projects within the GGNRA Marin Headlands area road network. Each project would address a unique issue, but cumulatively would serve to improve overall multi-modal transportation in the Marin Headlands. Several elements of the Fort Baker Plan, including improvement of the Alexander Avenue/Danes Drive intersection, were included in all of the alternatives analyzed in the TIMP EIS.

Further transportation improvement strategies are contained in the Draft Alexander Avenue Planning Study, which was conducted to identify deficiencies along the Alexander Avenue corridor (including the Alexander Avenue/Danes Drive intersection) and to develop multi-modal improvement strategies for Alexander Avenue.

The proposed project would widen and extend the northbound left-turn lane on Alexander Avenue; convert the intersection from a Y to a T intersection; add roadway shoulders to Alexander Avenue within the project limits; and replace the existing guardrail with a steel-backed timber guardrail painted white to match the existing timber rail.

1.5 Project Area Location

The project area begins along Alexander Avenue immediately north of the of US 101/Alexander Avenue interchange, just north of the Golden Gate Bridge. The project area includes approximately 1,150 feet of Alexander Avenue to the north of the interchange and approximately 200 feet of Danes Drive between Alexander Avenue and East Bunker Road. Figure 1-2 shows the project location and provides regional context for the proposed project. Local context for the project location is provided in Figure 1-3 through Figure 1-3C.



100017371 | Alexander Ave-Dames Drive



Figure 1-2
Project Location



100017371 | Alexander Ave-Danes Drive



Figure 1-3
Photo Location Map





100017371 | Alexander Ave-Danes Drive

Source: Atkins, 2011.



Figure 1-3A
Vantage Point 1:
Alexander Avenue/Danes Drive Intersection from top of East Cut Slope



100017371 | Alexander Ave-Danes Drive

Source: Atkins, 2011.



Figure 1-3B
Vantage Point 2:
US 101 Ramps looking Northeast towards Alexander Avenue



100017371 | Alexander Ave-Dames Drive

Source: Atkins, 2011.



Figure 1-3C
Vantage Point 3:
Project Site looking North from Vista Point

1.6 Scope of the Environmental Assessment

The decision that will be made as a result of this analysis is focused solely on the actions described in Chapter 2, Alternatives. Although there are a number of transportation improvement projects being considered in the GGNRA Marin Headlands area and along the Alexander Avenue corridor, the scope of this EA is limited to roadway and intersection improvements at the Alexander Avenue/Danes Drive intersection. According to NEPA, the Alexander Avenue/Danes Drive Intersection Improvement Project is considered to have “independent utility” and can be implemented with or without the implementation of other transportation improvement projects within the Alexander Avenue corridor and GGNRA Marin Headlands area. These other transportation improvement projects are included in the following documents:

- The Fort Baker Plan;
- The Marin Headlands and Fort Baker Transportation Infrastructure Management Plan; and
- The Draft Alexander Avenue Planning Study.

1.7 Related Laws/Legislation and Other Planning and Management Documents

This document has been jointly prepared by NPS and GGBHTD staff to satisfy the requirements of federal and State environmental laws and policies, primarily NEPA and CEQA. The following is a summary of relevant guidance documents and regulations and a description of their relationship to the proposed project. Other applicable regulations, plans, and standards that were considered in developing this EA/IS and analyzing impacts are discussed in individual resource topic areas in Chapter 3, Environmental Consequences.

1.7.1 National Environmental Policy Act

This EA was prepared pursuant to NEPA (42 United States Code [USC] §4341 et seq.), as amended in 1975 by Public Law (PL) 94-52 and PL 94.83. Additional guidance includes NPS Director’s Order 12, which implements Section 102(2) of NEPA and the regulations established by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulation [CFR] §1500-1508). The proposed project must comply with the requirements of NEPA as well as other legislation that governs land use, natural resource protection, and other policy issues within GGNRA. Many regulations and Executive Orders are typically addressed in NEPA documents.

An EA is a study required by NEPA to determine whether a proposed federal action has the potential to cause significant environmental impacts. An EA is a decision-making tool that analyzes the potential environmental effects of a proposed action - in this case, the Alexander Avenue/Danes Drive Intersection Improvement Project - and its alternatives.

1.7.2 California Environmental Quality Act

The CEQA statute, California Public Resources Code §21000 et seq., codifies a statewide policy of environmental protection. The IS, included in Appendix A, has been prepared in compliance with the State CEQA Guidelines (California Code of Regulations [CCR] §15000 et seq). The proposed project has also been evaluated according to State and local requirements including, but not limited to, the California Endangered Species Act and regional air and water quality standards. The IS also identifies measures that have been incorporated into the design of the project to reduce all project impacts to a less than significant level as defined by CEQA Guidelines §15065.

1.7.3 National Park Service Organic Act

The NPS Organic Act directs NPS to manage units “to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such a manner as will leave them unimpaired for the enjoyment of future generations.” (16 USC §1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that NPS must conduct its actions in a manner that will ensure no “derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress.” (16 USC §1 a-1). The NPS Organic Act prohibits actions that permanently impair park resources unless a law directly and specifically allows for the acts. An action constitutes an impairment when its impacts “harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources and values.”¹

1.7.4 National Park Service Management Policies (2006)

In addition to determining the potential environmental consequences of implementing the agency-preferred and other alternatives as required by NEPA, NPS Management Policies 2006 (MP06) §1.4 requires a determination that no implementation of any actions would impair a park’s resources and values.

The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, is the conservation of park resources and values. Park managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on cultural and natural resources and park values.

However, these laws also afford park managers discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the express purposes of the park. That discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is any impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact has such

¹ U.S. Department of Interior, National Park Service, *Management Policies 2006*.

a result depends on the particular resources that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the actions in question combined with other impacts.

As noted in MP06 §1.4.7, in addition to the above potential environmental consequences, the park manager also takes into consideration consultations required under §106 of the NHPA, relevant scientific information, pertinent information from subject matter experts, and results of related civic engagement and public involvement activities.

The park manager's determination of non-impairment will be provided as an Attachment to the approved Finding of No Significant Impact.²

1.7.5 General Management Plan for the Golden Gate National Recreation Area (1980)

The General Management Plan for the Golden Gate National Recreation Area (GMP), which is the guiding plan for the park, and its corresponding EA were reviewed in the development of this EA. The following relevant management objectives identified in the GMP that provide useful context include:

- Offer recreational opportunities to a diverse group of park users and impart knowledge necessary for full enjoyment of park resources through a particular emphasis on interpretation, education, and information programs.
- Retain opportunities for recreation activities pursued in the park today.
- Maintain and restore the character of natural environment lands by maintaining the diversity of native park plant and animal life; identifying and protecting threatened and endangered plant and animal species and other sensitive natural resources; controlling exotic plants; and checking erosion whenever feasible.
- Recognize the importance of the cultural resources within the recreation area through a positive identification, evaluation, preservation, management, and interpretation program.

1.7.6 National Park Service Director's Order 12 and Handbook

Director's Order 12 (DO-12) prescribes NPS-specific requirements for NEPA analysis, including analyzing a full range of reasonable alternatives, and analyzing impacts to park resources in terms of their context, duration, and intensity.

1.7.7 National Historic Preservation Act, Section 106

Section 106 of the National Historic Preservation Act (NHPA) of 1966 requires federal agencies to consider the effects of their undertakings on properties listed or potentially eligible for listing on the National Register of Historic Places. All actions affecting the parks' cultural resources must comply with this legislation.

² Ibid.

1.8 Scoping and Public Involvement

Scoping is an early and open process to determine the breadth of environmental issues and alternatives to be addressed in a planning document prepared in accordance with NEPA. Scoping includes obtaining early input about the planning project from any members of the public, staff, interested agency, or any agency with jurisdiction by law or expertise. Scoping activities for this project are summarized below. Chapter 4, Consultation and Coordination, of this EA describes the scoping response and agency coordination efforts in further detail.

1.8.1 Public Involvement

NPS hosted a public open house on April 26, 2011 at Fort Mason in San Francisco, to describe and answer questions regarding the Alexander Avenue/Danes Drive Intersection Improvement Project. Approximately 90 people attended the April 26th open house. Additionally, a scoping newsletter was mailed out to approximately 3,600 addresses on April 22, 2011 and emailed to 630 email addresses on April 29, 2011. Interested parties were encouraged to provide comment on the proposed project through May 27, 2011. Further, NPS and GGBHTD sent out consultation letters to State and federal agencies with regulatory or review authority over the potentially affected resources to specifically solicit their comments regarding the proposed project. A second open house was held on August 17, 2011 in Sausalito at which approximately 60 individuals attended.

1.8.2 Issues and Concerns

The following issues were identified during the scoping process with NPS staff, the public, agencies, and NPS partners:

- *Historic Resource Preservation* – Concerns were raised about impacts to historic resources in the military coastal fortifications and support facilities at Forts Baker, Barry, and Cronkhite, which make up a national historic district. Some were concerned that widening roads and improving intersections or making other changes in the landscape could adversely affect the integrity of the historic landscape and the features that contribute to the historic setting and context.
- *Access to the Park* - Park access for various users and transportation modes is important. For example, existing transit service to the park is limited, and expansion of transit is often identified as a need to provide access to a diverse range of park visitors and to relieve congestion. Expanding or improving pedestrian and bicycle access was often suggested.
- *Safety* - For all modes of transportation, safety is a concern, especially for pedestrians and bicyclists who must share the road with cars and buses.
- *Natural Resource Preservation* - Maintaining the rural nature of the park; protecting the natural resources, including the preservation of endangered species and the restoration of degraded areas; and implementing improvements with minimal impacts were all mentioned as desirable goals.

1.9 Impact Topics

Impact topics are the resources or values of concern that could be affected, either beneficially or adversely, by the proposed alternatives. The following impact topics were identified based on federal laws, regulations, orders, NPS Management Policies 2006, scoping, and NPS staff concerns or knowledge. The following impact topics are analyzed in this EA:

- Transportation
- Visual Resources
- Visitor Experience
- Cultural Resources
- Air Quality
- Geologic Resources, Soils, Seismicity, and Landslide Hazards
- Noise
- Public Health and Safety
- Special Status Species
- Invasive Species

A description of the existing conditions for each selected topic is provided in Chapter 3, Environmental Consequences.

1.10 Impact Topics Considered but Dismissed from Further Consideration

As part of the scoping and environmental analysis conducted for the proposed project, the following environmental resources and issues were considered but no potential for adverse impacts was identified. Consequently, there is no further analysis regarding the topics listed below in this EA. Reasons for dismissing specific topics from further review are included below.

- *Conflict with land use plans, policies, or controls* – Implementation of the proposed project would not change the existing use of the project area. In addition, construction of the proposed project would adhere to goals and policies established by the Marin Countywide Plan, described further in Section 3.9, Noise. As described previously, the proposed project would comply with NPS land management policies described in the NPS Management Policies 2006 document and the 1980 GMP for the GGNRA.
- *Energy requirements and conservation potential* - As a transportation improvement project, operation of the proposed project would not result in long-term energy requirements. The proposed project would not place an increased burden on local or regional energy resources. Construction activities associated with the project would be energy efficient.

- *Natural or non-renewable resource requirements and conservation potential* – The proposed project would not place an increased burden on natural or non-renewable resources. The Alexander Avenue/Danes Drive intersection improvements would require standard roadway construction materials. Furthermore, excavated material recovered from the widening of Alexander Avenue would be reused to the extent possible. Refer to Section 3.8, Geologic Resources, Soils, Seismicity, and Landslide Hazards, for more information.
- *Urban quality* – There would be no impact to urban quality because the proposed project would not induce substantial population growth in an area; create a significant demand for labor; or displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.
- *Socially or economically disadvantaged populations* – Executive Order 12898 requires that all federal agencies evaluate the impact of proposed actions on minority and low-income populations. According to the U.S. Environmental Protection Agency (EPA) Office of Environmental Justice, environmental justice is the “fair treatment of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws. Fair treatment means that no group of people 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.”

For environmental justice impacts to occur, significant environmental impacts attributable to a project must fall disproportionately upon environmental justice populations within the affected area. The proposed project would not have disproportionate health or environmental effects on minorities or low-income populations or communities as defined in the EPA’s Environmental Justice Guidance (1998). Any temporary restriction on roadway or intersection use would be equally applied to all visitors, regardless of race or socioeconomic standing.

- *Wetlands and floodplains* - Executive Orders 11988 (Floodplain Management) requires an examination of impacts to floodplains and the potential risk involved in placing facilities within floodplains. NPS Management Policies 2006, Section 4.6.4, Floodplains, and Director’s Order #77.1, 1993 NPS Floodplain Management Guidelines, provide guidelines on developments proposed in floodplains. Initial site reconnaissance and determinations made in related documents (such as the Draft Alexander Avenue Planning Study) did not identify wetlands within the project area. A potential wetland was identified adjacent to Alexander Avenue and East Bunker Road; however it is outside the project area and construction staging area.
- *Water Quality* – There are existing storm drains within the project area. Implementation of the No Action Alternative or the action alternatives would use the existing drop inlet on the west side of Danes Drive and the non-standard inlets that connect to slope drains to the north of Danes Drive along Alexander Avenue. Site reconnaissance found no drainage issues or problems in the project area. Because the project would disturb more than one acre, a Notice of Intent (NOI) must be filed with the State Water Resources Control Board (SWRCB) in order to obtain coverage under the General Permit for Discharges of Stormwater Associated with

Construction Activity (Construction General Permit Order 2010-0014-DWQ), pursuant to the National Pollutant Discharge Elimination System (NPDES) regulations established under the Clean Water Act. The Construction General Permit contains specific best management practices (BMPs) as well as numeric action levels (NALs) and numeric effluent limitations (NELs) in order to achieve minimum federal water quality standards. The discharger is required to implement a combination of BMPs, NALs, and NELs to address project-specific water quality issues. In addition, this permit requires development of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs the discharger will use to prevent degradation of surface and ground waters during the grading and construction process.³ The SWPPP must include BMPs that address source control, BMPs that address pollutant control, and BMPs that address treatment control. A Notice of Termination (NOT) must be filed with the San Francisco Bay Regional Water Quality Control Board (RWQCB) when construction is complete and final stabilization has been reached. In order for construction to be found complete, the discharger must install post-construction stormwater management measures and establish a long-term maintenance plan. Compliance with the NPDES Construction General Permit would ensure that implementation of the Alexander Avenue/Danes Drive Intersection Improvement Project would have a negligible effect on water quality.

- *Prime or unique agricultural lands* – All land in the project area is zoned as public parklands. The proposed project would not convert existing farmland to non-agricultural use. Therefore, the action alternatives would not affect prime or unique agricultural lands.
- *Ecologically critical areas, Wild and Scenic Rivers, or other unique natural resources* – There are no Wild and Scenic Rivers, or other unique natural resources within or surrounding the project area. Habitat for the endangered Mission Blue Butterfly (*Icaricia icarioides missionensis*) exists in proximity to the project area. Project effects on this habitat are discussed in Section 3.11, Special Status Species. In addition, to prevent potential harm to migratory bird species, the proposed project shall adhere to the stipulations of the Migratory Bird Treaty Act of 1936.
- *Sacred sites* – No sacred sites, as defined by Executive Order 13007, have been identified in the project area. This is addressed in Section 3.6, Cultural Resources.
- *Wilderness Values* - The Wilderness Act of 1964 (16 USC §1131 et seq.) established a national wilderness preservation system. There are no designated wilderness areas within the project area; therefore, this topic was dismissed.
- *Ethnographic Resources* – Ethnographic resources are defined in the NPS “Director’s Order #28: Cultural Resource Management Guideline” as, “any site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other

³ State Water Resources Control Board, Division of Water Quality, *Construction General Permit Fact Sheet*, November 16, 2010, website: http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_factsheet.pdf, accessed July 13, 2011.

significance in the cultural system of a group traditionally associated with it.”⁴ There are no known ethnographic resources within the project area.

- *Night Sky* - Although the roads of the study area are currently open to traffic after dark, there is very little nighttime traffic. No permanent changes in uses in the project area that would increase or decrease night traffic are included as part of the proposed project, nor are any new streetlights or other sources of new light pollution included as part of the proposed project. Although nighttime construction could occur, construction efforts would not adversely affect night views because construction activities would be temporary. Further, Mitigation Measures BIO-5 would be implemented to minimize the extent of light pollution during nighttime construction. For further detail regarding construction activities and scheduling refer to Chapter 2, Alternatives.
- *Global Climate Change* – Operation of the Alexander Avenue/Danes Drive Intersection Improvement Project would not increase the amount vehicular traffic within the project area. As such, the project would not affect the generation of the greenhouse gas emissions (GHG) in the long term. Short-term generation of emissions related to the operation of construction equipment would be negligible.

⁴ National Park Service, Director’s Order #28: Cultural Resource Management, June 11, 1998.