damage to the remainder of the Bridge historic property and the Fort Point property by hiring an independent Environmental Compliance Monitor (ECM) who will periodically monitor the site during construction and will prepare monthly reports documenting compliance and protection. These reports will be submitted to the District and GGNRA.

2.4 BIOLOGICAL ENVIRONMENT

The following description and evaluation of biological resources in the project area summarizes information contained in the Natural Environmental Study (NES) provided in full as Appendix F to this EIR/EA. In preparing the NES, previous biological studies prepared for the project area (Golden Gate Bridge Seismic and Wind Retrofit Project Biological Assessment and monitoring reports) were reviewed, as they address the staging areas within GGNRA lands that would be used to facilitate the proposed Golden Gate Bridge Physical Suicide Deterrent System Project. The latest versions of the California Natural Diversity Data Base (CNDDB) and the U.S. Fish and Wildlife Service (USFWS) list of federally-listed and candidate species occurring in Marin and San Francisco Counties were also reviewed to identify documented occurrences of special-status plant and wildlife species in the project area.

Reconnaissance-level field surveys of the Bridge and staging areas were conducted on June 13 and June 15, 2008. The intent of the surveys was to confirm the graded, graveled, and/or paved condition of the proposed staging areas, to describe the plant communities occurring adjacent to and near the staging areas, to assess the types of wildlife likely to occur in the project area, and to identify locations supporting or potentially supporting sensitive biological resources that could be adversely affected by the proposed project.

2.4.1 NATURAL COMMUNITIES

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Affected Environment

The proposed physical suicide deterrent system would be installed along both sides of the Bridge. The western side of the Bridge contains a heavily

used bikeway and the eastern side contains a heavily used pedestrian walkway. The Bridge is heavily traveled by cars and trucks, and is often subject to strong winds given its location at the entrance to San Francisco Bay. These factors and the lack of natural habitats deter wildlife use of the Bridge, although the Bridge is used by some bird species. No natural communities are present on the Bridge.

The four staging areas within GGNRA lands are generally denuded of vegetation and are covered by gravel and compacted dirt, with only small patches of ruderal (i.e. weedy) vegetation present within one of the staging areas. The staging areas have and/or continue to be used for staging and maintenance activities associated with the Golden Gate Bridge Seismic and Wind Retrofit Project. The one proposed staging area within the Presidio is within a paved parking lot.

The staging areas located within the GGNRA are, however, bordered by large expanses of coastal scrub habitat. These adjacent and nearby areas are characterized by a dense growth of native species such as coyote brush (*Baccharis pilularis*), California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), California sagebrush (*Artemisia californica*), arroyo willow (*Salix laseolepis*), and various lupine species (*Lupinus sp.*), as well as non-native invasive species such as French broom (*Genista monspessulana*), wild radish (*Raphanus sativus*), and fennel (*Foeniculum vulgare*).

Based on the California Department of Fish and Game (CDFG) List of California Terrestrial Natural Communities (CDFG, 2003), the coastal scrub habitat bordering the staging areas is not denoted on the list as "high priority for inventory in CNDDB and thus is not considered a sensitive plant community." Additionally, given that the staging areas are fenced and actively used, they are not part of an expected wildlife movement corridor and their use would not result in habitat fragmentation.

Environmental Consequences

The proposed project does not include the development or direct disturbance of plant communities or aquatic habitats. The Bridge is in a developed condition and the proposed staging areas are generally denuded of vegetation, covered by gravel and compacted dirt, or paved areas. The staging areas within GGNRA lands have and/or continue to be used for staging and maintenance activities associated with the Golden Gate Bridge Seismic and Wind Retrofit Project. The one proposed staging area within the Presidio is within a paved parking lot. Implementation of the avoidance measures will prevent adverse effects to adjacent and nearby coastal scrub habitat.

Avoidance, Minimization, and/or Mitigation Measures

To avoid impacts to coastal scrub habitat, the avoidance measures currently being implemented to as part to the Golden Gate Bridge Seismic and Wind Retrofit Project would continue to be implemented. The continued use of these staging areas for this project would therefore not impact coastal scrub habitat. The measures relevant to coastal scrub habitat include:

Measure 1: A qualified biologist or biologists will be retained by the District prior to the start of construction to act as a biological Environmental Compliance Monitor (ECM) and implement and oversee the below activities/measures.

- The biological ECM will flag and stake native vegetation near the staging areas within GGNRA lands as "Environmentally Sensitive Areas" and will oversee the contractor's installation of protective fencing around the designated ESA(s). Signs will be installed indicating that the fenced area is "restricted" and that all construction activities, personnel, and operational disturbances are prohibited.
- The biological ECM will prepare and provide worker educational materials that describe the value and importance of the coastal scrub habitat bordering the staging areas and the importance of not disturbing the habitat.
- The biological ECM will conduct regular visits of the staging areas to inspect if any damage to adjacent habitats has occurred, to evaluate if dust control measures need to be implemented or increased, to ensure that erosion control devices located near native vegetation and Environmentally Sensitive Areas (ESAs) are functioning properly, and to evaluate if weed control measures need to be implemented.
- Based on the findings of the site visits, the biological ECM will make recommendations to be implemented regarding weed control, re-vegetation of disturbed areas, the need for additional fencing, and other measures to protect biological resources.
- The biological ECM will prepare monthly monitoring reports for the District that will address the effectiveness of the avoidance measures being implemented and identify any other measures to be implemented.

Measure 2: The District will provide specifications for erosion and dust control to the Contractor, which will be implemented.

2.4.2 PLANT SPECIES

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) share regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these area species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section (2.4.4) in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See Also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Affected Environment

The four staging areas within GGNRA lands are generally denuded of vegetation and are covered by gravel and compacted dirt, with only small patches of ruderal (i.e. weedy) vegetation present within one of the staging areas. The staging areas have and/or continue to be used for staging and maintenance activities associated with the Golden Gate Bridge Seismic and Wind Retrofit Project. The one proposed staging area within the Presidio is within a paved parking lot. Given the above, and the developed condition of the Bridge, construction-related activities would only occur within areas denuded of vegetation or with only limited ruderal vegetation present. These areas do not provide suitable habitat for special-status plant species.

However, the staging areas within GGNRA are located adjacent to well-developed coastal scrub habitat. Coastal scrub habitat can also support several locally-occurring special-status plant species, such as Franciscan

thistle, San Francisco Bay spineflower, blue coast gilia, San Francisco gumplant, marsh microseris, San Francisco owl's clover, and potentially other species.

Environmental Consequences

Special-Status plant species could occur in areas bordering or near the staging areas within GGNRA lands, such as Franciscan thistle, San Francisco Bay spineflower, blue coast gilia, San Francisco gumplant, marsh microseris, San Francisco owl's clover, and potentially other species. No direct loss of suitable habitat for special-status plant species would occur. Implementation of the avoidance measures will prevent unauthorized intrusion by construction equipment and workers into the coastal scrub habitat bordering the staging areas, which could result in trampling of special-status plant species.

Avoidance, Minimization, and/or Mitigation Measures

To avoid impacts to special-status plant species, the avoidance measures currently being implemented to as part to the Golden Gate Bridge Seismic and Wind Retrofit Project would continue to be implemented. Implementation of these measures would also ensure that the continued use of these staging areas for this project would not impact special-status plant species. The measures relevant to special-status plant species include:

Measure 1: A qualified biologist or biologists will be retained by the District prior to the start of construction to act as a biological Environmental Compliance Monitor (ECM) and implement and oversee the below activities/measures.

- The biological ECM will flag and stake native vegetation near the staging areas within GGNRA lands as "Environmentally Sensitive Areas" and will oversee the contractor's installation of protective fencing around the designated ESA(s). Signs will be installed indicating that the fenced area is "restricted" and that all construction activities, personnel, and operational disturbances are prohibited.
- The biological ECM will prepare and provide worker educational materials that describe the value and importance of the coastal scrub habitat bordering the staging areas and the importance of not disturbing the habitat.
- The biological ECM will conduct regular visits of the staging areas to inspect if any damage to adjacent habitats has occurred, to evaluate if dust control measures need to be implemented or increased, to ensure that erosion control devices located near native vegetation and

Environmentally Sensitive Areas (ESAs) are functioning properly, and to evaluate if weed control measures need to be implemented.

- Based on the findings of the site visits, the biological ECM will make recommendations to be implemented regarding weed control, re-vegetation of disturbed areas, the need for additional fencing, and other measures to protect biological resources.
- The biological ECM will prepare monthly monitoring reports for the District that will address the effectiveness of the avoidance measures being implemented and identify any other measures to be implemented.

Measure 2: The District will provide specifications for erosion and dust control to the Contractor, which will be implemented.

2.4.3 ANIMAL SPECIES

Regulatory Setting

Many states and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state and federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.4.4. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Quality Act
- Migratory Bird Treaty Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1600-1603 of the Fish and Game Code
- Sections 4150 and 4152 of the Fish and Game Code

Affected Environment

Construction-related activities would be limited to the Bridge and to five staging areas, which are generally denuded of vegetation and are either paved or graveled. The Bridge is heavily traveled by cars and trucks, and is often subject to strong winds, given its location at the entrance to San Francisco Bay. These factors and the lack of natural habitats deter wildlife use of the Bridge, although brown pelicans and other bird species such as terns and sea gulls often fly at relatively low heights across the Bridge.

Given that the staging areas are generally denuded of vegetation, covered with gravel, or paved, and the developed condition of the Bridge, potential habitat for special-status wildlife species within the project's disturbance area is limited. However, monarch butterfly wintering sites, which are considered sensitive by the CDFG, have been documented in the project area. Additionally, nesting bird species protected by the Migratory Bird Treaty Act and Fish and Game Code could occur near or within the staging areas of the Bridge.

Environmental Consequences

The staging areas within GGNRA lands have and/or continue to be used for similar activities associated with the Golden Gate Seismic and Wind Retrofit Project and do not border areas potentially used as winter roost sites by monarch butterflies. Therefore, the continued use of these staging areas would not adversely affect a monarch butterfly winter roost site. The proposed staging area within the Presidio is paved and used as a parking lot. There are no trees within the parking lot and the preferred winter roost trees of monarch butterflies (i.e., eucalyptus and pine) are not present near the location. Given the above, the proposed project is not expected to have a substantial adverse affect on a monarch butterfly wintering site and no avoidance measures are required.

The proposed project does not include the removal of any trees or vegetation potentially used by nesting bird species protected by the California Fish and Game Code and/or the Migratory Bird Treaty Act. However, construction-related activities could still disturb and potentially result in nest abandonment of active bird nests potentially occurring near the staging and construction areas.

The use of vertical transparent panels is a component of several of the alternatives being considered for the physical suicide deterrent system, which could create a potential for bird collisions. Under one alternative, horizontal netting would be used as part of the physical deterrent system, with which birds could potentially collide and become entangled or otherwise harmed. The transparent panels would be installed at the

belvederes, 24 widened areas (each 12.5 feet wide) located on both the east and west sidewalks, and around portions of the two Bridge towers, representing about 5 percent of the total length of the Bridge. The transparent panels would be placed on top of the existing or modified rails (which are 4 feet in height) and would extend up to 8 feet above the rails. Several factors detract from the likelihood of birds attempting to fly over the Bridge or perch on structures at a height which could result in collisions with the transparent panels, such as the relatively low height of the panels (12 feet above the road surface), heavy car and truck traffic, heavy bike and pedestrian traffic on the Bridge's walkways (which would be adjacent to the transparent panels or netting), and that the panels around the tower would encircle a visible solid surface. The horizontal netting would extend out 20 feet from the Bridge and be located approximately 20 feet below the Bridge sidewalk. The horizontal netting's proximity to the Bridge structure, as well as heavy car and truck traffic, heavy bike and pedestrian traffic on the Bridge's walkways would detract from the likelihood of birds coming in contact with the horizontal netting.

However, brown pelicans and other bird species such as terns and sea gulls often fly at relatively low heights across the Bridge and focused studies have not been conducted to determine if bird collisions would be likely and to what extent they may occur. Therefore, it is assumed that the use of the transparent panels or netting could adversely affect various bird species.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance measures would be implemented to address potential impacts to nesting birds, and the potential for bird collisions or other obstructions to bird activities at the Bridge. The measures relevant to animal species would include the following.

Measure 6: Prior to the commencement of construction activities occurring during the nesting season of native bird species (typically February through August), the biological ECM will conduct or oversee the following activities.

- The biological ECM will conduct surveys for nesting birds protected by the Migratory Bird Treaty Act and/or California Fish and Game Code. The survey area will include potential nesting habitat within and bordering the staging and construction areas, as well as all areas that would be subject to elevated construction-related noise levels.
- If an active nest is found, a construction exclusion zone would be established around the active nest. The size of the exclusion zone will be determined by the CDFG and will take into account existing noise levels at the nest location and the sensitivity to noise of the bird species present.

- Construction activities may commence within the exclusion zone only upon determination by a qualified biologist that the nest is no longer active. The biological ECM will also survey for nesting birds during their regular site visits of the staging areas.

Measure 7: Prior to the commencement of construction activities, the District will retain the services of a qualified avian biologist to conduct or oversee the following activities.

- The avian biologist will further evaluate the potential of birds to collide with the transparent panels potentially used as part of the physical suicide deterrent system, and for the use of netting to harm bird species.
- At a minimum, the expected flight patterns of migratory and resident birds relative to the installation locations of the transparent panels or netting will be evaluated, as well as the potential of the transparent panels and associated reflections to alter regular flight patterns and encourage collisions.
- Should it be found that the use of the transparent panels or netting pose a substantial risk to birds, appropriate design modifications would be implemented. These measures may include, but are not limited to visual deterrents such as patterning the transparent material with a UV coating that birds can see but humans cannot; utilizing etching, fritting, and opaque patterned glass to reduce transparency; utilizing bird-legible patterns on the transparent material; limiting the amount of transparent panels or amount of panels without a visual deterrent; modifying the horizontal netting; or other effective means of deterring bird collisions or entrapment.

2.4.4 THREATENED AND ENDANGERED SPECIES

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United Stated Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species.

The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of FESA defines take as "harass, harm, pursue, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined as Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment

The project would occur along the Bridge and does not include the direct disturbance of undeveloped lands. However, the project does include the use of four construction staging areas within GGNRA lands. One is an existing gravel area located in a switchback of Conzelman Road. The other three are gravel areas located under the northern span of the Bridge, which are currently being used for similar staging and maintenance activities. There is also one proposed construction staging area within the Presidio in a location that is a paved parking lot, located just west of the toll plaza off Merchant Road.

The four staging areas located within GGNRA lands have and/or continue to be used for similar activities associated with the Golden Gate Bridge Seismic and Wind Retrofit Project. As part of the Golden Gate Bridge Seismic and Wind Retrofit Project, a Biological Assessment was prepared (pursuant to the requirements of Section 7 of the Federal Endangered Species Act) and a subsequent Biological Opinion was issued by the U.S. Fish and Wildlife Service (USFWS).

Environmental Consequences

Given that the staging areas are generally denuded of vegetation, covered with gravel, or paved, and the developed condition of the Bridge, potential

habitat for special-status wildlife species within the project's disturbance area is limited. However, Mission blue butterfly, a federally Endangered Species, is known to occur in areas near the staging areas on the north side of the Bridge. No direct loss of habitat for this species would occur. However, in the absence of avoidance measures, the use of the staging areas could result in other types of impacts to this species.

- Construction-related traffic: vehicular traffic, especially at higher speeds, can collide with and kill or injure flying Mission blue butterflies.
- Unauthorized intrusion into Mission blue butterfly habitat: Potential intrusion by construction equipment and workers into the coastal scrub habitat bordering the staging areas within GGNRA lands could result in trampling of larval host or adult nectar plants.
- Dust: The proposed project does not include grading, vegetation and soil removal, or soil storage, which are often associated within increased dust levels. However, the use of the staging areas within GGNRA lands could result in increased dust levels, which may affect both larval and adult Mission blue butterflies.

Peregrine falcons, a state Endangered species (and Candidate for Delisting), have been reported using the Bridge year-round from 1989 to the present, with nesting being attempted under the roadway on at least two occasions and the towers being used by non-nesting falcons.[1] The proposed project does not include the removal of any potential nesting habitat for the species or barriers to areas potentially used for nesting. However, should an active eyrie (i.e., nest) be present, construction-related activities could result in the abandonment of the eyrie.

Avoidance, Minimization and/or Mitigation Measures

As described below, to avoid impacts to Mission blue butterfly, the avoidance **Measures 1, 2** and **3** currently being implemented to protect the species as part to the Golden Gate Bridge Seismic and Wind Retrofit Project would continue to be implemented so that continued use of these staging areas for this project would not impact Mission blue butterfly. As described below, to avoid the loss or disturbance of an active peregrine falcon eyrie, **Measure 5** would be implemented.

Measure 1: A qualified biologist or biologists will be retained by the District prior to the start of construction to act as a biological Environmental Compliance Monitor (ECM) and implement and oversee the below activities/measures.

[1] Pacific Biology communication with Allen Fish, Director of the Golden Gate Bird Observatory, June 30, 2008.

- The biological ECM will flag and stake native vegetation near the staging areas within GGNRA lands as "Environmentally Sensitive Areas" and will oversee the contractor's installation of protective fencing around the designated ESA(s). Signs will be installed indicating that the fenced area is "restricted" and that all construction activities, personnel, and operational disturbances are prohibited.
- The biological ECM will prepare and provide worker educational materials that describe the value and importance of the coastal scrub habitat bordering the staging areas and the importance of not disturbing the habitat.
- The biological ECM will conduct regular visits of the staging areas to inspect if any damage to adjacent habitats has occurred, to evaluate if dust control measures need to be implemented or increased, to ensure that erosion control devices located near native vegetation and ESA(s) are functioning properly, and to evaluate if weed control measures need to be implemented.
- Based on the findings of the site visits, the biological ECM will make recommendations to be implemented regarding weed control, re-vegetation of disturbed areas, the need for additional fencing, and other measures to protect biological resources.
- The biological ECM will prepare monthly monitoring reports for the District that will address the effectiveness of the avoidance measures being implemented and identify any other measures to be implemented.

Measure 2: The District will provide specifications for erosion and dust control to the Contractor, which will be implemented.

Measure 3: Contractor's vehicles traveling on access roads within GGNRA lands would be restricted to a maximum speed of 20 mph during the period of March 15 to July 4, which is the flight season for the Mission blue butterfly. The Contractor will post and enforce this speed limit.

Measure 5: Prior to the implementation of construction activities the District will implement the following program to assess and avoid any impacts to peregrine falcon. This program will consist of the following activities.

- Prior to implementation of construction activities occurring during the nesting season of peregrine falcon (typically February through July), the District will consult with the Golden Gate Raptor Observatory (GGRO) and the Santa Cruz Predatory Bird Group to obtain any existing information on the locations of breeding pairs of peregrine falcon potentially using the Bridge.

- Focused surveys for nesting peregrine falcons would then be conducted by a qualified biologist to determine if nesting falcons are present in areas potentially affected by project implementation.
- If nesting falcons are identified, then a construction exclusion zone would be established around the active eyrie. The size of the exclusion zone will be determined by the CDFG and will take into account existing noise levels at the nest location and the type of construction activities proposed near the eyrie.
- Construction activities may commence within the exclusion zone only upon determination by a qualified biologist that the eyrie is no longer active. Alternatively, construction activities potentially affecting peregrine falcons nesting on the Bridge may be conducted outside of the nesting season of the species.

2.4.5 INVASIVE SPECIES

Regulatory Setting

On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the state's noxious weed list to define invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Affected Environment

The staging areas within GGNRA are located adjacent to well-developed coastal scrub habitat. This plant community is characterized by a dense growth of native species such as coyote brush (Baccharis pilularis), California blackberry (Rubus ursinus), poison oak (Toxicodendron diversilobum), California sagebrush (Artemisia californica), arroyo willow (Salix laseolepis), and various lupine species (Lupinus sp.), as well as non-native invasive species such as French broom (Genista monspessulana), wild radish (Raphanus sativus), and fennel (Foeniculum vulgare).

Environmental Consequences

Invasive plant species currently occur in various densities in areas bordering the staging areas. Soil disturbance and the unintentional

introduction of seeds by construction equipment could result in the further introduction and spread of invasive plant species.

Avoidance, Minimization, and/or Mitigation Measures

To avoid the further introduction or spread of invasive plant species, the avoidance measures currently being implemented to as part to the Golden Gate Bridge Seismic and Wind Retrofit Project would continue to be implemented. The measures relevant to invasive species include:

Measure 1: A qualified biologist or biologists will be retained by the District prior to the start of construction to act as a biological Environmental Compliance Monitor (ECM) and implement and oversee the below activities/measures.

- The biological ECM will flag and stake native vegetation near the staging areas within GGNRA lands as "Environmentally Sensitive Areas" and will oversee the contractor's installation of protective fencing around the designated ESA(s). Signs will be installed indicating that the fenced area is "restricted" and that all construction activities, personnel, and operational disturbances are prohibited.
- The biological ECM will prepare and provide worker educational materials that describe the value and importance of the coastal scrub habitat bordering the staging areas and the importance of not disturbing the habitat.
- The biological ECM will conduct regular visits of the staging areas to inspect if any damage to adjacent habitats has occurred, to evaluate if dust control measures need to be implemented or increased, to ensure that erosion control devices located near native vegetation and ESA(s) are functioning properly, and to evaluate if weed control measures need to be implemented.
- Based on the findings of the site visits, the biological ECM will make recommendations to be implemented regarding weed control, re-vegetation of disturbed areas, the need for additional fencing, and other measures to protect biological resources.
- The biological ECM will prepare monthly monitoring reports for the District that will address the effectiveness of the avoidance measures being implemented and identify any other measures to be implemented.

Measure 4: To prevent the introduction of non-native vegetation or other deleterious materials to GGNRA lands, the Contractor will inspect all construction equipment prior to accessing the staging areas. If any vegetation or deleterious materials are present, the Contractor will

decontaminate its equipment with a high-pressure washer and properly dispose of the wastewater and debris prior to entering GGNRA lands.

2.5 NON-RELEVANT TOPICS

As part of the environmental analysis conducted for the project, the following environmental issues were considered, but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

2.5.1 HUMAN ENVIRONMENT

Growth

This project would not foster economic or population growth. The project does not include the construction of additional housing units, nor would it indirectly result in such construction.

The project does not involve any changes in the existing use of the Bridge or the land surrounding the Bridge. It will not affect the location, distribution, density or growth rate of the human population of the area. Therefore, the project will not have an affect on growth.

Farmlands / Timberlands

There are no farmlands or timberland in the project area. The project will not convert prime farmland, unique farmland or farmland of statewide importance to non-agricultural uses. It will not conflict with any existing Williamson Act contract nor will it conflict with a Timber Production Zone contract. Therefore, the project will not have an affect on farmlands or timberlands.

Community Impacts

Community Character and Cohesion

The project does not involve any changes in the existing use of the Bridge or the land surrounding the Bridge. The project will not affect lifestyles, neighborhood character or stability of surrounding communities, nor will it divide or disrupt an established community.

Relocations

The project does not involve any changes in the existing use of the Bridge or the land surrounding the Bridge; it will not affect existing housing, require