

BIOLOGICAL RESOURCES

4.3 BIOLOGICAL RESOURCES

This chapter describes existing biological resources within the vicinity of the Project site and evaluates the potential biological resources impacts associated with future development that could occur by implementing the Project. A summary of the relevant regulatory setting and existing conditions is followed by a discussion of the Project-specific and cumulative impacts.

Biological resources associated with the Project site were identified through a review of available background information and field reconnaissance surveys. Available documentation was reviewed to provide information on general resources in the San Leandro area, presence of sensitive natural communities, and the distribution and habitat requirements of special-status species, which have been recorded from or are suspected to occur in the Project vicinity. This included records maintained by the California Natural Diversity Data Base (CNDDDB), the National Wetland Inventory, the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* (electronic edition); and the *San Leandro Marina Opportunities and Constraints Analysis*.¹ Field reconnaissance surveys were conducted by the EIR biologist on June 18, 2013 and August 2, 2014 to confirm existing vegetation and wildlife resources, presence or absence of any sensitive resources, and determine potential impacts of the Project.

4.3.1 ENVIRONMENTAL SETTING

4.3.1.1 REGULATORY FRAMEWORK

This section summarizes key federal, State, regional, and City regulations and policies pertaining to biological resources that are applicable to the Project.

Federal Regulations

The federal laws that regulate the treatment of biological resources include the Endangered Species Act, NPDES program, the Migratory Bird Treaty Act, and the Clean Water Act. The following sections outline the relevant principles of each.

Federal Endangered Species Act

The United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) are responsible for implementation of the federal Endangered Species Act (ESA). The Act protects fish and wildlife species that are listed as threatened or endangered and their habitats. Endangered species, subspecies, or distinct population segments are those that are in danger of extinction through all or a significant portion of their range. Threatened species, subspecies, or distinct population segments are those that are likely to become endangered in the near future.

¹ ESA, San Leandro Marina Opportunities and Constraints Analysis, 2007.

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Clean Water Act

The federal Clean Water Act (CWA) is administered by the United States Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (Army Corps). The Army Corps is responsible for regulating the discharge of fill material into waters of the United States, including lakes, rivers, streams, and their tributaries, as well as wetlands. In 2008, Army Corps published the *Wetlands Regulatory Assistance Program: Regional Supplements to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, which provides detailed information for the Arid West Region. Wetlands are defined for regulatory purposes as areas “inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

The discharge of dredged or fill material into waters of the United States is subject to permitting under Section 404 (Discharges of Dredge or Fill Material) of the CWA. Section 401 (Certification) specifies additional requirements for permit review, particularly at the State level. Project proponents must obtain a permit from the Army Corps for all discharges of dredged or fill material into waters of the United States, including wetlands, before proceeding with a proposed action. The Army Corps permits must be certified by the State Water Resources Control Board (SWRCB) in order to be valid. Thus, certification from the SWRCB should be requested at the same time an application is filed with the Army Corps.

Certification from the California Regional Water Quality Control Board (RWQCB) is also required when a proposed activity may result in discharge into navigable waters, pursuant to Section 401 of the CWA and EPA 404(b)(1) Guidelines.

National Pollutant Discharge Elimination System Program

The 1972 amendments to the federal Water Pollution Control Act established the National Pollutant Discharge Elimination System (NPDES) permit program to control discharges of pollutants from point sources (Section 402). The NPDES Permit Program is the primary federal program that regulates point source and nonpoint-source discharges to waters of the United States. The SWRCB issues both general and individual NPDES permits for certain activities.

Migratory Bird Treaty Act

The USFWS is also responsible for implementing the Migratory Bird Treaty Act (MBTA). The MBTA implements a series of treaties between the United States, Mexico, and Canada that provide for the international protection of migratory birds. The MBTA prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the USFWS; this prohibition includes whole birds, parts of birds, and bird nests and eggs. Nests of bird species regulated under the MBTA are protected when in active use during the breeding season. Examples of permitted actions that do not violate the law are the possession of a hunting license to pursue specific game birds, legitimate research activities, display in zoological gardens, bird-banding, and similar activities.

State Regulations

State laws regulating biological resources include the California Endangered Species Act, the California Fish and Game Code, and the California Native Plant Protection Act, each of which is described below.

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California Endangered Species Act

The California Endangered Species Act (CESA) establishes State policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that would affect species that are on the federal and State lists, compliance with the federal ESA satisfies the CESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of species that are only State-listed, the Project proponent must apply for a take permit under Section 2081(b) of the California Fish and Game Code. A Habitat Conservation Plan (HCP) must also accompany an application for an incidental take permit. The purpose of the HCP is to ensure that the effects of the permitted action on listed species are adequately minimized and mitigated.

California Fish and Game Code

Under the California Fish and Game Code, the CDFW provides protection from “take” for a variety of species, including Fully Protected species. “Fully Protected” is a legal protective designation administered by the CDFW, intended to conserve wildlife species that are at risk of extinction, within California. Lists have been created for birds, mammals, fish, amphibians, and reptiles. The California Fish and Game Code sections dealing with Fully Protected species state that these animals “...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected” species. However, taking may be authorized for necessary scientific research. In 2003, the code sections dealing with fully protected species were amended to allow CDFW to authorize take resulting from recovery activities for state-listed species.

The CDFW also protects streams, water bodies, and riparian corridors through the streambed alteration agreement process under Section 1601 to 1606 of the California Fish and Game Code. The Fish and Game Code stipulates that it is “unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake” without notifying CDFW, incorporating necessary mitigation, and obtaining a streambed alteration agreement. Through policy, CDFW asserts jurisdiction to the top of the banks of all streams, including intermittent and ephemeral streams, extending laterally to the upland edge of adjacent riparian vegetation. The CDFW uses the Cowardin system for wetland identification and classification, which typically results in a larger jurisdictional area than federal jurisdiction under the CWA. Under this system, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (CNPPA) prohibits importation of rare and endangered plants into California, “take” of rare and endangered plants, and sale of rare and endangered plants. CESA defers to the CNPPA, which ensures that State-listed plant species are protected when State agencies are involved in projects subject to CEQA. In this case, plants listed as rare under the CNPPA are not protected under CESA; however, impacts to endangered, rare, or threatened species, including plants, are evaluated under CEQA.

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Local Regulations

San Leandro General Plan

The Open Space, Parks and Conservation Element of the 2002 San Leandro General Plan contains a number of policies and actions related to the conservation of important biological and wetland resources, as shown in Table 4.3-1.

San Leandro Municipal Code

The San Leandro Municipal Code contains provisions related to the preservation or replacement of trees on development sites, as addressed in Section 4-1906, Existing Trees on Development Sites, in Article 19, Landscape Requirements of the Zoning Code. All trees with a trunk diameter equal or greater than 6 inches in diameter as measured 4½ feet above existing grade. Regulated trees are to be identified on-site plans, together with information on species, size and extent of drip line. The site plans are to indicate which trees are proposed for removal, and a “limit of grading” line, where applicable. A tree report may also be required, to be prepared by a certified arborist, providing additional information on tree health, appearance, and suitability for preservation. Decision-makers may require that significant trees, based on size, age, prominence and/or habitat value, and/or that replacement trees be provided as part of the final landscape plan for the project.

The Municipal Code also contains provisions related to the protection of monarch butterflies at the marina and golf courses. Section 4-1-1000, Interference with Monarch Butterflies Prohibited, of the Municipal Code reads as follows:

It is declared to be unlawful for any persons to molest or interfere with, in any way, the peaceful occupancy of the Monarch Butterflies during the entire time they remain within the San Leandro Marina, Tony Lema Golf Course and Marina Golf Course of the City of San Leandro, in whatever spot therein they may choose to stop, provided, however, that if said butterflies should at any time swarm in, upon, or near the private dwelling house or other buildings of a citizen of the City of San Leandro in such a way as to interfere with the occupancy and use of said dwelling or other buildings, that said butterflies may be removed, if possible, to another location upon the application of said citizen to the City Manager.

4.3.1.2 EXISTING CONDITIONS

Vegetation and Wildlife Habitat

The Project site has been extensively modified by past fill activity, and subsequent development with marina, riprap, roadways, structures, landscaping and golf course improvements along the shoreline of San Francisco Bay. Coastal saltmarsh, eel grass beds and other sensitive natural communities that most likely once characterized the area have been eliminated by these past fill activities. Scattered individual plants of the coastal salt marsh community have become established along the riprap slopes of the shoreline in some locations, including pickleweed (*Salicornia virginica*), saltgrass (*Distichlis spicata*), marsh gumplant (*Grindelia stricta* var. *angustifolia*), and alkali heath (*Frankenia salina*).

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TABLE 4.3-1 SAN LEANDRO GENERAL PLAN GOALS, POLICIES, AND ACTIONS PERTAINING TO BIOLOGICAL RESOURCES

Goal/Policy Number	Goal/Policy/Action Text
Policy 26.01	Ecosystem Management. Promote the long-term conservation of San Leandro’s remaining natural ecosystems, including wetlands, grasslands, and riparian areas. Future development should minimize the potential for adverse impacts to these ecosystems and should promote their restoration and enhancement.
Policy 26.02	Mitigation of Development Impacts. Require measures to mitigate the impacts of development or public improvements on fish and wildlife habitat, plant resources, and other valuable natural resources in the City.
Policy 26.03	Habitat Restoration. Encourage the restoration of native vegetation in the City’s open spaces as a means of enhancing habitat and reducing wildfire hazards.
Policy 26.04	Species of Special Concern. Ensure that local planning and development decisions do not damage the habitat of rare, endangered, and threatened species, and other species of special concern in the City and nearby areas.
Action 26.04-A	Biological Assessments. Require biological assessments for development in areas where special status species may be present. Require mitigation in accordance with state and federal regulations where potential adverse impacts exist.
Policy 26.05	San Leandro Shoreline Marshlands. Continue the restoration of the San Leandro Shoreline Marshlands as a unique natural area. The emphasis in this area should be on resource conservation, trails, and ecological study.
Action 26.05-A	San Leandro Shoreline Marshlands – Enhancement Program. Continue to monitor the progress of the San Leandro Shoreline Marshlands Enhancement Program. Conduct periodic assessments of hydrology, vegetation, and wildlife in this area, and make adjustments to the management program based on the findings.
Action 26.05-B	Predator Control Plan. Pursuant to the development agreement for Heron Bay, ensure that a predator control plan (controlling feral and domestic animals) is implemented in the San Leandro Shoreline Marshlands. Consider additional measures to improve marsh health, such as a cordgrass control plan.
Policy 26.06	Intergovernmental Coordination. Coordinate with the appropriate regional, state, and federal agencies and other organizations in their efforts to conserve and enhance ecological resources in San Leandro. Refer local projects to these agencies as required for their review and comment.

Source: San Leandro General Plan, Open Space, Parks, and Conservation Element.

Landscaping encompasses the golf course area and has been planted in scattered locations of the marina, composed of primarily non-native turf, groundcovers, shrubs and trees. Dominant tree species include: Monterey pine (*Pinus radiata*), blue gum eucalyptus (*Eucalyptus globulus*), black acacia (*Acacia melanoxylon*), and coast redwood (*Sequoia sempervirens*). Ruderal (weedy) grassland cover borders the managed greens and other landscaped areas, supporting non-native grasses and forbs such as wild oat (*Avena* spp.), bromes (*Bromus* spp.), lotus (*Lotus scoparius*), and English plantain (*Plantago lanceolata*). Invasive species such as sweet fennel (*Foeniculum vulgare*), yellow star thistle (*Centaurea solstitialis*), and tarweed (*Madia* sp.) are also present where routine maintenance has not been performed.

A drainage channel and two man-made ponds also occur on the golf course. Cattail (*Typha latifolia*) form a dense cover of freshwater marsh along the drainage channel, which extends for about 1,000 feet along the western edge of the golf course parallel to Monarch Bay Drive. Emergent vegetation is largely absent around the man-made ponds, which are carefully managed to minimize interruption to golf play.

The wildlife habitat values on the Project site have been greatly influenced by development and human activity. Impervious surfaces, turf, and routine maintenance limit protective cover and foraging

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opportunities. Wildlife in developed areas are typically acclimated to human activity, and include species common in urban and suburban habitats such as scrub jay, mourning dove, house finch, house sparrow, American robin, mockingbird, Norway rat, and house mouse. The mature trees provide roosting and potential nesting substrate for birds, and the grove of eucalyptus in the southeastern edge of the golf course provide winter roosting habitat for a colony of monarch butterflies, as discussed further below under Special-Status Species.

The scattered marshland plants along the riprap shoreline of the marina provide little habitat value for native wildlife, but the open waters of the bay provide foraging and resting opportunities for a variety of bird species including gulls, ducks and shorebirds. At low tides, invertebrate populations in exposed mudflats provide important foraging opportunities for resident and migratory shorebirds and waterfowl. The rock shoreline harbors small shore crabs and isopods and the intertidal and sub-tidal zone supports native oyster, numerous clams and mussels including Japanese littleneck and shot-shelled clams. The open waters of the bay provides dispersal and foraging opportunities for estuarine and marine fish and other aquatic life. Anglers along the shoreline frequently catch striped bass, California bat ray, white croaker, and leopard shark, as well as several surf perch species.

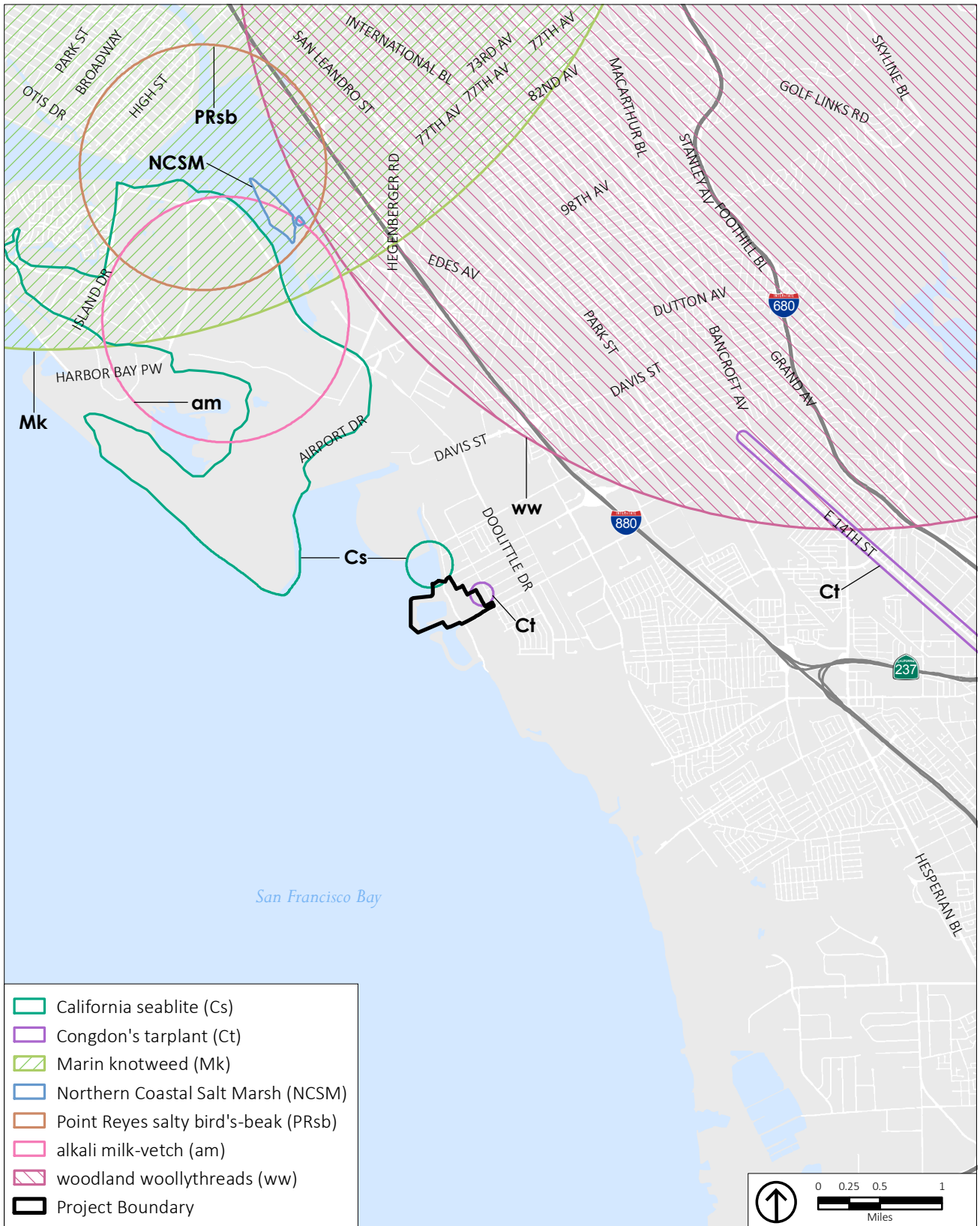
Special-Status Species

According to records maintained by the CNDDDB and other sources, numerous special-status species have been reported from the shoreline of San Leandro and the bay. Figures 4.3-1 and 4.3-2 show the reported occurrences of special-status plant and animal species, according to records maintained by the CNDDDB. Additional information on special-status species known or suspected from the site vicinity is provided in the 2007 *San Leandro Marina Opportunities and Constraints Analysis*,² although most of these suspected occurrences were reported from areas outside of the Project site, in the southern portion of the San Leandro Marina study area south of Monarch Bay Golf Course where natural marshland and wetland habitat remains. A table of special-status species known or suspected from the site vicinity, excerpted from the 2007 *San Leandro Marina Opportunities and Constraints Analysis* is contained in Appendix F.

Special-Status Animal Species

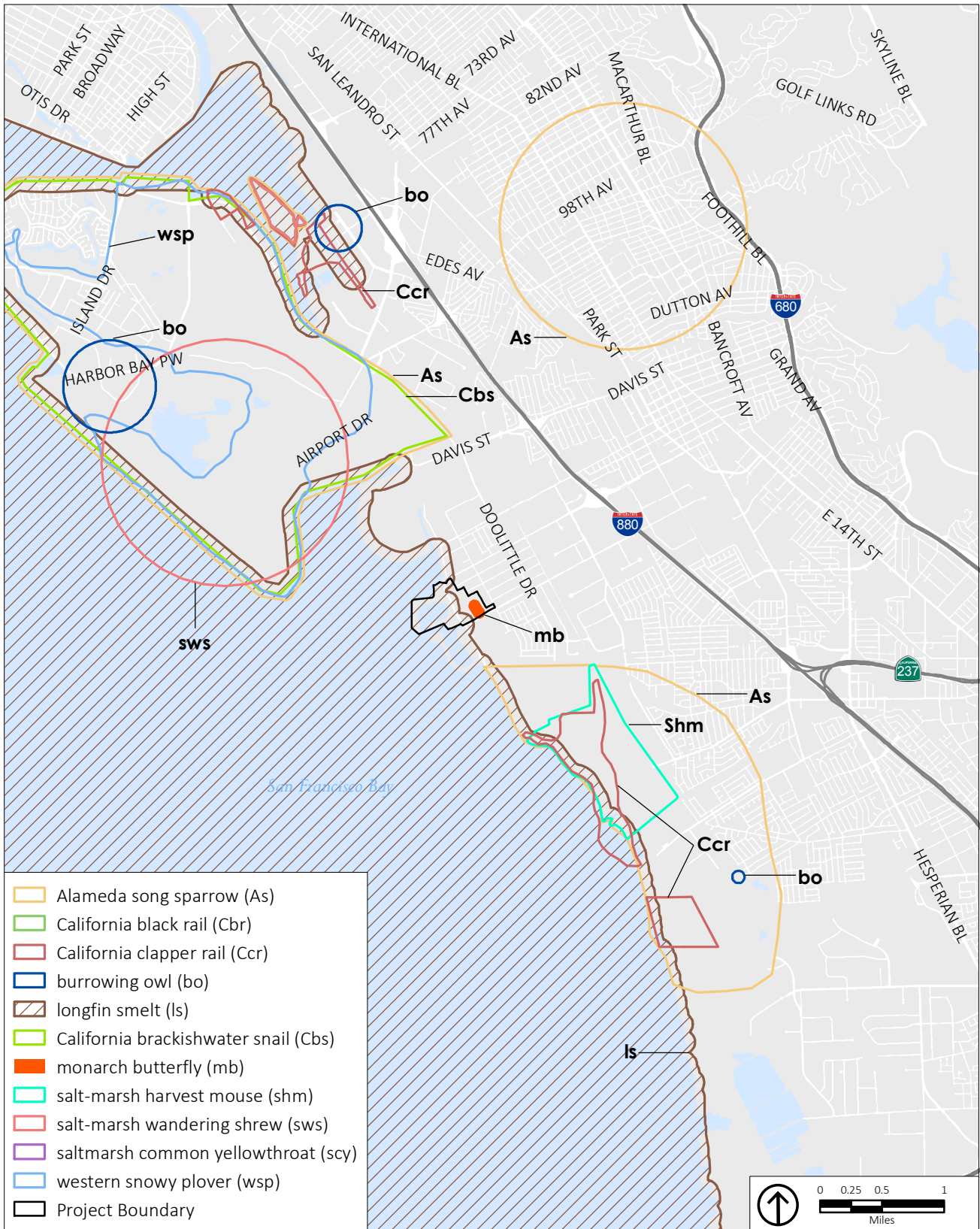
As indicated in Figure 4.3-2, most of the reported occurrences of special-status animal species from the surrounding area are typically associated with coastal salt marsh and aquatic habitat of the bay, which has long been extirpated from upland areas on the Project site. These include: the State and federally endangered California clapper rail (*Rallus longirostris obsoletus*), the federally threatened California black rail (*Laterallus jamaicensis coturniculus*), and the state and federally endangered salt-marsh harvest mouse (*Reithrodontomys raviventris*), as well as salt-marsh wandering shrew (*Sorex vagrans halicoetes*), Alameda song sparrow (*Melospiza melodia pusillula*), and salt-marsh common yellowthroat (*Geothlypis trichas*) all three of which are not listed under the Endangered Species Acts but are considered California Species of Special Concern (“SSC”) species by the CDFW.

² ESA, San Leandro Marina Opportunities and Constraints Analysis, 2007.



Source: California Natural Diversity Database, 2008; City of San Leandro, 2013; Alameda County, 2013; PlaceWorks, 2014.

Figure 4.3-1
Special-Status Plant Species



Source: California Natural Diversity Database, 2008; City of San Leandro, 2013; Alameda County, 2013; PlaceWorks, 2014.

Figure 4.3-2
Special-Status Animal Species

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Burrowing owl, also recognized as a SSC species, have been reported from the North Field at the Oakland Airport, and the state and federally endangered California least tern (*Sterna antillarum browni*) and the federally threatened western snowy plover (*Charadrius alexandrinus nivosus*) have been observed west of Runway 11/29 at the Oakland International Airport. Burrowing owl typically occurs in low grasslands, and marginally suitable habitat for this species occurs around the perimeter of the golf course on the Project site, although no occurrences have been reported in the past. California least tern and western snowy plover reportedly nested along the margins of the western runway at Oakland Airport, but haven't done so for over a decade and suitable nesting habitat for these species is absent on the Project site.

A winter roosting colony of monarch butterfly (*Danaus plexippus*) occurs in the grove of blue gum eucalyptus in the southeastern portion of the Project site. This species has no legal protective status under the Endangered Species Acts, but roosting colonies are recognized as important biological resources by the CDFW and are subject to CEQA review with a State-wide ranking by the CNDDDB of S3 or vulnerable (vulnerable in the state due to a restricted range, relatively few populations). According to monitoring performed by The Xerces Society from 2005 to 2009, an estimated 5,000 monarch butterflies overwintered in the rows of blue gum eucalyptus on the Project site, but this is a considerable reduction from the tens of thousands of monarchs observed in the late 1990s. The following provides a summary of the characteristic habitat and natural history of monarch butterflies, which are applicable to the wintering colony on the Project site.

Monarch butterflies are a migratory species that cannot survive the colder winter months in most parts of North America, and travel to their overwintering areas during the fall months. Monarchs that live west of the Rocky Mountains migrate to coastal areas of California, while those that live east of the Rockies travel to a few sites in the mountains of Central Mexico. In coastal California, overwinter sites range from northern Baja California to southern Mendocino County. In California, clustering behavior begins once migrating monarchs reach their overwintering sites in the fall. The duration of residence is generally used to differentiate the types of monarch wintering habitats, with sites that support clusters of wintering monarchs for a few days to a month are referred to as temporary habitats. Sites that host clusters of wintering monarchs for one to six months are referred to as overwintering habitats.

In the fall months, typically in September and October, numerous, generally small temporary aggregations are formed, especially in areas where nectar plants are plentiful. Monarchs at many of these sites disperse to part-term or full-term overwintering sites as nectar sources, air temperature, and day length decrease. Some sites may serve as overwintering sites one year and temporary sites another year, or a mixture of the two. Occasionally, previously utilized overwintering sites and/or temporary sites are abandoned for one or more seasons as a natural phenomenon.

Overwintering sites are characterized by groves of trees of mixed height and diameter. Often there is a small clearing within a stand of trees, or formed by a combination of the trees and surrounding topography, to provide shelter for the butterfly. These overwintering sites protect the butterfly from prevailing on-shore winds and freezing temperatures, and provide opportunities for sunning and other behaviors. The vegetation serves as a thermal "blanket" which moderates extreme weather conditions. At some locations, topographic features as well as nearby buildings or other man-made structures may provide some protection as well.

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Many of the best overwintering sites provide a heterogeneous mixture of habitat conditions and resultant microclimatic conditions that assist the Monarchs in surviving seasonal changes in climatic conditions during the winter. For example, overwintering habitat must provide wind-protected roost locations (usually tree branches that are 15 to 50 feet above ground), with buffered temperatures, relatively high humidity, and filtered sunlight throughout the fall and winter months. As weather conditions and exposure to sunlight vary over the winter months, high habitat heterogeneity at an overwintering site permits the Monarch roosts to satisfy their thermoregulatory needs by moving from tree to tree in response to changes in weather conditions. Thus during the early part of the overwintering period (October – November), when daily temperature maxima are relatively high, monarchs tend to cluster in locations that provide brief morning insolation, with mid-day and afternoon shade. Later in the season (December – February), when temperature maxima are lower, they tend to roost in trees that receive afternoon sunlight. Trees surrounding roost locations, known as windbreak or buffer trees, provide both wind protection and ameliorate microclimatic conditions near the roost trees.

A number of special-status fish species are known from the larger San Francisco Bay and may occasionally disperse through the open waters in the site vicinity. Although spawning and rearing habitat is absent on the Project site, these species could occasionally disperse or seasonally be present along the shoreline or in the marina basin. These include: Central California Coastal steelhead (*Oncorhynchus mykiss*), green sturgeon (*Acipenser medirostris*), Delta smelt (*Hypomesus transpacificus*), Sacramento splittail (*Pogonichthys macrolepidotus*), Central Valley spring-run chinook salmon (*Oncorhynchus tshawytscha*), and longfin smelt (*Spirinchus thaleichthys*). Steelhead, green sturgeon, and Delta smelt are federally listed threatened species, longfin smelt is state-listed as threatened, and the remainder are recognized as California SSC by the CDFW.

In addition, a number of native bird species could possibly nest in the existing trees and undeveloped areas on the Project site, particularly the mature pines and blue gum eucalyptus on the golf course. If any active nests are present or new nests are established in the future, they would be protected under the federal Migratory Bird Treaty Act (MBTA) while in use (see discussion above under Federal Regulations in Section 4.3.1.1, Regulatory Framework). Active nests of native bird species are also protected under State Fish and Game Code. Of particular concern is the potential for tree nesting by raptors such as red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), great-horned owl (*Bubo virginianus*), and white-tailed kite (*Elanus leucurus*) and nests of burrowing owl, which nests in ground squirrel burrows and other locations on the ground, and northern harrier (*Circus cyaneus*) which typically nests in shrubs and marshland cover. Raptors tend to be susceptible to human disturbance in the vicinity of the nest location.

Special-Status Plant Species

As indicated in Figure 4.3-1, special-status plant species reported from the site vicinity include: alkali milk vetch (*Astragalus tener* var. *tener*), Point Reyes salty bird's-beak (*Cordylanthus maritimus* ssp. *palustris*), Congdon's tarplant (*Hemizonia parryi* ssp. *congdonii*), California seablite (*Suaeda californica*), among others. None of these species have any state or federally listing status under the Endangered Species Acts, but are maintained on CNPS List 1B, (rare, threatened, or endangered in California and elsewhere). A historic occurrence of Congdon's tarplant was reported from just east of the Project site, but this population has presumably been extirpated by past residential and other development activities. No

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occurrences of special-status plant species are suspected to occur on the Project site given the extent of past and on-going habitat disturbance.

Wetlands and Waters

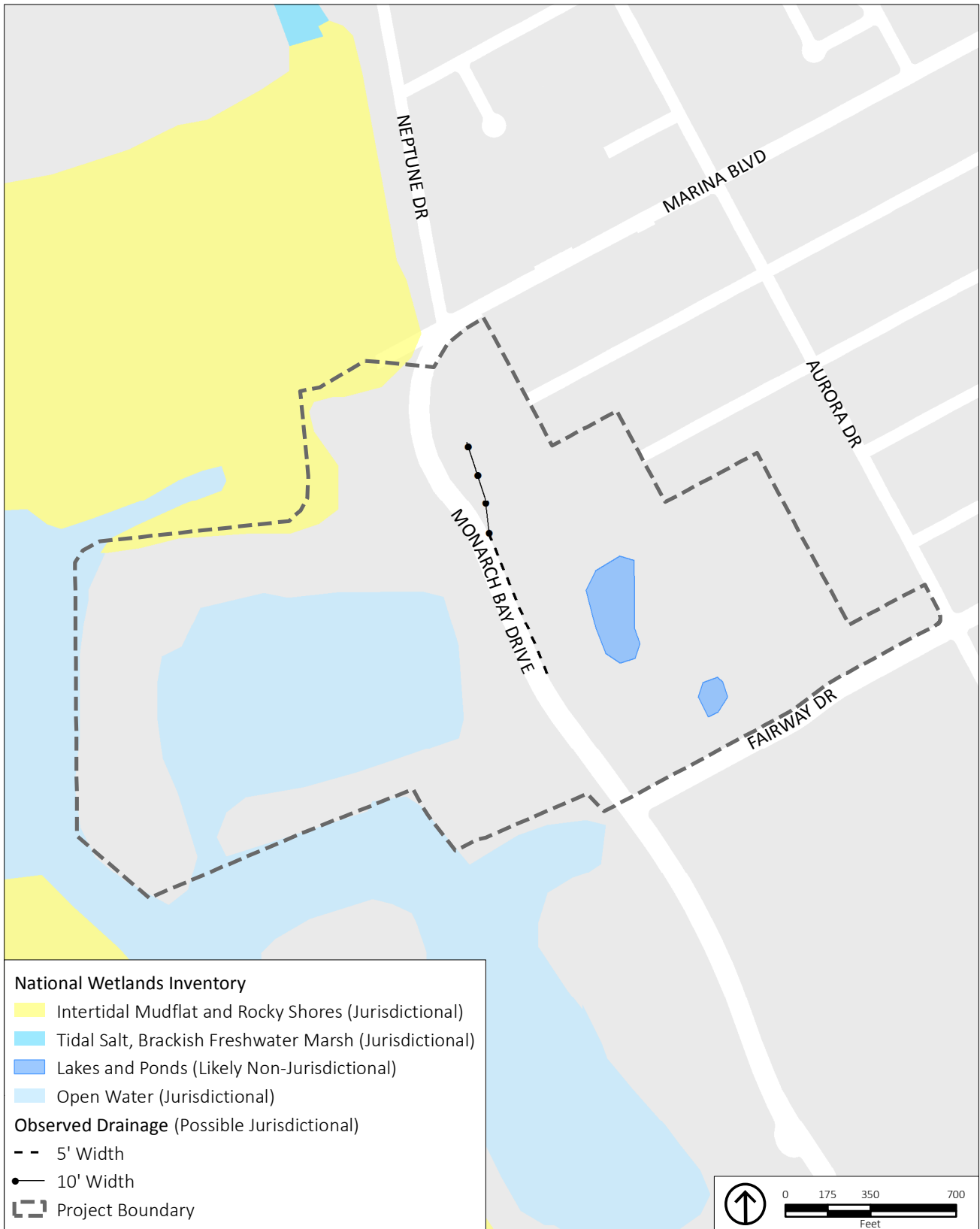
Portions of the Project site are considered wetlands or unvegetated waters of the U.S. (see discussion above under Clean Water Act and California Fish and Game Code in Section 4.3.1.1 Regulatory Framework). Figure 4.3-3 shows the extent of wetlands as mapped by the National Wetland Inventory, which uses a broad definition of wetlands that includes unvegetated features such as the open waters of the San Francisco Bay. These include areas of tidal and intertidal open waters associated with San Francisco Bay, which occupy an estimated 2.54 acres of the Project site, generally below the Mean High Water elevation. The two ponds on the golf course occupy an estimated 1.82 acres. Because they are man-made and not hydrologically connected to navigable waters such as the bay, and generally do not support any wetland vegetation, they are most likely not regulated by the Army Corps, RWQCB, and CDFW. A final determination on whether they are considered regulated waters would have to be made by the regulatory agencies. The northern, larger pond is lined and receives reclaimed water from the City's treatment plant for use in irrigating the golf course turf. The smaller, southern pond is unlined and receives irrigation and stormwater runoff in the winter rainy season.

In addition to the features mapped as part of the National Wetland Inventory, a drainage channel was also observed along the western edge of the golf course as indicated in Figure 4.3-3, extending for a distance of about 1,000 feet and supporting a dense cover of cattail marsh. The drainage appears to be of man-made origins, but conveys surface water flows that presumably are discharged into the marina. The Army Corps would have to make a determination on whether the drainage channel and on-site man-made on-site ponds are regulated waters of the U.S.

4.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the Project would result in a significant biological resources impact if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.



Source: National Wetlands Inventory (NWI), 1997; City of San Leandro, 2013; Alameda County, 2013; PlaceWorks, 2014; Environmental Collaborative, 2014.

Figure 4.3-3
Potential Wetlands and Waters

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6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.3.3 IMPACT DISCUSSION

This section analyzes potential project-specific and cumulative impacts to biological resources.

BIO-1 **The Project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.**

Construction activities associated with Project implementation could affect a number of special-status species known or suspected from the Project site, including the winter roost colony of monarch butterflies, special-status fish species that could be present in the open water habitat of San Francisco Bay, and possibly the nests of birds when in active use which are protected under State and federal regulations. Due to the extent of past and on-going development, no other special-status species are suspected to occur on the Project site with the possible exception of occasional fly-overs by bird species dispersing along the shoreline of the bay in search of suitable habitat. The following provides a summary of potential impacts on special-status species known or suspected from the Project site.

Monarch Butterflies Overwintering Colony

The Project avoids the stand of blue gum eucalyptus where the winter roosting colony of monarch butterflies congregates at the eastern edge of the gold course. No specific plans are proposed to remove or alter any of the trees in this area, or the surrounding golf course and ruderal grasslands at the eastern edge of the Project site. However, the South Golf Course Residential component of the Project includes new townhomes located immediately adjacent to the row of blue gum eucalyptus and pines to the west that most likely provide important wind buffering functions, and could provide nectaring and resting locations for individual butterflies. Although it appears these new residences would avoid most of the dripline of this row of buffering trees, detailed information on the location of individual tree trunks and relationship to the limits of proposed construction have not been provided and there remains a possibility that construction and/or vegetation management activities by future residents could adversely affect these trees and result in indirect adverse effects on the butterfly colony. Changes in microclimate, including removal or pruning of important buffer trees, could lead to further decline or eventual loss of the colony if adequate controls are not taken. Short-term impacts such as construction-generated fumes and dust could adversely affect roosting butterflies if construction is initiated or performed in close proximity during the overwintering period, generally from October 1 to March 1. This would be considered a *significant* impact.

Impact BIO-1A: Proposed development could adversely affect the monarch butterfly winter roosting habitat if adequate controls on tree removal and pruning are not implemented.

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Mitigation Measure BIO-1A: Ensure Protection of Monarch Butterfly Colony. Proposed development shall be designed to avoid adverse impacts on monarch butterfly winter roosting habitat, including controls on removal and pruning of trees in the southeastern portion of the Project site where the monarch butterfly overwintering colony is located. A Monarch Butterfly Roosting Habitat Protection Program (MBRHPP) shall be prepared by a qualified biologist and ensure adequate avoidance and protection of the winter roosting colony, consistent with the intent of Section 4-1-1000, Interference with Monarch Butterflies Prohibited, of the San Leandro Municipal Code. The MBRHPP shall be submitted as part of the Site Plan Review and/or tentative map application, whichever is first, and shall include the following components:

- The MBRHPP shall be prepared by a qualified biologist experienced in management of monarch butterfly colonies in California, and shall describe existing winter roosting colony habitat essential to the monarch butterfly colony and required measures taken to ensure both roosting and wind buffering trees are adequately protected.
- All mature blue gum eucalyptus and pine trees in the colony and along the east edge of the South Golf Course Residential development shall be preserved and protected as part of the MBRHPP, with trunk locations and edge of canopy clearly mapped by engineered survey in relation to proposed building footprints, landscaping and other improvements that may otherwise disrupt their function in buffeting winds.
- As necessary to protect the wind buffering trees, the eastern edge of the proposed South Golf Course residential area may require relocation as part of the MBRHPP to provide a larger setback if there is a risk to these trees as a result of construction activities or future maintenance for fire fuel management, landscape maintenance, and other practices. Where private yards and/or common open space associated with the South Golf Course residential area extends under the canopy of the buffering trees, appropriate CCRs shall be developed to ensure long-term protection as part of future maintenance activities.
- The MBRHPP shall identify restrictions and seasonal controls on construction, tree removal, and vegetation management within 200 feet of the edge of trees known to support the winter roosting colony, including tree removal, pruning, and herbicide application, and appropriate timing of construction and required management within this zone. Grading and equipment operation, any tree removal, pruning, or herbicide application in the vicinity shall be restricted from August 1 through March 31 to prevent any inadvertent disturbance to the winter roosting colony.
- The MBRHPP shall be submitted for review and approval as part of the Site Plan Review and/or tentative map application for the South Golf Course Residential development.

Significance After Mitigation: Less than significant.

Special-Status Fish Species

The Project would include improvements to areas of tidally influenced open water, and could have direct and indirect effects on a number of special-status fish species, such as Central California Coastal steelhead, green sturgeon, Delta smelt, Sacramento splittail, Central Valley spring-run Chinook salmon, and longfin smelt, if present in the area during the time of construction. Project-related improvements that could affect open water habitat of the bay include modifications to the existing riprap shoreline,

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removal of the existing pilings, docks and piers in the existing marina, creation of enhanced natural shoreline along the interior of the existing marina, installation of new piers, docks and pedestrian bridge over the mouth of the entrance to the existing marina, and installation of an aeration fountain to improve water quality in the existing marina basin. Construction could result in disturbance to aquatic habitat of the bay, requiring drilling and excavation for pier/dock installation and shoreline modifications, and suspending silts and other substrate within the construction zone. This could result in a temporary reduction in water quality, or inadvertent injury or loss of individual special-status fish species, if present within the construction zone. The new piers and docks would shade areas of open water, but the removal of the existing dock system in the marina basin would result in a substantial net reduction in shading of open water habitat as part of the Project. Details of the Aeration fountain are not available, but special-status and other fish species could be routinely entrained in the pumping system if adequate screening at the intake locations is not provided and maintained. Appropriate construction avoidance measures would be necessary to prevent possible loss of one or more of these species, and appropriate authorizations may be required from NOAA Fisheries, USFWS, and/or CDFW where “take” of special-status fish species may occur as a result of the in-water activities of the Project. This would be considered a *significant* impact.

Impact BIO-1B: Proposed development could result in inadvertent loss of special-status fish species and other aquatic species as part of in-water construction activities if adequate controls are not implemented.

Mitigation Measure BIO-1B: Prevent Inadvertent Loss of Special-Status Fish and Aquatic Life.

Appropriate construction controls and restrictions shall be taken to prevent inadvertent loss of special-status fish species and other aquatic life as a result of construction activities within or near areas of tidal influence and open water habitat of San Francisco Bay to avoid possible inadvertent take of Central California Coastal steelhead, green sturgeon, Delta smelt, Sacramento splittail, Central Valley spring-run chinook salmon, and longfin smelt, if present in the area during the time of construction. This shall be accomplished with the following provisions:

- Adequate measures shall be taken to minimize disturbance and sedimentation in aquatic habitat of the bay, which may include installation of silt curtains around in-water construction zones, restrictions on in-water operations to low tide periods, and timing restrictions for in-water construction, among other possible controls and restrictions.
- Any pumping as part of dewatering construction areas or as part of the proposed aeration fountain shall be adequately screened according to the latest screening guidelines of the CDFW, USFWS, and NOAA Fisheries to prevent entrainment of special-status fish and other aquatic life during their operation.
- Any in-water construction activities shall be restricted to the period from June 15 through October when stray or dispersing special-status fish species would most likely not be expected within the affected areas.
- The applicant shall obtain all necessary authorizations from the CDFW, NOAA Fisheries, and USFWS as required by federal and State law for potential harm to special-status fish species. Such authorization would be obtained as a result of interagency coordination through the Army Corps Section 404 consultation and the CDFW Section 2081 Incidental Take Permit process. The Project shall adhere to any additional conditions and restrictions required as part of the authorizations from regulatory agencies.

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Significance After Mitigation: Less than significant.

Nesting Birds

The mature trees, dense landscaping, and even the exterior of the existing buildings to be demolished could be used for nesting by raptors and more common bird species. These nests would be protected under the MBTA and California Fish and Game Code when in active use. The MBTA prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the USFWS; this prohibition includes whole birds, parts of birds, and bird nests and eggs. Tree and vegetation removal, building demolition, and other construction activities during the breeding season could result in the incidental loss of fertile eggs or nestlings or nest abandonment if any active nests are present. This would be considered a *significant* impact.

Impact BIO-1C: Proposed development could result in inadvertent loss of bird nests in active use, which would conflict with the federal Migratory Bird Treaty Act and California Fish and Game Code if adequate controls and preconstruction surveys are not implemented.

Mitigation Measure BIO-1C: Ensure Avoidance of Bird Nests in Active Use. Tree removal, landscape grubbing, building demolition, and other construction activities, such as grading and utility installation shall be performed in compliance with the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code to avoid loss of nests in active use. This shall be accomplished by scheduling tree removal and building demolition outside of the bird nesting season (which occurs from February 1 to August 31) to avoid possible impacts on nesting birds if new nests are established in the future. Alternatively, if tree removal and building demolition cannot be scheduled during the non-nesting season (September 1 to January 31), a pre-construction nesting survey shall be conducted. The pre-construction nesting survey shall include the following:

- A qualified biologist (Biologist) shall conduct a pre-construction nesting bird (both passerine and raptor) survey within seven calendar days prior to tree removal, landscape grubbing, other construction activities and/or building demolition.
- If no nesting birds or active nests are observed, no further action is required and tree removal, landscape grubbing, other construction activities, and building demolition shall occur within seven calendar days of the survey.
- Another nest survey shall be conducted if more than seven calendar days elapse between the initial nest search and the beginning of tree removal, landscape grubbing, other construction activities and building demolition.
- If any active nests are encountered, the Biologist shall determine an appropriate disturbance-free buffer zone to be established around the nest location(s) until the young have fledged. Buffer zones vary depending on the species (i.e., typically 75 to 100 feet for passerines and 300 feet for raptors) and other factors such as ongoing disturbance in the vicinity of the nest location. If necessary, the dimensions of the buffer zone shall be determined in consultation with the California Department of Fish and Wildlife.
- Orange construction fencing, flagging, or other marking system shall be installed to delineate the buffer zone around the nest location(s) within which no construction-related equipment or

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operations shall be permitted. Continued use of existing facilities such as surface parking and site maintenance may continue within this buffer zone.

- No restrictions on grading or construction activities outside the prescribed buffer zone are required once the zone has been identified and delineated in the field and workers have been properly trained to avoid the buffer zone area.
- Construction activities shall be restricted from the buffer zone until the Biologist has determined that young birds have fledged and the buffer zone is no longer needed.
- A survey report of findings verifying that any young have fledged shall be submitted by the Biologist for review and approval by the City of San Leandro prior to initiation of any tree removal, landscape grubbing, building demolition, and other construction activities within the buffer zone. Following written approval by the City, tree removal, and construction within the nest-buffer zone may proceed.

Significance After Mitigation: Less than significant.

BIO-2 The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

No riparian or other sensitive natural community types are present on the Project site, and none would be affected by the Project. Coastal salt marsh and well-developed riparian habitat are absent, and existing vegetative cover is generally limited ornamental landscaping, including areas of turf, shrubs and groundcovers and tree plantings. The narrow band of freshwater marsh along the drainage channel at the western edge of the golf course is dominated by cattail, which is an opportunistic species that quickly colonizes areas with permanent to semipermanent surface water. This feature may be a regulated wetland, and would receive protection as such if jurisdictional, as discussed further below under BIO-3.

Applicable Regulations:

- None

Significance Before Mitigation: No impact.

BIO-3 The Project would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Implementation of the Project would result in direct and indirect effects on jurisdictional wetlands and other waters. This includes disturbance to areas in open water and the shoreline of San Francisco Bay and upland areas in the golf course. Modification in areas within or adjacent to tidal influence includes removal of existing pilings and docks, demolition of the existing Harbor Master office, construction of new docks and launching piers, installation of the aeration fountain in the middle of the marina basin, and

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changes to the existing riprap shoreline to accommodate the proposed enhanced natural shoreline areas, perched beach and steps, and pedestrian bridge at the mouth of the existing marina basin. Details on the extent of dredging and fills in tidal areas and adjacent shoreline have not yet been refined as part of the project, but encompass most of the shoreline to the existing marina basin and several new piers and promenade treatments along the shoreline to the bay. Modifications below the Mean High Water would be regulated activities subject to authorization from the Army Corps and RWQCB. Fills in the golf course area include culverting of a portion of the drainage channel along the east side of Monarch Bay Drive and eliminating the southern pond. An estimated 600 linear feet of the existing man-made drainage ditch in the golf course area (see Figure 4.3-3) would also be filled to accommodate the North Golf Course Residential area, affecting an estimated 0.11 acre of cattail dominated freshwater marsh. Although it is a man-made drainage ditch, based on the presence of wetland vegetation and hydrologic connection to the bay, it appears this feature may be considered jurisdictional wetlands by the Army Corps and/or CDFW. The southern pond would also be filled to accommodate the South Golf Course Residential area. However, this pond is a man-made waterbody that contains no prominent wetlands and appears to be hydrologically isolated, and may therefore not be a jurisdictional water regulated by the Army Corps, RWQCB and/or CDFW.

Modifications to regulated waters would require appropriate authorizations from State and federal regulatory agencies, including the Army Corps and RWQCB under Section 404 and 401 of the Clean Water Act, and possibly CDFW under the Streambed Alteration Agreement program. Further review would be provided by these regulatory agencies when a permit application was formally submitted for authorization of activities within jurisdictional limits. If regulated wetland habitat is affected, possibly including the linear drainage channel on the east side of Monarch Bay Drive, a compensatory mitigation program will likely be required as part of the regulatory agency authorizations. A program to monitor and maintain any created habitat provided as mitigation would be a requirement of the regulatory agency authorizations, ensuring adequate compensatory mitigation and successful establishment of any replacement marshland and adjunct upland vegetation. As discussed in Section 4.8, Hydrology and Water Quality, best management practices (BMPs) would be utilized to prevent any construction-generated sediments or pollutants from entering the surrounding wetlands and open water habitat, although no stormwater pollution program has been prepared for the Project. Overall, if the waters described above are determined to be regulated waters and not exempt as man-made features, this would be considered a *significant* impact.

Impact BIO-3: Proposed development would result in fills and modifications to jurisdictional waters, which would require appropriate controls, compensatory mitigation, and regulatory authorizations.

Mitigation Measure BIO-3: Provide Compensatory Mitigation for Wetland Modifications. A compensatory mitigation program shall be developed and implemented to provide adequate mitigation for jurisdictional waters affected by proposed improvements. A jurisdictional wetland delineation shall be prepared by a qualified wetland specialist and submitted for verification by the Army Corps. A Wetland Protection and Replacement Program (WPRP) shall be prepared by the qualified wetland specialist and implemented to provide compensatory mitigation at a minimum 2:1 ratio where wetland habitat is affected, shall minimize disturbance to unvegetated waters, and shall be reviewed and approved by regulatory agencies. The WPRP shall include appropriate implementation measures to prevent inadvertent loss and degradation of jurisdictional waters to be

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protected, and replacement for those wetland features eliminated or modified as a result of development. The WPRP shall contain the following components:

- Where verified waters of the U.S. are present and cannot be avoided, authorization for modifications to these features shall be obtained from regulatory agencies with jurisdiction. This includes the Army Corps through the Section 404 permitting process where waters of the United States are affected by the Project and the RWQCB as part of the Section 401 Certification process. Together with a Streambed Alteration Agreement (SAA) secured from CDFW, if required as part of the SAA Notification process for proposed fills to the man-made drainage and possibly the pond on the golf course. All conditions required as part of the authorizations by the Army Corps, RWQCB, and CDFW shall be implemented as part of the project.
- Consultation or incidental take permitting may be required under the California and federal Endangered Species Acts. The applicant shall obtain all legally required permits or other authorizations from the USFWS, NOAA Fisheries, and CDFW under the Endangered Species Acts.
- Install orange construction fencing around the boundary of all wetland areas and waters to be preserved at the interface with proposed fills and grading so that they are not disturbed during construction. The fencing shall be placed a minimum of 25 feet out from the boundary of the wetlands/waters but may need to be adjusted if restoration activities are to be conducted within this area. Grading, construction, and restoration work within the wetland/waters buffer zones shall be conducted in a way that avoids or minimizes disturbance of existing wetlands and aquatic habitat.
- A qualified biologist/restoration specialist shall be available during construction to provide situation-specific wetland avoidance measures or planting recommendation, as needed.
- Success criteria, maintenance and long-term management responsibilities, monitoring requirements, and contingency measures in the WPRP shall be specified. Monitoring shall be conducted by the qualified wetland specialist for a minimum of five years and continue until the success criteria are met. Permanent monitoring transects shall be established as part of the program and vegetation data collected in the spring and summer months when plant identification is possible. Photo stations shall be established along each monitoring transect, and photographs taken every year during the required monitoring period.
- Annual monitoring reports shall be prepared by the qualified wetland specialist and submitted to resource agency representatives and the City's Planning Services and Building and Safety Services Divisions by December 31 of each monitoring year for a minimum of five years or longer, until the defined success criteria are met. The annual report shall summarize the results of the monitoring effort, performance standards, and any required contingency measures, and shall include photographs of the monitoring transects and program success. Maps shall be included in the monitoring report to show the location of monitoring transects and photo stations.

Significance After Mitigation: Less than significant.

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BIO-4 The Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

The Project would result in modifications to existing wildlife habitat but would not interfere with existing movement opportunities and use of native wildlife nursery areas. Most of the Project site is developed with parking lots, structures, irrigated turf of the golf course, and landscaping. Wildlife habitat values are generally limited, with the exception of the open waters of marina basin and San Francisco Bay, which would be improved through removal of much of the existing dock system and creation of enhanced natural shoreline along lower segments of the existing riprap. Most of the existing mature trees would be retained, including the monarch butterfly roosting habitat at the southeast edge of the golf course, serving to protect the resting, perching, and foraging opportunities they provide wildlife. New landscaping would replace areas where existing trees, shrubs and groundcovers would be removed, serving to replace their habitat functions for birds and other wildlife common in suburban habitats. Potential adverse impacts on fish and other aquatic species during construction would be avoided through restrictions implemented as conditions of approval of regulatory agencies such as the Army Corps and RWQCB, as addressed above under Impact BIO-1 and Impact BIO-3, which would ensure any substantial impacts on special-status species and more common aquatic species are adequately avoided. These include restrictions on timing of in-water dredging and construction activities to avoid periods when listed species have a higher likelihood of being present, typically from October 15th to July 1st. This would be considered a *less-than-significant* impact.

Applicable Regulations:

- Clean Water Act
- California Endangered Species Act
- National Pollutant Discharge Elimination System Program

Significance Before Mitigation: Less than significant.

BIO-5 The Project could conflict with local ordinances protecting biological resources, such as the City's tree preservation ordinance and monarch butterfly protection ordinance.

In general, the Project would not conflict with any relevant goals and policies in the City of San Leandro General Plan related to protection of biological and wetland resources. Potential impacts on special-status species, wetlands or important wildlife resources would be addressed through adherence to relevant policies and actions in the General Plan, implementation of recommended mitigation measures, and through habitat enhancement efforts undertaken as part of implementing the Project, including the natural shoreline element along the southwest and southeast interior borders of the harbor basin.

Relevant policies and actions from the General Plan particularly applicable to the Project are listed above in Table 4.3-1. Consistency with Policies 26.02 and 26.04, and Action 26.04-A would be achieved through compliance with mitigation measures developed as part of this EIR. As discussed below under Section 4.3.5, this includes Mitigation Measure BIO-1A to address potential impacts on monarch butterfly,

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Mitigation Measure BIO-1B to address potential impacts on special-status fish species, Mitigation Measure BIO-1C to address potential impacts on possible bird nests in active use, Mitigation Measure BIO-3 to address potential impacts on any regulated waters, Mitigation Measure BIO-5 to address potential impacts on regulated trees. The biological resource assessment conducted by the EIR biologist and provided as part of this EIR serves to address the requirement for a biological assessment to determine presence or absence of any special-status species as called for in Action 26.04-A. Very little natural habitat remains on the Project site, and areas of “enhanced natural shoreline” are to be incorporated into the Project, consistent with Policy 26.01 and 26.03.

A number of trees would be removed to accommodate the Project, including scattered trees in the reconfigured parking area at the marina and trees planted on the golf course area. These consist of ornamental species planted as landscaping, including Monterey pine, fruitless pear, and blue gum eucalyptus. Many of these trees would qualify as a regulated tree under Section 4-1906, Existing Trees on Development Sites, in Article 19, Landscape Requirements of the City’s Zoning Code. According to the landscape requirements, all trees with a trunk diameter of six inches or greater are to be identified on site plans, together with information on species, size and extent of drip line. The site plans are to indicate which trees are proposed for removal, and a “limit of grading” line, where applicable. A tree report, prepared by a certified arborist, may also be required by the City to provide additional information on tree health, appearance, and suitability for preservation. The City may require that replacement trees be provided as part of the final landscape plan for removal of trees of significant size that cannot be avoided. Until a thorough inventory of all regulated trees is prepared, and a review of the accompanying tree report and final landscape plans showing proposed replacement provided by the applicant, there remains a possible conflict with the relevant section of the Zoning Code over the possible loss of trees of significant size. This would be considered a *significant* impact.

Impact BIO-5A: Proposed development would result in removal of trees regulated under City Ordinance, and possible damage to other trees unless adequate controls are implemented.

Mitigation Measure BIO-5A: Tree Protection and Replacement. The Project shall comply with Section 4-1906, Existing Trees on Development Sites, in Article 19, Landscape Requirements of the City of San Leandro Zoning Code. Compliance with the Zoning Ordinance shall be achieved through adherence with the following provisions:

- All trees with a trunk diameter of 6 inches or greater shall be identified on site plans prior to site plan approval, together with information on species, size, assigned tree number, trunk location determined by engineer survey, and extent of drip line.
- A tree report shall be prepared by a certified arborist prior to site plan approval, providing additional information on tree health, appearance, and suitability for preservation of each regulated tree.
- All grading, improvement plans, and construction plans prepared for building permits shall clearly indicate trees proposed to be removed, altered, or otherwise affected by development construction, together with the “limit of grading” line.
- Adequate measures shall be defined in the tree report to protect all trees to be preserved. This shall include installation of temporary construction fencing at the perimeter of the protected area, restrictions on construction within the fenced areas unless approved as a condition of the

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application and performed under the supervision of the certified arborist, and prohibition on parking or storing of vehicles and other construction equipment within the protected area.

- Where avoidance of a regulated tree is not feasible, replacement tree plantings shall be provided prior to site plan approval as part of the final landscape plan.

Significance After Mitigation: Less than significant.

As discussed under Impact BIO-1, the Project could also result in adverse impacts on the monarch butterfly colony if appropriate avoidance measures aren't implemented in accordance with Section 4-1-1000, Interference with Monarch Butterflies Prohibited, of the Municipal Code. The proposed South Golf Course residential component of the Project includes new townhomes located adjacent to the row of blue gum eucalyptus and pines to the west of the monarch butterfly roosting area, and these trees most likely provide important wind buffering functions, and could provide nectaring and resting locations for individual butterflies. Without property controls and management, proposed construction and/or vegetation management activities by future residents could adversely affect these trees and result in indirect adverse effects on the butterfly colony, which would be in conflict with the provisions in the Municipal Code. This would be considered a *significant* impact.

Impact BIO-5B: Proposed development would result in removal of trees regulated under City Ordinance, and interfere with Section 4-1-1000, Interference with Monarch Butterflies Prohibited, of the Municipal Code.

Mitigation Measure BIO-5B: Implement Mitigation Measure BIO-1A to ensure protection of trees supporting Monarch Butterfly colony.

Significance After Mitigation: Less than significant.

BIO-6	The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.
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The Project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. No such plans have been adopted encompassing the Project vicinity, and no impacts are anticipated.

Applicable Regulations:

- None.

Significance Before Mitigation: No impact.

4.3.4 CUMULATIVE IMPACT DISCUSSION

BIO-7	The Project, in combination with past, present and reasonably foreseeable projects, would result in less than significant cumulative impacts with respect to biological resources.
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The potential impacts of the Project on biological resources tend to be site-specific, and the overall cumulative effect would be dependent on the degree to which significant vegetation and wildlife resources are protected on a particular site. This includes preservation of well-developed native vegetation (e.g., marshlands, native grasslands, oak woodlands, riparian scrub and woodland, etc.), populations of special-status plant or animal species, and wetland features (including seasonal wetlands and drainages). Environmental review of specific development proposals in the vicinity of a development site should serve to ensure that important biological resources are identified, protected, and properly managed, and to prevent any significant adverse development-related impacts, including development for the remaining undeveloped lands in the surrounding incorporated and unincorporated lands. Adherence to relevant policies and actions from the City of San Leandro General Plan call for identification and protection of sensitive biological resources, and adequate mitigation and resource agency authorization where potential impacts exist for a project. In general, anticipated development in the Project site vicinity would be located in areas that have already been heavily modified by past development, and do not contain sensitive biological resources.

To some degree, cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human disturbance can be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. New development in the west Alameda County area encompassing San Leandro would result in further conversion of existing natural habitats to urban and suburban conditions, limiting the existing habitat values of the surrounding area. This could include further loss of wetlands and sensitive natural communities, reduction in essential habitat for special-status species, removal of mature native trees and other important wildlife habitat features, including obstruction of important wildlife movement corridors. Additional development may contribute to degradation of the remaining aquatic habitat in the creeks and other open waters of the San Francisco Bay if adequate protective measures are not implemented. Grading associated with construction activities generally increases erosion and sedimentation, and urban pollutants from new development would reduce water quality. However, other development would similarly be subject to regulatory controls on erosion and sedimentation after grading, and compliance with numerous water quality regulations. Compliance with this comprehensive regulatory scheme would minimize the potential for water quality degradation for cumulative development to a *less-than-significant* level.

However, with regard to future development and its relationship to surrounding habitat, most of the Project site vicinity is already extensively disturbed by urban and suburban uses. Wildlife in the area has already become acclimated to human activity, and proposed development is not expected to disrupt important movement corridors or access to surrounding habitat. Monarch butterflies are experiencing significant declines throughout their range in North America, but the monarch butterfly colony on the Project site would be avoided by proposed construction with the appropriate controls recommended to preserve buffer trees, and the Project would have no contribution to cumulative impacts on this species. The shoreline habitat of the marina and bay would be enhanced as part of the Project, with appropriate controls during construction and operation to avoid and minimize any potential adverse contribution to decline in water quality and aquatic habitat of the San Francisco Bay. Therefore, the Project's contribution to cumulative impacts on biological resources would be *significant* and the mitigations recommended throughout this chapter would serve to address significant Project-specific impacts and their contribution to cumulative impacts.

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Impact BIO-7: Proposed development would result in a cumulative impact with regard to biological resources.

Mitigation Measure BIO-7: Implement Mitigation Measures BIO-1A, BIO-1B, BIO-1C, BIO-3, BIO-5A, and BIO-5B.

Significance After Mitigation: Less than significant.