Appendix F

Draft Seaside 2040 Biological Resources Assessment

Seaside General Plan, "Seaside 2040"

Biological Resources Assessment

prepared by

Rincon Consultants, Inc.
437 Figueroa Avenue, Suite 203
Monterey, California 93940

prepared for

City of Seaside
Community and Economic Development Department
440 Harcourt Avenue
Seaside, California 93955
Contact: Sharon Mikesell, Administrative Analyst

November 2017

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers
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Appendix A Special Status Species Evaluation

1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared this Biological Resources Assessment (BRA) to document the existing conditions within the City of Seaside (City) General Plan area, in support of the preparation of the City of Seaside 2040 General Plan Update, and associated Environmental Impact Report (EIR).

This report documents the existing biological conditions, known occurrences of special status species and sensitive natural communities, as well as the regulatory setting and environmental constraints.

2 Project Description

The City last updated its General Plan in 2004. Since then, changes have taken place in the City's economic and housing markets, demographics, land use, transportation system, community character, and infrastructure demands. The 2040 General Plan Update incorporates these new conditions, the community's consensus for the future and new State requirements regarding climate change and transportation with a time horizon of 2040.

"The General Plan Update brings the General Plan up-to-date by:

- Engaging community members to express their collective values to create a common vision for the City's future.
- Refining the land use and community character vision for potential growth areas of the City.
- Incorporating recently created plans, such as the West Broadway Specific Plan.
- Creating updated policies for land use, community design, transportation, infrastructure, and other topics.
- Ensuring that the General Plan is consistent with the Fort Ord Base Reuse Plan.
- Maintaining the City's stock of housing, especially housing for those with low- and moderate-incomes.
- Addressing recent State requirements regarding climate change and transportation."

To accomplish these goals the 2040 General Plan outlines 16 major strategies, some of which occur on previously developed land within the City proper, and some of which occur on undeveloped former Fort Ord lands, or within the Laguna Grande Lake Roberts complex. Projects associated with these strategies have potential to result in impacts to biological resources. Specifically, strategies 9-13 have increased potential to result in impacts to biological resources based on their design in relation to the City's natural and recreation assets and the former Fort Ord lands. The 2040 General Plan update, and major strategies are described in full in the Seaside General Plan Update EIR.

Strategy nine: Create entryways to the City's key amenities and destinations. Under this strategy, amenities would be created to encourage use of the City's natural and recreational assets to encourage use. This would include construction of restaurants, cafes, and retail services.

Strategy ten: Develop Seaside East with sustainable neighborhoods and the preservation of natural areas. This strategy includes the development of former Fort Ord lands for residential and mixed-use retail areas, designed to preserve significant natural resources.

Strategy eleven: Construct new and enhance existing parks. This stagey includes development of new parks and recreational facilities on former Fort Ord lands.

Strategy twelve: Create an active trail network. Strategy twelve will create a network of open space trails and bicycle facilities to connect the Fort Ord National Monument, Laguna Grande/Lake Roberts, Dunes State Park, Seaside beach, open space, and other neighborhood and community parks; Including links to the Fort Ord Rec Trail and Greenway (FORTAG).

Strategy thirteen: Preserve habitat. The purpose of this strategy is to protect sensitive habitats and preserve the extensive natural resources during new development, particularly on former Fort Ord lands. This will be accomplished through open space corridors and trails that support natural

vegetation communities, sensitive habitats, and connections to the National Monument and FORTAG trail. A buffer will be established between new development and the National Monument; and Oak woodlands and oak linkages will be protected during development and preserved.

2.1 Relevant 2040 General Plan Goals and Policies

The goals and policies incorporated into the 2040 General Plan that are relevant to biological resources and sensitive species include:

Land Use and Urban Design Goals and Policies

Goal LUD-9: A City with beautiful and vibrant architecture and building design that reflects the culture and character of Seaside. To beautify the City, enhance the image of the community, and encourage integrated urban design.

> **Policy: Natural areas.** Design sites and buildings adjacent to natural areas with transparent design elements. Employ bird-safe design practices near habitat areas or migratory routes.

Goal LUD-17: Abundant and high-quality natural open space on former Fort Ord lands. To leverage the undeveloped Fort Ord lands to provide new active and passive open space for the Seaside community. To create connected open space and habitat corridors that maximize ecological quality.

> **Policy: Sensitive habitat.** Protect and maintain sensitive habitat areas as feasible.
>
> **Policy: Open space corridors.** Balance the need to create more housing, employment, retail, and entertainment uses on former Fort Ord lands with open space corridors that support natural vegetation communities, scenic vistas, and sensitive habitats within new growth areas. Open space corridors should connect to formal and informal trailheads in the National Monument, where possible.
>
> **Policy: Open space buffer.** Provide an open space buffer consistent with the Base Reuse Plan (BRP).
>
> **Policy: Regional efforts.** Participate in regional programs and in partnerships with land trusts to seek funding to preserve, maintain, and acquire open space as opportunities allow.

Goal LUD-20: New development supports the preservation or enhancement of the City's natural resources. To protect the most valuable natural areas and species in former Fort Ord lands.

> **Policy: Clustered development.** Cluster new development on former Fort Ord lands, as feasible, to minimize impacts on sensitive habitat.
>
> **Policy: Development adjacent to habitat.** Require new construction adjacent to habitat management areas to minimize new impervious surface, minimize light pollution, and emphasize native landscaping.
>
> **Policy: Low-impact development.** Require new construction to use low-impact development techniques to improve stormwater quality and reduce run-off quantity.
>
> **Policy: Steep slopes.** Preserve areas with steep slopes greater than 40 percent by prohibiting commercial and residential development. Open space and trails may be allowed in these areas.

Policy: Native species. Encourage new development to support a diversity of native species and manage invasive species.

Policy: Green Streets. Explore opportunities for Green Streets, when feasible. When Green Street demonstration areas are identified, include unobtrusive educational signage.

Goal LUD-22: Balanced, diverse, and sustainable growth. To guide development towards a diverse community that balances habitat and wilderness with new low-impact residential development clustered around neighborhood centers, supporting public use, and employment districts.

Policy: Habitat preservation. Support the preservation of open space and sensitive habitat including:

- Oak woodlands and linkages.
- An open space buffer between future development and the National Monument.
- Open space corridors that support natural vegetation communities, scenic vistas, and sensitive habitats

Parks, Open Space, and Conservation Goals and Policies

Goal POC-2: Natural open space on former Fort Ord lands. As former Fort Ord lands redevelop, this goal aims to create a high-quality and well-connected series of natural open spaces that support expanded recreational opportunities. Open space corridors include trails connecting to the Fort Ord National Monument, parks, and other destinations. It also includes passive corridors to preserve habitat, consistent with the Base Reuse Plan.

Policy: Active open space corridors. In partnership with regional and local agencies, develop active open space corridors that support natural vegetation communities, scenic vistas, and sensitive habitats within former Fort Ord lands. Open space corridors should connect to formal and informal trailheads in the National Monument where possible.

Policy: Open space buffer. Provide an open space buffer consistent with the BRP between future development in Seaside East and the National Monument.

Policy: Partner with outside agencies. Participate in regional and federal programs and partner with land trusts or other nonprofits to seek funding to preserve, maintain, and manage natural open space

Policy: Educational opportunities. Promote educational opportunities to emphasize the need to maintain and manage biological resources to maintain the uniqueness and biodiversity of the former Fort Ord

Goal POC-7: Environmental sustainability and awareness at new and existing park and recreational facilities. Reducing energy and water use, diverting solid waste from the landfill, and capturing stormwater onsite can improve the environmental sustainability of Seaside's parks and open spaces. This goal seeks to increase the City's sustainability efforts in parks, using these actions as an opportunity to educate the community about sustainability.

Policy: Education. Increase awareness of environmental sustainability practices by highlighting conservation practices at park and recreational facilities.

Policy: Environmental literacy. Promote environmental literacy classes or urban ecology programs for youth.

Goal POC-8: Sensitive species and habitat protected on former Fort Ord lands. The Fort Ord HMP and HCP provide frameworks to conserve and manage special status species, animal communities, and habitat areas on former Fort Ord lands. This goal aims to implement those plans locally, identifying and managing habitat areas and species.

Policy: Inland water resources. Strive to protect and enhance creeks, lakes, and adjacent wetlands by eradicating non-native vegetation and restoring native vegetation.

Policy: Habitat Management Plan and Habitat Conservation Plan. Continue to partner with local, regional, and federal agencies to implement the programs outlined by the HCP and HMP.

Policy: Loss of sensitive species. Strive to minimize the loss of sensitive species and critical habitat areas in areas planned for future development.

Policy: Habitat management areas. Continue to protect habitat management areas on former Fort Ord land, identifying habitat areas, planning carefully to avoid significant impacts, and implementing more restrictive development standards adjacent to these areas.

Policy: Oak woodlands. Continue to partner with regional and local agencies to designate oak woodlands and linkages, encourage the preservation and management, of oak woodland and linkages, and connect them to other parks, open spaces, and active open space corridors.

Policy: Habitat restoration. Restore habitat areas where habitat has been disturbed by activities on the former Fort Ord lands, if economically feasible, in development of Specific Plans.

Policy: Zoning. During development of Specific Plans on former Fort Ord lands, map and designate habitat management areas to be protected from future development, where appropriate.

Goal POC-9: New development supports the preservation or enhancement of the City's natural resources. Former Fort Ord lands contain higher-quality, contiguous habitats and special status species. As future development occurs on former Fort Ord lands, this goal fosters sustainable development practices that provide to sensitive habitats and species.

Policy: Clustered development. Cluster new development on former Fort Ord lands to minimize impacts to oak woodlands and linkages, preserve habitat management areas, and protect steep slopes, wetlands, and waterways.

Policy: Integrating oak woodland. Work with developers to promote an understanding of existing oak trees and previously-identified oak woodland linkages as they design new developments.

Policy: Development review. When projects are adjacent to or contain sensitive habitat, require projects to submit analysis showing the existing habitat, proposed plan.

Policy: Development near habitat management areas. Require new development adjacent to habitat management areas to minimize new impervious surface, minimize light pollution, and emphasize native landscaping.

Policy: Hillside protection. When grading is necessary, encourage grading for new development that complements the surrounding natural features.

Policy: Dark sky lighting standards. Require new construction or modifications to existing development and public facilities to adhere to: dark sky lighting standards or the control of outdoor lighting sources by shielding light in the downward direction and limiting bright white lighting and glare.

Policy: Dark sky education. Promote dark sky education in the community in order to excel at efforts to promote responsible lighting and dark sky stewardship.

Policy: Native species. Encourage new development to support a diversity of native species and manage invasive species.

Policy: Invasive species. Discourage the use of plant species on the California Invasive Plant Inventory.

Policy: Low-impact development. Use low-impact development techniques to improve stormwater quality and reduce run-off quantity.

Policy: Stormwater area and wetlands. Incorporate wetland features into stormwater control facilities to the extent practicable.

Policy: Water quality. Incorporate water quality and habitat enhancement in new flood management facilities.

Goal POC-10: A City that protects, conserves, and enhances the natural beauty and resources within the coastal zone. Seaside's coastal zone provides important habitat for special status species. Habitat areas and wildlife can be negatively affected by certain types of development and human activity. This goal aims to preserve and protect natural resources in the coastal zone through careful management, including eradication of non-native vegetation, and restoration of native vegetation.

Policy: Partnerships. Promote local and regional cooperation and partnership, including the Fort Ord Reuse Authority and California State Parks, to help protect and manage Seaside's natural resources in the coastal zone.

Policy: Protect critical habitats. Preserve, protect, and improve open space areas to the greatest extent possible to improve on existing limited habitats outlined by the Local Coastal Plan.

Policy: Beach habitat. Work with local and regional agencies to ensure beaches can function as a quality habitat for permanent and migratory species.

Policy: Coastal zone. Protect the coastal zone west of SR 1 from habitat degradation due to increased access.

Goal POC-11: Pollutant discharge managed to minimize adverse impacts on water quality in the Monterey Bay, Robert's Lake, Laguna Grande and other bodies of water. To reduce the negative environmental impacts of storm water runoff on the Monterey Bay, Robert's Lake, Laguna Grande, and other bodies of water improves local habitat.

Policy: Low-impact development practices. Use and encourage the use of low-impact development techniques that may include improving soil health, providing soil cover and water-wise planting and irrigation, installing permeable pavements, building bio-retention areas to reduce runoff quantity, and improving storm water quality for new development and redevelopment projects.

Policy: Storm water runoff. Enforce the reduction of storm water runoff consistent with local storm water permits.

Policy: Storm water facilities. Incorporate storm water facilities into the design of parks and open spaces, using natural processes to capture, treat, and infiltrate storm water to the extent feasible.

Policy: Retrofit existing street. Explore the retrofit of streets with storm water treatment areas as existing streets are redesigned.

Goal POC-12: An abundant, robust urban forest that contributes to Seaside's quality of life as it combats the effects of climate change. Urban forestry and is essential to the City's path towards greater sustainability. Seaside urban forest enhances its environmental quality and the mental and physical health of its residents, while bringing significant economic benefits through increased property values. Urban forestry will make the City more resilient to the likely impacts of climate change.

Policy: Maintenance. Encourage the maintenance of trees on public and private property.

Policy: New plantings. Require new development to include the planting and maintenance of trees (on both sides of the street when applicable) as well as on private properties.

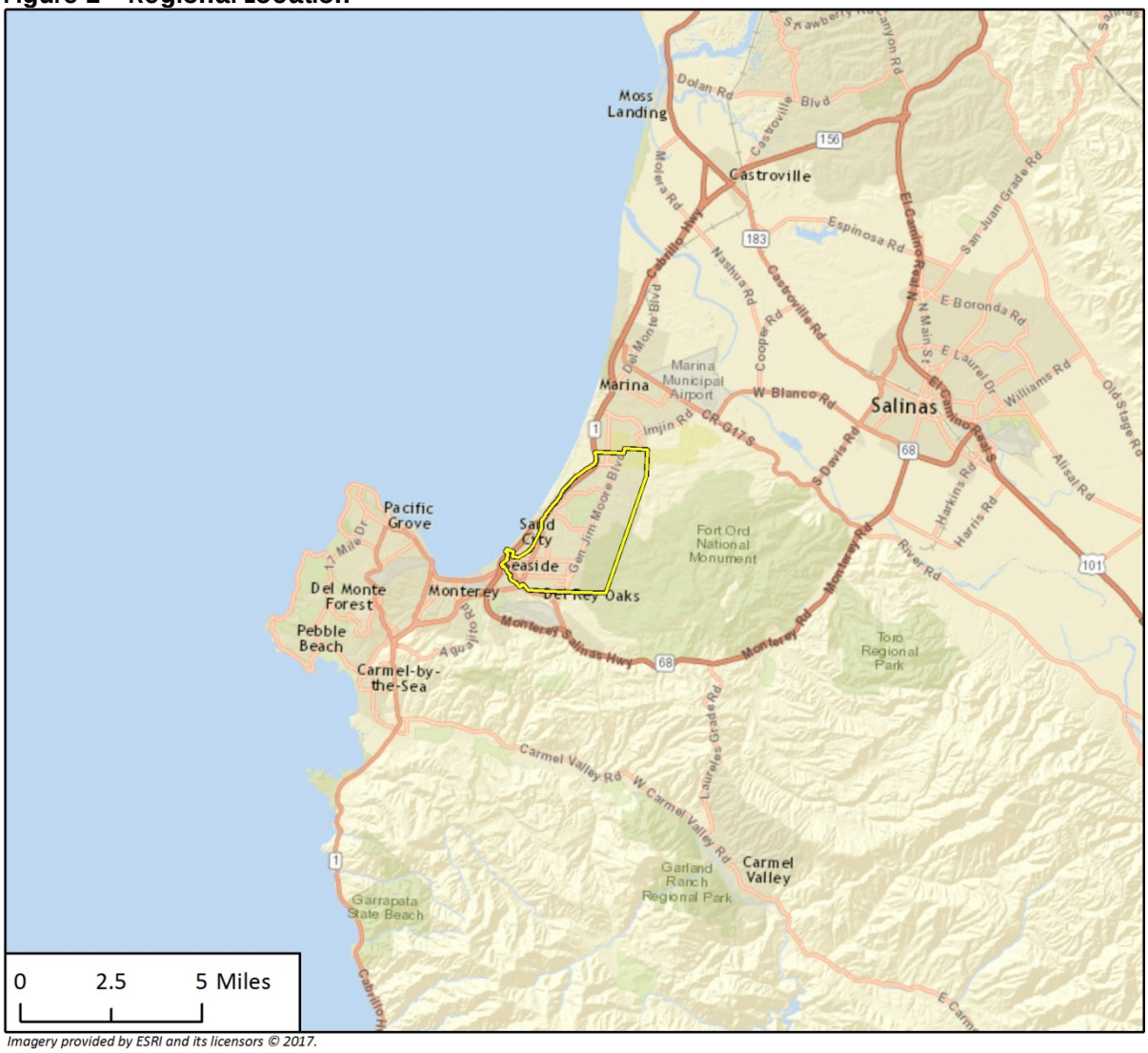
Policy: Protected tree species. Preserve protected tree species, (e.g. native oaks) whenever possible during site redevelopment.

Policy: Select planting. Encourage the planting of native, non-invasive, and drought-tolerant landscaping and trees. Encourage landscape plantings to use tree species native to an area when adjacent to natural plant communities and habitat management areas.

2.2 Project Location

The Plan Area and Sphere of Influence for the 2040 General Plan Update are defined by the City limits. The City encompasses 7.94 square miles on the Monterey Peninsula, approximately 115 miles south of San Francisco. The City borders the City of Monterey and Del Rey Oaks to the south, Sand City to the west, and Marina to the north. The Fort Ord National Monument lies to the east of the City. Land use is primarily urban within the boundaries of the City, while open space and former military lands exist to the north and east of the City. Figure 1 and 2 show the regional location and Plan Area.

Figure 1 Regional Location



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Project Location

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EIRFig 1 Regional Loc

Figure 2 General Plan Area

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3 Methods

3.1 Literature Review

Rincon reviewed literature for baseline information on biological resources potentially occurring In the Plan Area and vicinity. The purpose of this review was to identify biological resources that could be affected by implementation of the 2040 General Plan goals and policies. The literature review included information available in peer reviewed journals, standard reference materials, and online databases (e.g., Holland, 1986; Baldwin et al., 2012, Sawyer et al., 2009; Stebbins, 2003; Rodewald, 2017; Sullivan et al., 2009).

Rincon also conducted a review of relevant databases of sensitive resource occurrences from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB) (CDFW, 2017a) and Biogeographic Information and Observation System (CDFW, 2017b); the U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS, 2017a), National Wetlands Inventory Wetlands Mapper (USFWS, 2017b), and Information for Planning and Consultation (IPaC) System (USFWS, 2017c); the United States Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS) Web Soil Survey (USDA, NRCS, 2017); and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS, 2017). Other sources of information about the site included aerial photographs, topographic maps, geologic maps, climatic data, and project plans. Previous biological studies for projects occurring in the region, including the *Seaside General Plan Update Existing Conditions Report* (Raimi + Associates et al., 2017), *Seaside Local Coastal Program* (City of Seaside, 2013), *City of Seaside Local Coastal Program Biological Inventory Report* (PCM, 2009), *Flora and Fauna Baseline Study of Fort Ord, California* (USACE, 1992), *Installation-wide Multispecies Habitat Management Plan for former Fort Ord, California* (HMP) (USACE, 1997), and *Fort Ord Reuse Plan; Final Environmental Impact Report* (FORA, 1997) were reviewed for pertinent information of special status biological resources and existing conditions occurring in the region.

Queries of the CDFW CNDDB and the CNPS Inventory of Rare and Endangered Plants of California included the *Seaside* and *Marina*, California USGS 7.5-minute topographic quadrangles, and surrounding eight quadrangles; *Monterey*, *Soberanes Point, Mt. Carmel, Carmel Valley, Spreckels, Salinas, Prunedale,* and *Moss Landing*. A list of federal species known to occur in Monterey County was acquired from the USFWS IPaC System. The results of these scientific database queries were compiled into a table that is presented as Appendix A. Note that for CNDDB mapping purposes a five-mile search radius was used.

3.2 Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees.

3.2.1 Environmental Statutes

Federal, state, and local authorities under a variety of statutes and guidelines share regulatory authority over biological resources. The CDFW is a trustee agency for biological resources throughout the state under the California Environmental Quality Act (CEQA) and also has direct jurisdiction under the California Fish and Game Code, which includes, but is not limited to, resources protected by the State of California under the California Endangered Species Act (CESA). The USFWS and National Marine fisheries Service (NMFS) share responsibility for implementing the federal Endangered Species Act (ESA). The U.S. Army Corps of Engineers (USACE) has authority to regulate activities that result in discharge of dredged or fill material into wetlands or other "waters of the United States." "Waters of the State" fall under the jurisdiction of the California Department of Fish and Wildlife and the State Water Resources Control Board (SWRCB)(including each of nine local Regional Water Quality Control Boards [RWQCBs]). Under the California Coastal Act (CCA), the City is responsible for the development and implementation of a Local Coastal Program (LCP) through review and approval of Coastal Development Permit applications.

For the purpose of this report, potential impacts to biological resources were analyzed based on the following laws, ordinances, regulations, and statutes:

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (FESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act (Porter-Cologne)
- City of Seaside General Plan Update (2040)
- City of Seaside Municipal Code (Chapter 8.54, Trees)
- City of Seaside Local Coastal Program (LCP) (2013)
- Fort Ord Habitat Management Plan (HMP) (1997)
- Fort Ord Habitat Conservation Plan (HCP) (in progress)
- FORA Base Reuse Plan (1997)

3.2.2 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

> *1) Have substantial adverse effects, 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, or 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, and regulations or by the California Department of Fish and Wildlife or US 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.

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 Existing Conditions

4.1 Environmental Setting

The Plan Area is located at the southern end of Monterey Bay, within the Central California Coast Ecoregion. It is bordered to the west by the Pacific Ocean and to the east by Fort Ord National Monument. The climate in this region is generally mild with an annual minimum temperature of 40.7°F, a maximum average temperature of 67.4°F, and an annual precipitation of 14.7 inches (NOAA, 2016). Elevation within the City ranges from mean sea level (msl) at the Pacific Ocean, to 552 feet above msl along the City's eastern border.

Six soil types are mapped within the Plan Area: Arnold-Santa Ynez complex; Baywood sand, 2 to 15 percent slopes; Coastal beaches; Dune land; Oceano loamy sand, 2 to 15 percent slopes; and Rindge muck, 0 to 2 percent slopes, MLRA 14 drained (USDA, NRCS 2017). The two dominant soil types in the Plan Area are Baywood sands and Oceano loamy sand, covering approximately 65 percent and 31 percent, respectively. Both of these are deep, well-drained soils found in rolling coastal dunes.

The Plan Area can be divided into two general areas based on existing conditions, the City of Seaside proper, and the former Fort Ord. The City to the west is primarily developed, and generally lacks natural habitats with the exception of the Laguna Grande/Roberts Lake complex and a small section of marine habitat at Seaside Beach. Former Fort Ord lands, occurring in the eastern side of the Plan Area, are primarily undeveloped and contain the majority of native vegetation communities and open space in the Plan Area.

4.2 Vegetation Communities and Land Cover Types

Vegetation communities and land cover types occurring within the Plan Area were developed based on aerial imagery and data from the City of Seaside, the former Fort Ord, California State University Monterey Bay, USGS, and NOAA, as described in the existing conditions report (City of Seaside, 2017). Sixteen vegetation communities and land cover types were identified; ranging from developed areas to native chaparral and woodlands. The sixteen vegetation communities are described below. One nonvegetated land cover type was mapped within the plan area; Urban/Developed. This type includes patches of bare ground and developed areas, primarily within the City proper.

Annual grasses and forbs. This community is typically comprised of grasses and forbs introduced during and since the Spanish colonial period. While some invasive plants may have been first introduced during the 16th century as Spanish explorers came to California's coast, it is likely that the majority of invasive plants were introduced after people of Old World descent began to settle in California. Rapid land use change during the mid- to late-1800s, along with other interacting factors, accelerated the invasion of California's native grassland by species of European origin. The intensification of livestock grazing both brought in new species for livestock forage, and prompted the spread of invasive species in California grasslands (Caziarc 2012). Non-native species are dominant, including annual grasses such as wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), rattail fescue (*Festuca myuros*), Italian rye

(*Festuca perennis*), and foxtail barley (*Hordeum murinum* var. *leporinum*). Some native plant species are also present and include common yarrow (*Achillea millefolium*), blow wives (*Achyrachaena mollis*), mountain dandelion (*Agoseris grandiflora*), golden stars (*Bloomeria crocea*), golden Brodiaea (*Triteleia ixioides*), soap plant (*Chlorogalum pomeridianum*), purple clarkia (*Clarkia purpurea*), narrow leaved owl's clover (*Castilleja attenuata*), and Jeffrey's shooting star (*Primula jeffreyi*). Occasional patches of native perennial grasses are intermixed at low cover, and include blue wildrye (*Elymus glaucus*), valley wild rye (*Leymus triticoides*), California fescue (*Festuca californica*), California melicgrass (*Melica californica*), and pine bluegrass (*Poa secunda*).

Chamise chaparral. This community is considered chaparral, and consists of a shrub layer with few trees and an open canopy. Chamise is dominant, with Eastwood manzanita (*Arctostaphylos glandulosa*), whiteleaf manzanita (*Arctostaphylos manzanita*), California lilac (*Ceanothus* spp.), sticky monkey flower (*Mimulus aurantiacus*), California buckwheat, oaks (*Quercus* spp.), toyon (*Heteromeles arbutifolia*), sage (*Salvia* spp.), and poison oak intermixed occasionally. This community is differentiated from other chaparral communities in the plan area due to the high percentage of chamise and low cover of other species.

Coast Live Oak Woodland. Holland (1986) and Sawyer et al. (2009) describe this community as singularly dominated by coast live oak (*Quercus agrifolia*) with an open underdeveloped understory, consisting of poison oak, grassland, or chaparral species such as black sage, chamise, coyote brush, and California sagebrush. Oak woodlands and savannas support the greatest species richness of any vegetation type in the state and are considered important habitats (Barbour et al., 2007).

Dune/Beach. This land cover type consists of unvegetated sand, between the vegetated portion of the foredunes and the ocean.

Vegetated Dune. Partially stabilized dunes occur northwest of Highway 1, near Roberts Lake. Some sparse vegetation occurs on the foredune, including sea rocket (*Cakile maritima*) and saltscales (*Atriplex* spp., *Extriplex* spp.). Native dune species in this community also include coast buckwheat (*Eriogonum parvifolium*), bush lupine (*Lupinus chamissonis*), deerweed (*Acmispon glaber*), beach primrose (*Camissoniopsis cheiranthifolia*), and coastal sagewort (*Artemisia pycnocephala*). Ice plant (*Carpobrotus chilensis*, and *C. edulis*) is also present in low quantities, but not dominant.

Ice Plant. Ice plants are non-native invasive species, originally planted in the 1940s and 50s for landscaping and dune stabilization (USACE 1992). These perennial ground-hugging succulents form large monospecific mats (Sawyer et al., 2009). *Carpobrotus edulis* is an invasive species with a Cal ICP rating of "High" for its invasive tendencies. This hardy species spreads readily from landscaped areas into dune and scrub habitats, out competing native species for space, nutrients, and moisture. Within this community some native species, ornamental plantings, and bare patches may occur.

Maritime Chaparral. Maritime chaparral occurs on sandy soils within the coastal fog zone. This community is primarily found the eastern side of Seaside, on former Fort Ord lands. Maritime chaparral is a fairly open fire dependent community, dominated by woollyleaf manzanita (*Arctostaphylos tomentosa*), with black sage, coyote brush, Toro manzanita (*Arctostaphylos montereyensis*), sand mat manzanita (*Arctostaphylos pumila*), Hooker's manzanita (*Arctostaphylos hookeri*), toyon, and ceanothus (*Ceanothus* spp.). This chaparral community is distinguished from the chamise chaparral community by its more diverse species composition.

Non-Native/Ornamental Grass. This land cover type consists of managed fields and lawns. Species are typically turf grasses and nonnative species such as kikuyu grass (*Pennisetum clandestinum*), hairy crabgrass (*Digitaria sanguinalis*), and English daisy (*Bellis perennis*).

Non-Native/Ornamental Hardwood. This community consists of primarily non-native species in ornamental plantings. Tree species found in this community are highly variable, and typically non-native or not occurring as a natural community woodland, and include Monterey cypress (*Hesperocyparis macrocarpa*), eucalyptus (*Eucalyptus* spp.), Monterey pine (*Pinus radiata*), eastern redbud (*Cercis canadensis*), California sycamore (*Platanus racemosa*), and American sweetgum (*Liquidambar styraciflua*). Bushes and shrubs in this community are variable by occurrence and may include oleander (*Nerium oleander*), lantanas (*Lantana* spp.), juniper (*Juniperus* spp.), and California lilac. Although Monterey pine and cypress are native to California, there are no naturally occurring stands of these species in Seaside, and the individuals present are ornamental plantings and offspring established from ornamental plantings.

Pacific Coast Scrub. This community is comprised of coastal scrub dominated by evergreen, microphyllous-leaved or hemi-sclerophyllous shrub taxa; drought-deciduous species are unimportant or absent in this system due to proximity to the coast and supplemental moisture from fog. Dense shrublands typically include a well-developed woody and herbaceous understory. Characteristic species of Pacific coast scrub include coyote brush, yellow bush lupine (*Lupinus arboreus*), blueblossom (*Ceanothus thyrsiflorus*), seaside golden yarrow (*Eriophyllum staechadifolium*), sticky monkeyflower, poison oak, California blackberry (*Rubus ursinus*), thimbleberry (*Rubus parviflorus*), salmon berry (*Rubus spectabilis*), California coffeeberry (*Frangula californica*), ocean spray (*Holodiscus discolor*), salal (*Gaultheria shallon*), common cow parsnip (*Heracleum maximum*), and sword fern (*Polystichum munitum*). In some areas, this community is dominated by California Sagebrush (*Artemisia californica*) or coyote brush (*Baccharis pilularis*),

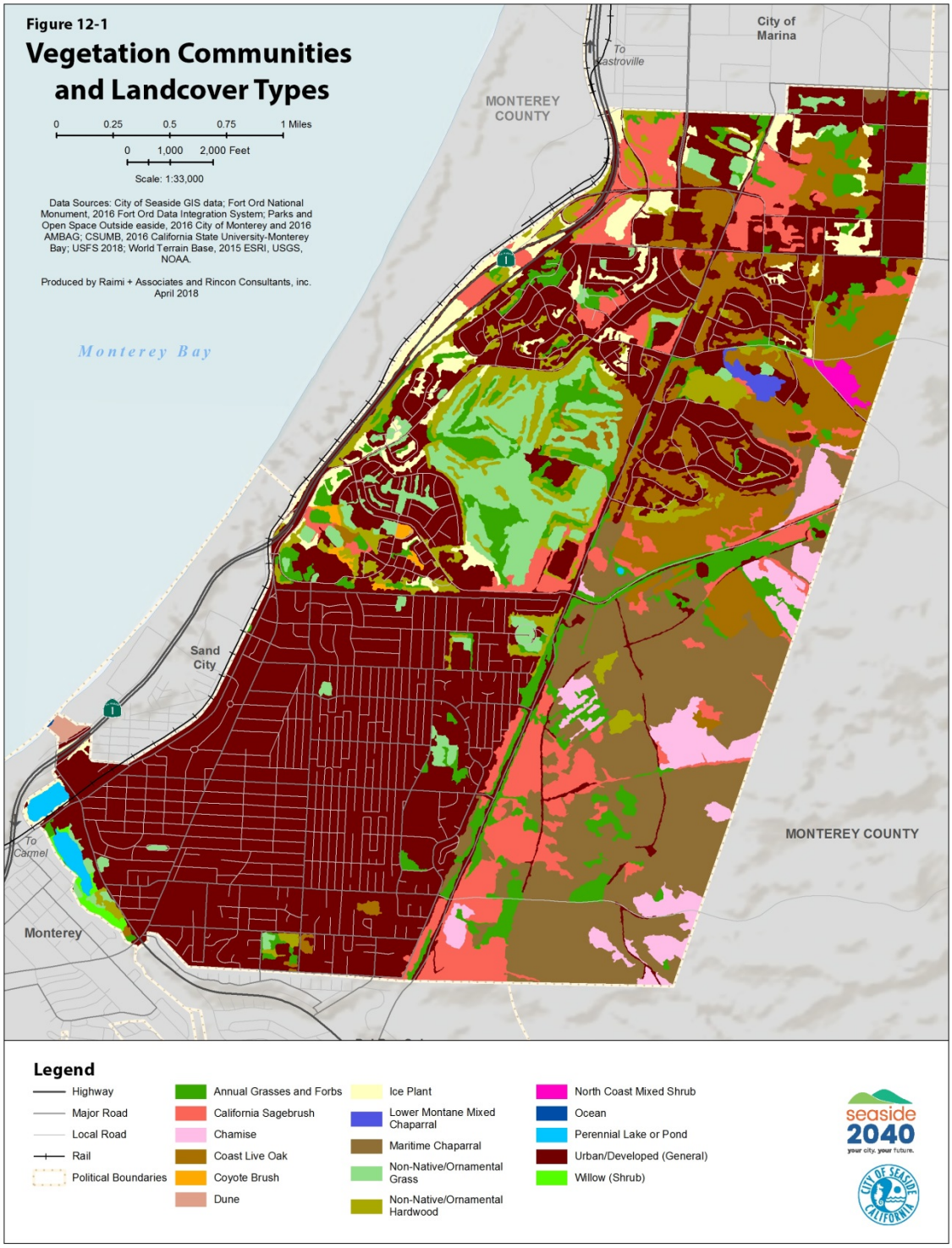
Ocean. This land cover type consists of open waters of the Pacific Ocean, on the south western edge of the City of Seaside.

Perennial Lake or Pond. Freshwater habitats occur at Roberts Lake and Laguna Grande. Originally a seasonal estuarine body of water, the Laguna Grande and Roberts Lake complex is now a freshwater marsh and two lakes. It is a portion of the Canyon Del Rey Creek that drains the 13.5 square mile Canyon Del Rey Creek watershed to the southeast. The creek flows through Laguna Grande, then into Roberts Lake, and finally into Monterey Bay. Despite the past disturbance to these lakes, wetlands, and associated communities, these habitats continue to support a variety of vegetation and wildlife. Because of this unusual setting, these coastal zone habitats are biologically and physically significant as a whole in that they represent a unique example of coastal zone plant and wildlife communities. Both coastal water bodies are frequent foraging and resting sites for resident and migrating water fowl. The freshwater marshes in this area consist of large emergent herbaceous wetland species, including tule (*Schoenoplectus californicus*) and cattails (*Typha* spp.), which grow in a discontinuous band along the margins of both lakes in shallow waters. Soils are saturated or inundated for many weeks each year. This community also includes patches of other emergent herbaceous wetland vegetation, in which other, smaller emergent species such as rushes (*Juncus* spp.), pennywort (*Hydrocotyle ranunculoides*), spikerush (*Eleocharis macrostachya*), loosestrife (*Lythrum hyssopifolia*), rabbitsfoot grass (*Polypogon monspeliensis*), and brass buttons (*Cotula coronopifolia*) are intermixed in saturated soils at the edges of the lakes and stream.

Urban/Developed. This community consists of areas that have been modified such that most or all vegetation has been removed or only small areas of landscape vegetation are present. Parking lots, roads, sidewalks, structures, paved and unpaved pathways are included within this community. In some cases vegetation from adjacent areas may overhang. Playgrounds, picnic areas, gravel areas, roadside pullouts, and areas of urban-related bare soil are included in this land cover type.

Willow. This community occurs primarily along the margins of Canyon Del Rey Creek, portions of Laguna Grande, and portions of Roberts Lake, dominated by arroyo willow (*Salix lasiolepis*) in tree form. Other trees in this community include blackwood acacia (*Acacia melanoxylon*) and occasional coast live oak trees. The understory is mixed. In some areas close to the lake edge where soils remain moist year round, native emergent wetland species including horsetails (*Equisetum* spp.), tule, cattails, and rushes are present; these areas are sometimes called forested wetlands. In drier areas, poison oak and California blackberry are present in the riparian community. Infestations of Himalayan blackberry (*Rubus armeniacus*), English ivy, German ivy (*Delairea odorata*) and garden nasturtium (*Tropaeolum majus*) are also present.

Figure 3 Vegetation Communities and Land Cover Types



4.3 Jurisdictional Waters and Wetlands

The Plan Area crosses the Carmel and Alisal-Elkhorn Sloughs watersheds (Hydrologic Unit Codes 18060012 and 18060011, respectively).

According to the National Wetland Inventory (NWI) (USFWS, 2017b), known jurisdictional wetlands and waters within the City of Seaside include: estuarine and marine wetlands, estuarine and marine deepwater, freshwater emergent wetlands, freshwater forested/shrub wetlands, riverine, lake, and freshwater ponds (Figure 4). Primarily located within the former Fort Ord and adjacent to Laguna Grande, these wetlands and non-wetland waters are typically subject to USACE jurisdiction under the Clean Water Act (CWA), RWQCB jurisdiction under the CWA and Porter-Cologne, and CDFW jurisdiction under the CFGC. Additional wetlands or waters, if discovered within the Plan Area would require evaluation as potentially subject to CDFW, RWQCB, and/or USACE jurisdiction(s).

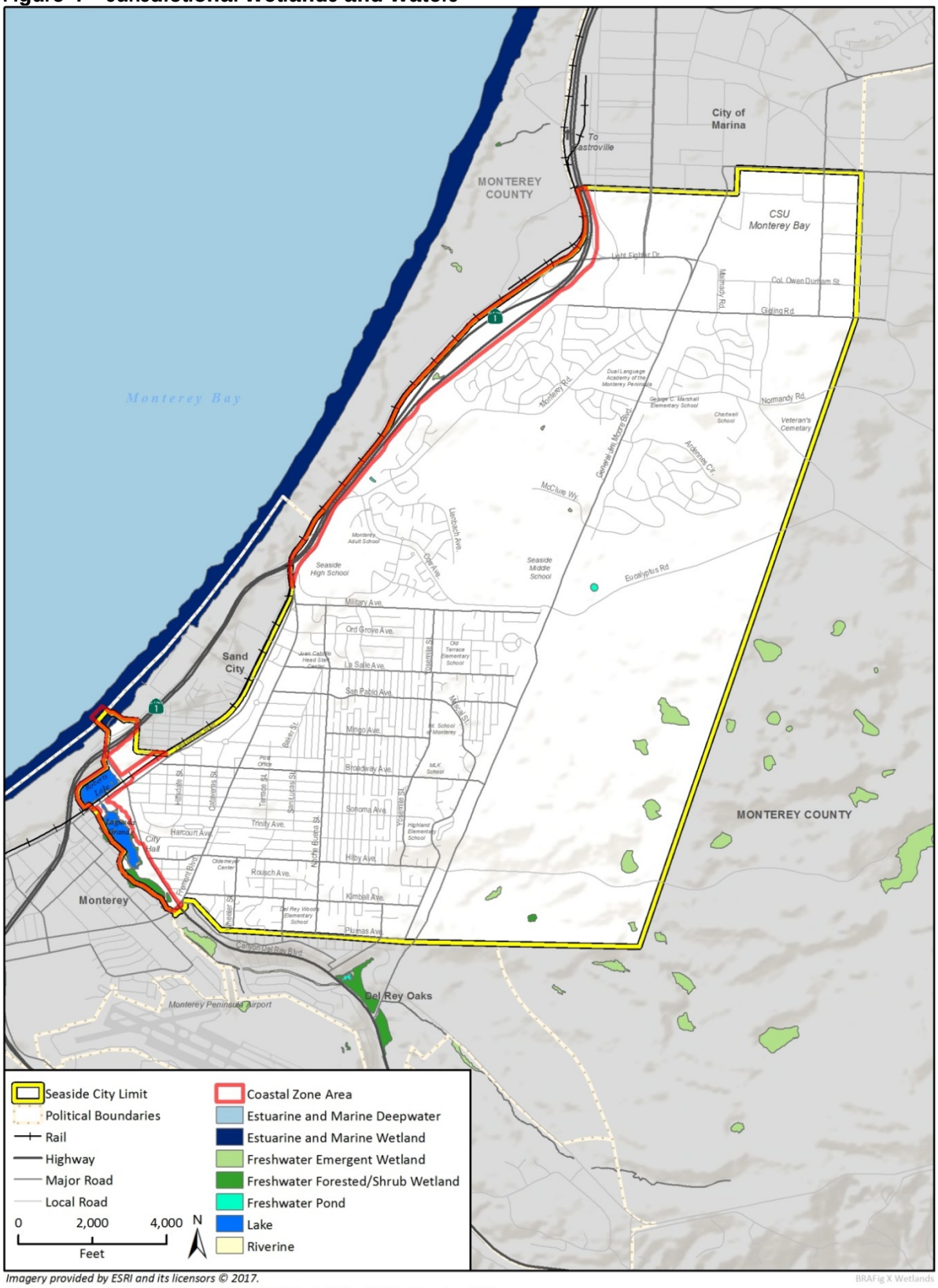
Canyon Del Rey Creek, an ephemeral stream, is the only stream in the Plan Area. The Canyon Del Rey Creek watershed flows into the Pacific Ocean and drains an area of 16.8 square miles (Balance Hydrologics, Inc. and Whitson Engineers, 2014). The creek flows into Laguna Grande and Roberts Lake, before discharging into the ocean west of Roberts Lake through concrete box culverts under Roberts Avenue and State Route (SR) 1 (Balance Hydrologics, Inc. and Whitson Engineers, 2014). This watershed has been highly developed within the Plan Area.

Within the former Fort Ord, vernal pools have been documented outside the Plan Area on land designated for conservation. If vernal pools exist within the Plan Area they may be considered jurisdictional, and may support special status species.

4.4 Coastal Zone

The Coastal Zone crosses the Plan Area twice, and includes the Laguna Grande/Roberts Lake complex and a narrow band that runs along SR 1 between the northern boundary of Seaside and Sand City (Figure 4).

Figure 4 Jurisdictional Wetlands and Waters



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Additonal data provided by City of Seaside GIS, 2016; Wetlands, National Wetland Inventory, 2016.

5 Sensitive Biological Resources

Sensitive biological resources are known to occur or have the potential to occur within or adjacent to the Plan Area. These resources include; special status plants and animals, sensitive natural communities, wetlands, streams and associated riparian corridors, nesting birds, roosting bats, and corridors for wildlife movement.

5.1 Special Status Species

Special status species are defined as those plants and wildlife that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, and/or local agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special status species include:

- Species listed or proposed for listing as rare, threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA);
- Species that meet the definitions of rare or endangered under California Environmental Quality Act (CEQA) Guidelines Section 15380;
- All of the plants constituting California Rare Plant Rank (CRPR) 1B and 2 meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 CFGC (CESA), and are eligible for state listing;
- Species covered under an adopted Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP);
- Wildlife designated by the CDFW as "species of special concern" or "special animals";
- Wildlife designated as "fully protected" by the CDFW (CFGC Sections 3511, 4700, and 5050); and
- Wildlife species protected as "fur-bearing mammals" (CFGC Section 4000 et seq.).

Assessments for the potential occurrence of special status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from the vicinity of the Plan Area, and previous reports for the City and the former Fort Ord. This assessment is programmatic and includes the entire Plan Area; therefore, project-specific analysis should be conducted prior to project implementation under the 2040 General Plan Update. The potential for each special status species to occur in the Plan Area was evaluated according to the following criteria:

Not Expected. Habitat on and adjacent to the Plan Area is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Low Potential. Suitable or marginal habitat may occur in the Plan Area, but: no CNDDB records of the species have been recorded within twenty-five years; records of the species within 5 miles of the Project are suspected to be now extirpated or potentially misidentified with other species. For bird and bat species, this category may be used for species that are documented, but likely to be only transient through the area during foraging or migratory movements, no suitable nesting or roosting habitat is present.

Moderate Potential. CNDDB or other documented occurrences have been recorded within 5 miles of the Plan Area and suitable habitat is present (suitable nesting or roosting habitat or high quality foraging areas for bird and bat species).

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the Plan Area is highly suitable. The species has a high probability of being found in the Plan Area.

Presumed Present. CNDDB or other documented occurrences have been recorded within the Plan Area and suitable habitat is present (suitable nesting or roosting habitat for bird and bat species). The species was documented from the Plan Area during previous surveys and is presumed extant.

5.1.1 Special Status Plants

Based on the database and literature review, 44 special status plant species are known to occur, or have at least a moderate potential to occur within the vicinity of the Plan Area (Appendix A). Federal and/or State listed plant species with at least a moderate potential to occur in the City of Seaside include: Seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), Monterey gilia (*Gilia tenuiflora* ssp. *arenaria*), Menzies' wallflower (*Erysimum menziesii*), Gowen cypress (*Hesperocyparis goveniana*), Contra Costa goldfields (*Lasthenia conjugens*), Tidestrom's lupine (*Lupinus tidestromii*), Yadon's rein orchid (*Piperia yadonii*), Hickman's cinquefoil (*Potentilla hickmanii*), Monterey clover (*Trifolium trichocalyx*), beach layia (*Layia carnosa*), and Monterey spineflower (*Chorizanthe pungens* var. *pungens*).

Twelve special status plant species are presumed to be present based on the potential presence of suitable habitat and/or recorded occurrences.

- Pajaro manzanita (*Arctostaphylos pajaroensis*) – CRPR 1B.1
- Monterey spineflower – Federally Threatened, CRPR 1B.2
- Jolon clarkia (*Clarkia jolonensis*) – CRPR 1B.2
- seaside bird's-beak – State Endangered, CRPR 1B.1
- Eastwood's goldenbush (*Ericameria fasciculata*) – CRPR 1B.1
- sand-loving wallflower (*Erysimum ammophilum*) – CRPR 1B.2
- Monterey gilia – Federally Endangered, State Threatened, CRPR 1B.2
- Monterey cypress (*Hesperocyparis macrocarpa*) – CRPR 1B.2
- Kellogg's horkelia (*Horkelia cuneata* var. *sericea*) – CRPR 1B.1
- northern curly-leaved monardella (*Monardella sinuata* ssp. *nigrescens*) – CRPR 1B.2
- Monterey Pine (*Pinus radiata*) – CRPR 1B.1
- pine rose (*Rosa pinetorum*) – CRPR 1B.2

The majority of these plant species are associated with coastal dune and maritime chaparral habitats. Therefore, special status plants are most likely to occur along the west side of the Plan Area near the ocean, or on former Fort Ord land to the east. A comparison of special status plant

species and their potential to occur in vegetation communities and land cover types mapped within the Plan Area is provided in Table 1 below.

Table 1 Special Status Plant Species and Vegetation Communities

	Vegetation Communities and Potential to Occur												
Species	Annual Grasses and Forbs	Chamise Chaparral	Coast Live Oak	Dune/Beach	Vegetated Dune	Ice Plant	Maritime Chaparral	Non-Native/Ornamental Grass	Non-Native/Ornamental Hardwood	Pacific Coast Scrub	Perennial Lake or Pond	Urban/Development	Willow
Pajaro manzanita		X					X			X			
Monterey spineflower	X	X			X		X			X		X	
Jolon clarkia	X	X					X			X		X	
seaside bird's-beak		X	X				X		X	X	X	X	X
Eastwood's goldenbush							X			X			
sand-loving wallflower		X					X			X		X	
Monterey gilia	X	X	X		X	X	X			X		X	
Menzies' wallflower					X	X				X		X	
Gowen cypress	X						X		X				
Contra Costa goldfields	X						X	X					
Tidestrom's lupine					X	X				X		X	
Yadon's rein orchid							X		X	X			
Hickman's cinquefoil										X	X		X
Monterey clover	X						X		X			X	
beach layia					X					X		X	
Monterey cypress							X		X				
Kellogg's horkelia		X			X	X	X			X		X	
northern curly-leaved monardella		X			X	X	X			X		X	
Monterey Pine							X		X			X	
pine rose			X						X				

5.1.2 Special Status Wildlife

Based on the database and literature review, 21 special status wildlife species are known, or have at least a moderate potential to occur within the Plan Area (Appendix A). Federal and/or state listed species with at least a moderate potential to occur in the City of Seaside include: tricolored blackbird (*Agelaius tricolor*), western snowy plover (*Charadrius alexandrinus nivosus*), bank swallow (*Riparia riparia*), California tiger salamander (*Ambystoma californiense*), and Smith's blue butterfly (*Euphilotes enoptes smithi*).

Fifteen species have a high potential to occur, or are presumed to be present based on the potential presence of suitable habitat and known occurrences.

- Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) – State Species of Special Concern (SSC)
- American Badger (*Taxidea taxus*), – SSC
- burrowing owl (*Athene cunicularia*) – SSC
- western snowy plover – Federally Threatened, SSC
- California horned lark (*Eremophila alpestris actia*) – Watch list (WL)
- prairie falcon (*Falco mexicanus*) – WL
- American peregrine falcon(*Falco peregrinus anatum*) – State Fully protected (FP)
- California brown pelican (*Pelecanus occidentalis californicus*), foraging only – FP
- bank swallow – State Threatened
- California tiger salamander – State Threatened, Federally Threatened, WL
- northern California legless lizard (*Anniella pulchra*) – SSC
- western pond turtle (*Emys marmorata*) – SSC
- coast horned lizard (*Phrynosoma blainvillii*) – SSC
- two-striped gartersnake (*Thamnophis hammondii*) – SSC
- monarch butterfly (*Danaus plexippus*), California overwintering population – Federal Candidate
- Smith's blue butterfly – Federally Endangered

Generally, special status species are most likely to occur in undeveloped areas on former Fort Ord lands. There is also potential for some species to occur on the west edge of the Plan Area near the ocean, and on non-developed and developed parcels/areas within developed portions of the City. The dunes along the west side of the Plan Area may provide habitat for northern California legless lizard, Smith's blue butterfly, and western snowy plover. The proximity of the Plan Area to western snowy plover designated critical habitat also increases the likelihood of this species occurring. Within developed areas, buildings provide suitable nesting and foraging sites for American peregrine falcon, particularly near Laguna Grande and Roberts Lake. Laguna Grande and Roberts Lake also provide foraging habitat for California brown pelican and bank swallow, and suitable habitat for western pond turtle. There are also large eucalyptus trees in the developed area, which may provide suitable overwintering habitat for monarch butterflies.

California red-legged frog (*Rana draytonii*) has a low potential to occur in the Laguna Grande/Roberts Lake complex due to known occurrences within five miles; however, repeated surveys of this area and nearby Frog Pond Wetland Preserve were negative (Anderson, 2016).

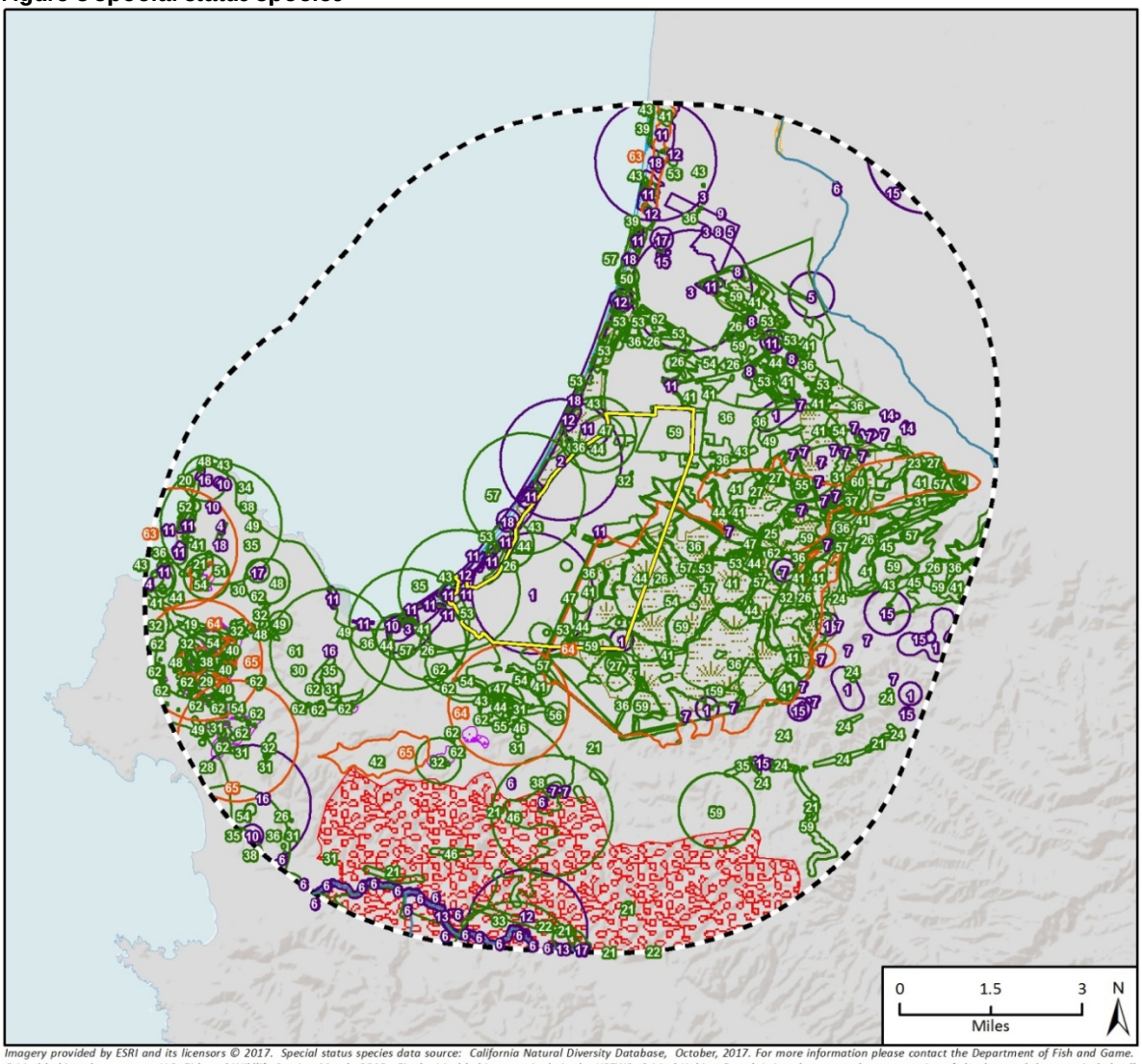
On the former Fort Ord, coast live oak woodland and savanna provide habitat for California tiger salamander, burrowing owl, American badger, California horned lark, and prairie falcon. Maritime

chaparral communities may also support coast horned lizard and Monterey dusky-footed woodrat. A comparison of special status animal species and their potential to occur in vegetation communities and land cover types mapped within the Plan Area is provided in Table 2 below.

Table 2 Special Status Animal Species and Vegetation Communities

	Vegetation Communities and Potential to Occur												
Species	**Annual Grasses and Forbs**	**Chamise Chaparral**	**Coast Live Oak**	**Dune/Beach**	**Vegetated Dune**	**Ice Plant**	**Maritime Chaparral**	**Non-Native/Ornamental Grass**	**Non-Native/Ornamental Hardwood**	**pacific Coast Scrub**	**Perennial Lake or Pond**	**Urban/Development**	**Willow**
Monterey dusky-footed woodrat			X						X	X			X
American Badger	X		X				X			X			
Burrowing owl	X	X	X				X	X	X	X		X	
Western snowy plover					X								
California horned lark	X	X	X				X			X	X		
prairie falcon	X	X	X				X			X	X		
American peregrine falcon	X	X	X				X	X	X	X	X	X	X
California brown pelican											X		
Bank swallow											X		X
California tiger salamander	X		X				X			X	X		
northern California legless lizard	X	X	X		X	X	X	X	X	X	X	X	
western pond turtle			X								X	X	X
coast horned lizard	X	X	X		X	X	X	X	X	X	X	X	
two-striped gartersnake											X	X	X
monarch butterfly									X				
Smith's blue butterfly	X	X			X	X	X			X			
tricolored blackbird	X							X			X		X

Figure 5 Special Status Species



Imagery provided by ESRI and its licensors © 2017. Special status species data source: California Natural Diversity Database, October, 2017. For more information please contact the Department of Fish and Game. Critical habitat data source: U.S. Fish and Wildlife Service, March, 2016. Final critical habitat acquired via the USFWS Critical Habitat Portal. It is only a general representation of the data and does not include all designated critical habitat. Contact USFWS for more specific data.

City of Seaside
5-Mile Buffer

CNDDB

Animals
Plants
Natural Communities

Critical Habitat

California red-legged frog
Monterey spineflower
Tidewater goby
Western snowy plover
Yadon's piperia
Steelhead

1 - American badger
2 - bank swallow
3 - burrowing owl
4 - California black rail
5 - California horned lark
6 - California red-legged frog
7 - California tiger salamander
8 - coast horned lizard
9 - ferruginous hawk
10 - monarch - California overwintering population
11 - northern California legless lizard
12 - Smith's blue butterfly
13 - steelhead - south-central California coast DPS
14 - Townsend's big-eared bat
15 - tricolored blackbird
16 - western bumble bee
17 - western pond turtle
18 - western snowy plover
19 - angel's hair lichen
20 - beach layia
21 - Carmel Valley bush-mallow
22 - Carmel Valley malacothrix
23 - Choris' popcornflower
24 - Congdon's tarplant
25 - Contra Costa goldfields
26 - Eastwood's goldenbush
27 - Fort Ord spineflower
28 - fragrant fritillary
29 - Gowen cypress
30 - Hickman's cinquefoil
31 - Hickman's onion
32 - Hooker's manzanita
33 - Hospital Canyon larkspur
34 - Hutchinson's larkspur
35 - Jolon clarkia
36 - Kellogg's horkelia
37 - legenere
38 - marsh microseris
39 - Menzies' wallflower
40 - Monterey clover
41 - Monterey gilia
42 - Monterey pine
43 - Monterey spineflower
44 - northern curly-leaved monardella
45 - Oregon meconella
46 - Pacific Grove clover
47 - Pajaro manzanita
48 - pine rose
49 - pink Johnny-nip
50 - Point Reyes horkelia
51 - saline clover
52 - San Francisco collinsia
53 - sand-loving wallflower
54 - sandmat manzanita
55 - Santa Cruz clover
56 - Santa Cruz microseris
57 - seaside bird's-beak
58 - Tidestrom's lupine
59 - Toro manzanita
60 - vernal pool bent grass
61 - woodland woollythreads
62 - Yadon's rein orchid
63 - Central Dune Scrub
64 - Central Maritime Chaparral
65 - Monterey Pine Forest
66 - Monterey Pygmy Cypress Forest
67 - Northern Bishop Pine Forest
68 - Valley Needlegrass Grassland

BRAFig X CNDDB

5.2 Sensitive Natural Communities

Sensitive natural communities are vegetation types, associations, or sub-associations that support concentrations of special status plant and/or wildlife species, are of relatively limited distribution, and/or are of particular value to wildlife. Although most sensitive natural communities are not afforded legal protection unless they support special status species, potential impacts on them may increase concerns and trigger mitigation suggestions by resource/regulatory agencies for those habitats considered sensitive by federal, State, and local agencies due to their rarity or value in providing habitat for vegetation, fish, and wildlife. According to the CDFW Vegetation Program, Alliances with State ranks of S1-S3 are considered to be imperiled, and thus, potentially of special concern. Natural communities with these ranks are often considered in the CEQA environmental review process with corresponding compensatory mitigation prescribed for impacts.

Sensitive natural communities present or with at least a moderate potential to occur within the Plan Area include: central dune scrub, central maritime chaparral, coastal and valley freshwater marsh, coastal brackish marsh, Monterey cypress forest, Monterey pine forest, Monterey pygmy cypress forest, northern bishop pine forest, and valley needlegrass grassland.

Central Dune Scrub. This community, described by Holland (1986) and Sawyer et al. (2009), is dominated in the shrub canopy by California goldenbush and dune lupine. Other species associated with this community include; California sagebrush, beach sagewort (*Artemisia pycnocephala*), Menzies' goldenbush (*Isocoma menziesii*), coastal bush lupine (*Lupinus arboreus*), and poison oak. Within the Plan Area, Central Dune Scrub is most likely to occur near the ocean, in undisturbed areas.

Central Maritime Chaparral. Maritime chaparral is known to occur in the Plan Area, and has been characterized as the dominant vegetation type on the former Fort Ord (USACE, 1992). Species likely to occur in this community are; Toro manzanita, chamise, sandmat manzanita, Monterey spineflower, seaside bird's-beak, and sand gilia. This community is fire dependent.

Coastal and Valley Freshwater Marsh. Freshwater mashes occur where wetlands are regularly to permanently flooded, and are typically dominated by hydrophytic species such as cattails (*Typha* spp.) and bulrushes (S*choenoplectus* spp.). These communities may occur as small isolated wetlands on former Fort Ord land, or in association with the Laguna Grande/Roberts Lake complex.

Coastal Brackish Marsh. Brackish marsh occurs where saline water mix with freshwater, resulting in defined tidal zones. Species typically found in brackish marsh include; pickleweeds, bulrushes, and cordgrasses. Because the mouth of Canyon Del Ray Creek has been diverted into a box culvert and inlet weir, saline waters are unlikely to enter Roberts Lake except during storm events.

Monterey Cypress Forest. Stands of Monterey cypress may be dominant or codominant with Monterey pine. Only two native stands are known to exist in Monterey; Cypress Point at Pebble Beach and Point Lobos State Reserve. Monterey cypress has been widely planted as an ornamental tree or wind break, in some cases becoming invasive (Sawyer et al., 2009).

Monterey Pine Forest. This plant community is characterized by a Monterey pine overstory and a dominant native shrub understory. Shrubs commonly found in this community included manzanita species (*Arctostaphylos* spp.), California huckleberry (*Vaccinium ovatum*), bush or sticky

monkeyflower, poison oak, and California coffeeberry. Forb species may include Douglas' iris (*Iris douglasiana*), Monterey sedge (*Carex harfordii*), and Pacific peavine (*Lathyrus vestitus*).

Monterey Pygmy Cypress Forest. The dominant species found in Monterey pygmy cypress forest is Gowen cypress. Bishop pine and Monterey pine may also occur in the tree canopy, with Hooker's manzanita (*Arctostaphylos hookeri*), woolly leaf manzanita (*Arctostaphylos tomentosa*), coast rhododendron (*Rhododendron macrophyllum*), and California huckleberry in the understory. Monterey pygmy cypress forest occurs on shallow acidic soils, which cause Gowen cypress to grow significantly shorter than on deep fertile soils. Typically 164 feet at mature height, dwarfed Gowen cypress may only grow to 16 feet (Sawyer et al., 2009).

Northern Bishop Pine Forest. This plant community is characterized by a Bishop pine (*Pinus muricata*) overstory, with grand fir (*Abies grandis*), Pacific madrone (*Arbutus menziesii*), pygmy cypress (*Hesperocyparis pigmaea*), tanoak (*Notholithocarpus densiflorus*), Bolander pine (*Pinus contorta* ssp. *bolanderi*), Monterey pine, Douglas fir (*Pseudotsuga menziesii*), coast live oak, California redwood, and California bay laurel.

Valley Needlegrass Grassland. This community is characterized by purple needlegrass (*Nassella pulchra*) in the herbaceous layer, with other perennial grasses and herbs such as; slender oats, wild oats, soft chess brome, foxtail brome (*Bromus madritensis* ssp. *rubens*), native lilies (*Calochortus* spp.), bindweed (*Convolvulus arvensis*), turkey-mullein (*Croton setiger*), blue wildrye, stork's-bill (*Erodium* spp.), and California fescue.

Monterey Spineflower Designated Critical Habitat. Critical habitat for the Monterey spineflower occurs on the east side of the Plan Area (Unit 8, former Fort Ord). This unit includes maritime chaparral and oak woodland habitats which can support tens of thousands of individuals in some years (USFWS, 2008). Within the Plan Area this unit is limited to the Fort Ord National Monument, which is not proposed for development.

Western Snowy Plover Designated Critical Habitat. Critical habitat for the western snowy plover occurs in the small strip of beach within City limits below Roberts Lake (Unit CA 22 Monterey to Moss Landing). This beach is heavily used for recreation and therefore, disturbance may be high. However, it does contain primary constituent elements such as; sandy beach above and below the high-tide line, tidal debris supporting invertebrate prey, and barren to sparsely vegetated terrain.

5.3 Wetlands and Riparian Communities

As described in section 4.3, wetlands within the City include; estuarine and marine wetlands, estuarine and marine deepwater, freshwater emergent wetlands, freshwater forested/shrub wetlands, riverine, lake, and freshwater ponds. Additionally, the Laguna Grande/Lake Roberts complex includes the riparian corridor extending from Canyon Del Ray Creek.

5.4 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return.

Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time. Wildlife movement corridors can be both large and small scale.

The California Essential Habitat Connectivity Project commissioned by the California Department of Transportation (Caltrans) and CDFW; identifies "natural landscape blocks" which support native biodiversity and the "essential connectivity areas" which link them (Spencer et al., 2010). The Plan Area is located west of two natural landscape blocks, near Jacks Peak, and Pilarcitos Canyon on the east side of the former Fort Ord. An essential connectivity area linking these blocks overlaps the south east corner of the Plan Area, by approximately 422 acres. Essential connectivity areas are rated based on the permeability of the landscape to wildlife movements, and the section within the Plan Area is rated as the least permeable. It is likely wildlife use natural habitats in this area as a corridor. This connectivity area is largely part of the Fort Ord National Monument. Only approximately 33 acres fall within the area planned for development.

Additionally, the riparian area along Canyon Del Ray Creek and the Laguna Grand/ Lake Roberts complex provides a corridor for wildlife movement. However, this corridor is highly disturbed by recreational use and homeless encampments within the Plan Area.

6 Impact Analysis and Mitigation Measures

The following impact analysis is programmatic in nature, and designed to evaluate the potential for impacts to biological resources throughout the Plan Area. This analysis does not address any project-specific impacts. This section discusses the possible adverse impacts to biological resources that may occur from implementation of the 2040 General Plan and suggests appropriate avoidance, minimization, and mitigation measures that would reduce those impacts to less than significant levels. Future projects developed under the 2040 General Plan should be evaluated for impacts at a project-specific level. Additional measures not identified at this programmatic-level, but which could be identified at the project-level, may be required if special status species or sensitive biological resources are documented during project-level analyses, and it is determined that those resources may be impacted by individual project implementation.

6.1 Special Status Species and Sensitive Natural Communities

Thresholds 1 and 2: Have a substantial adverse effect (i.e. significantly reduce species population, reduce species habitat, restrict reproductive capacity), either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations, or by CDFW or USFWS; or have a substantial adverse effect (i.e. direct/indirect reduction) on any riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the CDFW or USFWS.

Impacts BIO-1 & BIO-2 With implementation of the goals and policies in the 2040 General Plan and measures outlined herein, impacts to special status species and sensitive habitats would be avoided, minimized, and, if necessary, mitigated.

State and/or federally listed animal species with the potential to occur in the Plan Area include tricolored blackbird, western snowy plover, bank swallow, California red-legged frog, California tiger salamander, and Smith's blue butterfly (Figure 5). State and/or federally listed plant species with the potential to occur in the Plan Area include seaside bird's-beak, Monterey gilia, Menzies' wallflower, Gowen cypress, Contra Costa goldfields, Tidestrom's lupine, Yadon's rein orchid, Hickman's cinquefoil, Monterey clover, beach layia, and Monterey spineflower (Figure 5). Sensitive plant communities documented within the Plan Area include central maritime chaparral; however, central dune scrub, coastal and valley freshwater marsh, coastal brackish marsh, Monterey cypress forest, Monterey pine forest, Monterey pygmy cypress forest, northern bishop pine forest, and valley needlegrass grassland also have the potential to occur.

The goals and policies of the 2040 General Plan support growth and redevelopment within the City proper, including within the jurisdiction of the City's LCP; as well as on undeveloped former Fort Ord lands. The 2040 General Plan is designed to be consistent with the LCP and Fort Ord Base Reuse Plan. New development on former Fort Ord lands would incorporate open space corridors with trails that support natural vegetation communities, sensitive habitats, and connections to the Fort Ord National Monument and FORTAG. Major strategies of the 2040 General Plan include the development of Seaside east with sustainable neighborhoods and the preservation of natural areas,

including sensitive habitats such as oak woodlands. In addition, all development under the 2040 General Plan would be subject to the provisions of the various federal and State natural resources regulations (discussed in subsection 3.2, *Regulatory Overview*) and their respective permitting processes. Further, the 2040 General Plan goals and policies presented in section 2 would encourage the conservation and protection of open space and natural resources within the Plan Area, thus protecting special status species to the greatest extent possible.

Land Use and Urban Design Goals 17, 20, and 22, aim to balance habitat preservation and development on former Fort Ord lands, which would minimize the loss of sensitive habitats and habitat linkages. Parks, Open Space, and Conservation Goals two, eight, and nine would also address habitat preservation on former Fort Ord lands. Goal two aims to maintain high-quality, well-connected habitats and open space corridors. Special status species protection is addressed in goal eight, which includes a policy for the continued partnership with local, regional, and federal agencies, and continued implementation of the Fort Ord HMP and HCP. Goal nine addresses clustering of development, limiting of impervious surfaces, future project impact analysis, and limiting the use of invasive plants in landscaping. Additionally, Parks, Open Space, and Conservation Goal 10 provides protection for habitat in the coastal zone, including critical habitat and habitat for permanent and migratory species. It also would provide protection from habitat degradation in the coastal zone due to increased access. Parks, Open Space, and Conservation Goal 12 includes policies to protect native trees (particularly oaks), and encourages the planting of native, non-invasive species as landscaping.

These goals to limit habitat loss, maintain habitat integrity and connectivity, and protect special status species would minimize, and sometimes avoid, impacts from potential direct and indirect effects to special status species and sensitive habitats, but implementation of the 2040 General Plan would result in impacts to such resources. Therefore, impacts would occur but would be less than significant with measures incorporated.

Land Use and Urban Design Goal nine's policy to incorporate bird-safe design practices near natural habitats and migratory routes would limit direct impacts to adult migratory birds. With implementation of additional measures, direct and indirect impacts to nesting birds would be less than significant.

Avoidance, Minimization, and Mitigation (AMM) Measures

AMM-1 New development supports the preservation or enhancement of the City's natural resources. The Development Review Policy of the 2040 General Plan Parks, Open Space, and Conservation Goal POC-9 should be updated to read:

Policy: Development Review. When projects are adjacent to or contain ~~sensitive~~ natural habitat and/or non-developed areas, require projects to submit analysis of potential impacts to sensitive biological resources. The analysis shall: 1) show~~ing~~ the existing habitat; 2) outline the proposed plan; 3) identify potential impacts to special status species, sensitive communities, and jurisdictional waters; and 4) identify measures to avoid, minimize, and/or mitigate impacts, as necessary.

AMM-2 Riparian Corridors. The 2040 General Plan Parks, Open Space, and Conservation Goal POC-10 should include the following policy:

Policy: Riparian Corridors. Encourage the restoration and protection of riparian corridors at Laguna Grange and Roberts Lake.

Significance After Mitigation

Impacts to special status species and sensitive habitats would be less than significant with implementation of AMM-1 and AMM-2, and other measures as identified in the EIR.

6.2 Wetlands

Threshold 3: Have a substantial adverse effect (i.e. direct/indirect reduction) 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, or hydrological interruption, or other means.

Impact BIO-3 While the 2040 General Plan would not facilitate development that would directly impact riparian and wetland habits, there would be potential for adverse indirect impacts from such development on wetlands and areas under the jurisdiction(s) of the CDFW, RWQCB and/or USACE, as well as under the jurisdiction of the LCP and therefore subject to the CCA. However, compliance with existing regulations and implementation of 2040 General Plan policies would avoid, minimize, and mitigate (if necessary) potential impacts to less than significant levels.

Wetlands in the Plan Area include estuarine and marine wetlands, estuarine and marine deepwater, freshwater emergent wetlands, freshwater forested/shrub wetlands, riverine, lake, and freshwater ponds. The Laguna Grande Lake Roberts are two freshwater lakes, fed by Canyon Del Ray Creek. The Pacific Ocean (marine habitat) occurs at the far south west edge of the Plan Area. The remaining freshwater ponds and marshes occur primarily on former Fort Ord lands. All known wetlands mapped on former Fort Ord lands occur within areas designated for conservation. No surveys were conducted for this analysis however, and additional wetlands may be discovered during site specific surveys. Additionally, some wetland features, such as freshwater seeps and springs, are generally not identified as part of the NWI because of the general scale of the mapping effort. Detailed wetland delineations would be needed to determine the extent of any jurisdictional wetlands and other waters at specific locations and each agency is responsible for making a final determination on the extent of jurisdictional waters for a particular site.

Wetlands and waterways may be subject to USACE, RWQCB and/or CDFW jurisdiction(s), as well as subject to the CCA. Compliance with the requirements of the CWA, Porter-Cologne, and CFGC, and CCA would be required for any project proposed under the 2040 General Plan. In addition, the following goals and policies from the Parks, Open Space, and Conservation Goals and Policies presented in section 2 would reduce impacts to federally protected wetlands and riparian habitat through preservation and enhancement of wetland and riparian habitats.

The policies contained within Parks, Open Space, and Conservation Goals 8, 9, and 11 would require detailed inventory of sensitive habitats prior to new development and protection of sensitive habitats that have been inventoried. Additionally, 2040 General Plan goals and policies would require preservation of wetland and riparian habitat, compliance with the LCP, the HMP, State and federal wetland regulations, and protection of water quality. Impacts to riparian and wetland habitats would be less than significant with implementation of measures.

AMM Measures

AMM-3 New development supports the preservation or enhancement of the City's natural resources. A policy specific to wetlands and riparian habitats should be included (in addition to the recommended AMM Measure 2; Riparian Corridors). The 2040 General

Plan Parks, Open Space, and Conservation Goal POC-9 should be updated to include the following policy:

Policy: Wetlands. The City shall encourage the preservation, enhancement and protection of wetland areas, and the evaluation of areas proposed for new development during the site planning process for wetland features. Where present, the City shall require that wetlands be avoided or replaced so that there is no net loss to wetland resources.

Significance After Mitigation

Impacts would be less than significant after mitigation.

6.3 Wildlife Movement

Threshold 4: Interfere substantially (i.e. direct/indirect reduction) 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.

Impact BIO-4 Development carried out under the 2040 General Plan would largely avoid impacts to wildlife movement corridors by conservation of natural areas and linkages contained in policies of the 2040 General Plan.

The Plan Area is located west of Fort Ord National Monument, and natural habitat in the Santa Lucia mountain range. An essential connectivity area was mapped in the south east corner of the Plan Area on former Fort Ord lands. It is likely wildlife use natural habitats in this area as a corridor. This connectivity area is largely part of the Fort Ord National Monument. Only approximately 33 acers fall within the area planned for development.

Additionally, the riparian area along Canyon Del Ray Creek and the Laguna Grande Lake Roberts complex provides a corridor for wildlife movement. This corridor is highly disturbed however, by recreational use and homeless encampments.

One of the goals of the 2040 General Plan is to preserve sensitive habitats and habitat linkages, particularly oak woodlands.

Implementation of the 2040 General Plan would preserve open space within the Plan Area and protect sensitive habitats, thus preserving existing corridors used by wildlife through the Goals LUD-22, and POC-8 and 9. Although the 2040 General Plan policies would preserve open space and protect sensitive habitats resulting in the protection of wildlife movement corridors, wildlife movement corridor protection is not specifically stated in the 2040 General Plan.

Mitigation Measures

MM-4 Wildlife Movement Corridors Protection Policy. The 2040 General Plan Parks, Open Space, and Conservation Goal POC-9 should be updated to read:

Policy: Clustered development. Cluster new development on former Fort Ord lands to minimize impacts to oak woodlands and linkages, preserve habitat management areas and important wildlife movement corridors, and protect steep slopes, wetlands, and waterways.

Significance after mitigation

Impacts would be less than significant with implementation of 2040 General Plan policies and Mitigation Measure MM-4 to specify preservation of wildlife movement corridors in Goal 9.

6.4 Local Policies and Ordinance

Threshold 5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact BIO-5 Development proposed by the 2040 General Plan would conform with applicable local policies protecting biological resources and underscore their importance with strengthened policy statements. Impacts would be less than significant.

Implementation of the 2040 General Plan would be subject to all applicable local policies and regulations related to the protection of important biological resources. Specifically, development under the 2040 General Plan would be required to comply with the City of Seaside Municipal Code City of Seaside Local Coastal Program, and FORA base reuse plan. The City of Seaside Municipal Code Chapter 8.54 Trees provides standards for the removal, protection and preservation of trees. The ordinance requires a tree removal permit and replacement plantings for any tree to be removed during project construction. In addition to requiring tree removal permits, the ordinance also requires measures to protect existing trees during project construction. The following 2040 General Plan policies from the Parks, Open Space, and Conservation Goal 12 provides protection for protected tree and encourages the use of native species for landscaping. Goal 8 also provides protections for oak woodlands.

Therefore, the 2040 General Plan would comply with applicable local regulations and impacts would be less than significant.

Mitigation Measures

No mitigation required.

Significance After Mitigation

Impacts to biological resources would be less than significant without mitigation.

6.5 Habitat Conservation Plans

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

Impact BIO-6 The Plan Area is includes lands governed by the Fort Ord Installation-wide HMP, and will include lands governed by the Fort Ord HCP once it is finalized. Impacts to areas identified in the HMP and HCP would be protected by conservation strategies contained in goals and policies of the 2040 General Plan. Impacts would be less than significant.

Development under the 2040 General Plan would be required to comply with Fort Ord HMP and Fort Ord HCP. The 2040 General Plan Parks, Open Space, and Conservation Goal 8 requires the Continued partnership with local, regional, and federal agencies to implement the programs outlined by the HCP and HMP. Therefore, conflicts with the Fort Ord HCP and Fort Ord HMP would be less than significant.

Mitigation Measures

No mitigation required.

Significance After Mitigation

Impacts to biological resources would be less than significant without mitigation.

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Appendix A

Special Status Species Evaluation

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Plants				
Agrostis lacuna-vernalis vernal pool bent grass	None/None G1 / S1 1B.1	Vernal pools. In mima mound areas or on the margins of vernal pools. 125-150 m.	**Moderate Potential**	Vernal pools may be present on former Fort Ord land, and there is a known occurrence within 5 miles of the Plan Area.
Allium hickmanii Hickman's onion	None/None G2 / S2 1B.2	Closed-cone coniferous forest, chaparral, coastal scrub, coastal prairie, cismontane woodland. Sandy loam, damp ground and vernal swales; mostly in grassland though can be associated with chaparral or woodland. 5-200 m.	**Moderate Potential**	Chaparral, coastal scrub, coastal prairie, and cismontane woodlands are present, and there is a known occurrence within 5 miles of the Plan Area.
Arctostaphylos edmundsii Little Sur manzanita	None/None G2 / S2 1B.2	Coastal bluff scrub, chaparral. Forming mounds on sandy terraces on ocean bluffs. 30-95 m.	**Low Potential**	Coastal bluff scrub and chaparral are present; however there are no known occurrences within 5 miles.
Arctostaphylos hookeri ssp. hookeri Hooker's manzanita	None/None G3T2 / S2 1B.2	Chaparral, coastal scrub, closed-cone coniferous forest, cismontane woodland. Sandy soils, sandy shales, sandstone outcrops. 30-550 m.	**Moderate Potential**	Chaparral, coastal scrub, and cismontane woodlands are present, and there is a known occurrence within 5 miles of the Plan Area.

Arctostaphylos montereyensis Toro manzanita	None/None G2G3 / S2S3 1B.2	Chaparral, cismontane woodland, coastal scrub. Sandy soil, usually with chaparral associates. 75-735 m.	**Moderate Potential**	Chaparral, coastal scrub, and cismontane woodlands are present, and there is a known occurrence within 5 miles of the Plan Area.
Arctostaphylos pajaroensis Pajaro manzanita	None/None G1 / S1 1B.1	Chaparral. Sandy soils. 30-155 m.	**Presumed Present**	Chaparral habitat is present, and there is a known occurrence within the Plan Area.
Arctostaphylos pumila sandmat manzanita	None/None G1 / S1 1B.2	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal dunes, coastal scrub. On sandy soil with other chaparral associates. 3-210 m.	**Moderate Potential**	Chaparral, coastal scrub, and cismontane woodlands are present, and there is a known occurrence within 5 miles of the Plan Area.
Arenaria paludicola Marsh sandwort	Endangered/Endangered G1 / S1 1B.1	Marshes and swamps. Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	**Low Potential**	Marshes with dense mats of Typa, Juncus, and Scirpus are present; however there are no known occurrences within 5 miles.
Astragalus tener var. tener alkali milk-vetch	None/None G2T2 / S2 1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 m.	**Low Potential**	Vernal pools are present; however there are no known occurrences within 5 miles.
Astragalus tener var. titi coastal dunes milk-vetch	Endangered/Endangered G2T1 / S1 1B.1	Coastal bluff scrub, coastal dunes, coastal prairie. Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a	**Low Potential**	Coastal bluff scrub, coastal dunes, and coastal prairies are present; however there are no known occurrences within 5 miles.

		clay terrace. 1-45 m.		
Bryoria spiralifera twisted horsehair lichen	None/None G3 / S1S2 1B.1	North coast coniferous forest. Usually on conifers. 0-30 m.	**Low Potential**	North coast coniferous forests are present; however there are no known occurrences within 5 miles.
Castilleja ambigua var. insalutata pink Johnny-nip	None/None G4T2 / S2 1B.1	Coastal bluff scrub, coastal prairie. 0-100 m.	**Moderate Potential**	Coastal bluff scrub and coastal prairie are present, and there are known occurrences within 5 miles of the Plan Area
Centromadia parryi ssp. congdonii Congdon's tarplant	None/None G3T2 / S2 1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 0-230 m.	**Moderate Potential**	Valley and foothill grasslands are present, and there are known occurrences within 5 miles.
Chorizanthe minutiflora Fort Ord spineflower	None/None G1 / S1 1B.2	Coastal scrub, chaparral (maritime). Sandy, openings. 55-150 m.	**Moderate Potential**	Coastal scrub and maritime chaparral are present, and there are known occurrences within 5 miles.
Chorizanthe pungens var. pungens Monterey spineflower	Threatened/None G2T2 / S2 1B.2	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils in coastal dunes or more inland within chaparral or other	**Presumed Present**	There are known occurrences and federally designated critical habitat within the Plan Area.

		habitats. 0-170 m.		
Chorizanthe robusta var. robusta robust spineflower	Endangered/None G2T1 / S1 1B.1	Cismontane woodland, coastal dunes, coastal scrub, chaparral. Sandy terraces and bluffs or in loose sand. 9-245 m.	**Low Potential**	Coastal dunes and chaparral habitat are present; however there are no known occurrences within 5 miles.
Clarkia jolonensis Jolon clarkia	None/None G2 / S2 1B.2	Cismontane woodland, chaparral, coastal scrub, riparian woodland. 10-1280 m.	**Presumed Present**	Coastal scrub and chaparral habitat are present, and there is a known occurrence within the Plan Area.
Collinsia multicolor San Francisco collinsia	None/None G2 / S2 1B.2	Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus; sometimes on serpentine. 30-275 m.	**Low Potential**	Coastal scrub is present, and there is a known occurrence within 5 miles of the Plan Area; however this occurrence was observed in 1903.
Cordylanthus rigidus ssp. littoralis seaside bird's-beak	None/Endangered G5T2 / S2 1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes. Sandy, often disturbed sites, usually within chaparral or coastal scrub. 30-520 m.	**Presumed Present**	Coastal scrub and chaparral habitat are present, and there is a known occurrence within the Plan Area.

Delphinium californicum ssp. interius Hospital Canyon larkspur	None/None G3T3 / S3 1B.2	Cismontane woodland, chaparral, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. 195-1095 m.	**Moderate Potential**	Chaparral and coastal scrub with wetlands are present, and there is a known occurrence within 5 miles of the Plan Area.
Delphinium hutchinsoniae Hutchinson's larkspur	None/None G2 / S2 1B.2	Broadleafed upland forest, chaparral, coastal prairie, coastal scrub. On semi-shaded, slightly moist slopes, usually west-facing. 15-535 m.	**Moderate Potential**	Chaparral, coastal prairie, and coastal scrub are present, and there is a known occurrence within 5 miles of the Plan Area.
Delphinium umbraculorum umbrella larkspur	None/None G3 / S3 1B.3	Cismontane woodland, chaparral. Mesic sites. 215-2075 m.	**Low Potential**	Cismontane woodland and chaparral are present; however there are no known occurrences within 5 miles.
Ericameria fasciculata Eastwood's goldenbush	None/None G2 / S2 1B.1	Closed-cone coniferous forest, chaparral (maritime), coastal scrub, coastal dunes. In sandy openings. 30-215 m.	**Presumed Present**	Coniferous forest and maritime chaparral are present, and there are known occurrences within the Plan Area.
Eriogonum nortonii Pinnacles buckwheat	None/None G2 / S2 1B.3	Chaparral, valley and foothill grassland. Sandy soils; often on recent burns; western Santa Lucias. 90-975 m.	**Low Potential**	Cismontane woodland and chaparral are present; however there are no known occurrences within 5 miles.
Erysimum ammophilum sand-loving wallflower	None/None G2 / S2 1B.2	Chaparral (maritime), coastal dunes, coastal scrub. Sandy openings. 5-130 m.	**Presumed Present**	Maritime chaparral and coastal dunes are present, and there are known occurrences within the Plan Area.

Erysimum menziesii Menzies' wallflower	Endangered/Endangered G1 / S1 1B.1	Coastal dunes. Localized on dunes and coastal strand. 1-25 m.	**Moderate Potential**	Coastal scrub and chaparral habitat are present, and there is a known occurrence within 5 miles of the Plan Area.
Fritillaria liliacea fragrant fritillary	None/None G2 / S2 1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. 3-400 m.	**Moderate Potential**	Coastal scrub, valley and foothill grassland, coastal prairie, and cismontane woodland are present, and there is a known occurrence within 5 miles of the Plan Area.
Galium clementis Santa Lucia bedstraw	None/None G3 / S3 1B.3	Lower montane coniferous forest, upper montane coniferous forest. Forming soft mats in shady rocky patches; on granite or serpentine; mostly on exposed peaks. 990-1645 m.	**Not Expected**	Montane coniferous forests are not present, and the Plan Area elevation is out of this species range.
Gilia tenuiflora ssp. arenaria Monterey gilia	Endangered/Threatened G3G4T2 / S2 1B.2	Coastal dunes, coastal scrub, chaparral (maritime), cismontane woodland. Sandy openings in bare, wind-sheltered areas. Often near dune summit or in the hind dunes; two records from Pleistocene inland dunes. 5-245 m.	**Presumed Present**	Coastal dunes, scrub, and chaparral habitat are present, and there is a known occurrence within the Plan Area.
Hesperocyparis goveniana Gowen cypress	Threatened/None G1 / S1 1B.2	Closed-cone coniferous forest, chaparral. Coastal terraces; usually in sandy soils; sometimes with Monterey pine, bishop pine. 100-125 m.	**Moderate Potential**	Coniferous forest and coastal chaparral are present, and there is a known occurrence within 5 miles of the Plan Area.

Hesperocyparis macrocarpa Monterey cypress	None/None G1 / S1 1B.2	Closed-cone coniferous forest. Granitic soils. 10-20 m.	**Presumed Present**	Coniferous forests are present, and Monterey cypress are commonly used in ornamental plantings. However there are no known natural occurrences within 5 miles.
Holocarpha macradenia Santa Cruz tarplant	Threatened/Endangered G1 / S1 1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with nonnatives. 10-220 m.	**Low Potential**	Coastal prairie, coastal scrub, and grasslands are present; however there are no known occurrences within 5 miles.
Horkelia cuneata var. sericea Kellogg's horkelia	None/None G4T1? / S1? 1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sand hills; openings. Sandy or gravelly soils. 5-430 m.	**Presumed Present**	Coastal dunes, scrub, and chaparral habitat are present, and there is a known occurrence within the Plan Area.
Horkelia marinensis Point Reyes horkelia	None/None G2 / S2 1B.2	Coastal dunes, coastal prairie, coastal scrub. Sandy flats and dunes near coast; in grassland or scrub plant communities. 2-775 m.	**Moderate Potential**	Coastal dunes, scrub, and chaparral habitat are present, and there is a known occurrence within 5 miles of the Plan Area.
Lasthenia conjugens Contra Costa goldfields	Endangered/None G1 / S1 1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 1-450 m.	**Moderate Potential**	Grasslands and cismontane woodlands are present, and there is a known occurrence within 5 miles of the Plan Area.

Layia carnosa beach layia	Endangered/Endangered G2 / S2 1B.1	Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind fore dunes. 0-30 m.	**Moderate Potential**	Coastal dunes and coastal scrub are present, and there is a known occurrence within 5 miles of the Plan Area.
Legenere limosa legenere	None/None G2 / S2 1B.1	Vernal pools. In beds of vernal pools. 1-880 m.	**Moderate Potential**	Vernal pools may be present, and there is a known occurrence within 5 miles of the Plan Area.
Lupinus tidestromii Tidestrom's lupine	Endangered/Endangered G1 / S1 1B.1	Coastal dunes. Partially stabilized dunes, immediately near the ocean. 4-25 m.	**Moderate Potential**	Coastal dunes are present, and there is a known occurrence within 5 miles of the Plan Area.
Malacothamnus palmeri var. involucratus Carmel Valley bush-mallow	None/None G3T2Q / S2 1B.2	Cismontane woodland, chaparral, coastal scrub. Talus hilltops and slopes, sometimes on serpentine. Fire dependent. 5-520 m.	**Moderate Potential**	Cismontane woodlands, chaparral, and coastal scrub are present, and there is a known occurrence within 5 miles of the Plan Area.
Malacothamnus palmeri var. palmeri Santa Lucia bush-mallow	None/None G3T2Q / S2 1B.2	Chaparral. Dry rocky slopes, mostly near summits, but occasionally extending down canyons to the sea. 60-360 m.	**Moderate Potential**	Chaparral is present, and there is a known occurrence within 5 miles of the Plan Area.
Malacothrix saxatilis var. arachnoidea Carmel Valley malacothrix	None/None G5T2 / S2 1B.2	Chaparral, coastal scrub. Rock outcrops or steep rocky roadcuts. 25-1220 m.	**Moderate Potential**	Chaparral is present, and there is a known occurrence within 5 miles of the Plan Area.

Meconella oregana Oregon meconella	None/None G2G3 / S2 1B.1	Coastal prairie, coastal scrub. Open, moist places. 60-640 m.	**Low Potential**	Coastal prairie and coastal scrub are present; however there are no known occurrences within 5 miles.
Microseris paludosa marsh microseris	None/None G2 / S2 1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 3-610 m.	**Moderate Potential**	Coniferous forest, cismontane woodland, coastal scrub, and grasslands are present, and there is a known occurrence within 5 miles of the Plan Area.
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	None/None G3T2 / S2 1B.2	Coastal dunes, coastal scrub, chaparral, lower montane coniferous forest. Sandy soils. 10-245 m.	**Presumed Present**	Coastal dunes, scrub, and chaparral habitat are present, and there is a known occurrence within the Plan Area.
Monolopia gracilens woodland woollythreads	None/None G3 / S3 1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broadleafed upland forest, North Coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns, but may have only weak affinity to serpentine. 120-975 m.	**Moderate Potential**	Chaparral, grasslands, coniferous forest, and cismontane woodlands are present, and there is a known occurrence within 5 miles of the Plan Area.
Pinus radiata Monterey pine	None/None G1 / S1 1B.1	Closed-cone coniferous forest, cismontane woodland. Three primary stands are native to California. Dry bluffs and slopes. 60-125 m.	**Presumed Present**	Coniferous forests are present, and Monterey pines are commonly used in ornamental plantings. There are known occurrences within 5 miles of the Plan

				Area.
Piperia yadonii Yadon's rein orchid	Endangered/None G1 / S1 1B.1	Closed-cone coniferous forest, chaparral, coastal bluff scrub. On sandstone and sandy soil, but poorly drained and often dry. 10-505 m.	**Moderate Potential**	Chaparral, coniferous forest, and coastal scrub are present, and there is a known occurrence within 5 miles of the Plan Area.
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	None/None G3T2Q / S2 1B.2	Chaparral, coastal scrub, coastal prairie. Mesic sites. 15-160 m.	**Moderate Potential**	Coastal prairie, chaparral, and coastal scrub are present, and there is a known occurrence within 5 miles of the Plan Area.
Plagiobothrys uncinatus hooked popcornflower	None/None G2 / S2 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Sandstone outcrops and canyon sides; often in burned or disturbed areas. 210-855 m.	**Low Potential**	Chaparral, cismontane woodland, and grasslands are present; however there are no known occurrences within 5 miles.
Potentilla hickmanii Hickman's cinquefoil	Endangered/Endangered G1 / S1 1B.1	Coastal bluff scrub, closed-cone coniferous forest, meadows and seeps, marshes and swamps. Freshwater marshes, seeps, and small streams in open or forested areas along the coast. 5-125 m.	**Moderate Potential**	Coniferous forest, coastal scrub, and freshwater wetlands are present, and there is a known occurrence within 5 miles of the Plan Area.

Ramalina thrausta angel's hair lichen	None/None G5 / S2? 2B.1	North coast coniferous forest. On dead twigs and other lichens. 75-430 m.	**Moderate Potential**	Coniferous forests are present, and there is a known occurrence within 5 miles of the Plan Area.
Rosa pinetorum pine rose	None/None G2 / S2 1B.2	Closed-cone coniferous forest, cismontane woodland. 5-1090 m.	**Presumed Present**	Coniferous forest and cismontane woodlands are present, and there is a known occurrence within the Plan Area.
Stebbinsoseris decipiens Santa Cruz microseris	None/None G2 / S2 1B.2	Broadleaf upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes. 90-750 m.	**Moderate Potential**	Coniferous forests, chaparral, coastal prairie, and coastal scrub are present, and there is a known occurrence within 5 miles of the Plan Area.
Tortula californica California screw moss	None/None G2G3 / S2S3 1B.2	Chenopod scrub, valley and foothill grassland. Moss growing on sandy soil. 10-1460 m.	**Low Potential**	Scrub and grasslands are present; however there are no known occurrences within 5 miles.
Trifolium buckwestiorum Santa Cruz clover	None/None G2 / S2 1B.1	Coastal prairie, broadleafed upland forest, cismontane woodland. Moist grassland. Gravelly margins. 30-550 m.	**Moderate Potential**	Coastal prairie, cismontane woodland, and grasslands are present, and there is a known occurrence within 5 miles of the Plan Area.

Trifolium hydrophilum saline clover	None/None G2 / S2 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m.	**Moderate Potential**	Grasslands and wetlands are present, and there is a known occurrence within 5 miles of the Plan Area.
Trifolium polyodon Pacific Grove clover	None/Rare G1 / S1 1B.1	Closed-cone coniferous forest, meadows and seeps, coastal prairie, valley and foothill grassland. Along small springs and seeps in grassy openings. 5-260 m.	**Moderate Potential**	Coniferous forest, grasslands, and wetlands are present, and there is a known occurrence within 5 miles of the Plan Area.
Trifolium trichocalyx Monterey clover	Endangered/Endangered G1 / S1 1B.1	Closed-cone coniferous forest. Openings, burned areas, and roadsides. Sandy soils. 60-210 m.	**Moderate Potential**	Coniferous forests are present, and there is a known occurrence within 5 miles of the Plan Area.
Mammals				
Corynorhinus townsendii Townsend's big-eared bat	None/None G3G4 / S2 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Moderate Potential**	Suitable forest habitat is present, and there is a known occurrence within 5 miles of the Plan Area.
Enhydra lutris nereis Southern sea otter	Threatened/None G4T2 / S2 FP	Nearshore marine environments from about Año Nuevo, San Mateo Co. to Point Sal, Santa Barbara Co. Needs canopies of giant kelp & bull kelp for rafting & feeding. Prefers rocky substrates with abundant	**Low Potential**	Occurs off shore, rocky substrates are not present in marine habitats within the Plan Area.

		invertebrates.		
Neotoma macrotis luciana Monterey dusky-footed woodrat	None/None G5 T3/ S3 SSC	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Nests constructed of grass, leaves, sticks, feathers, etc. Population may be limited by availability of nest materials.	**High Potential**	known to occur on former Fort Ord lands.
Sorex ornatus salarius Monterey shrew	None/None G5 T1T2/ S1S2 SSC	Riparian, wetland & upland areas in the vicinity of the Salinas River delta. Prefers moist microhabitats. feeds on insects & other invertebrates found under logs, rocks & litter.	**Low Potential**	Potentially occurring on former Fort Ord lands near the Salinas River.
Taxidea taxus American badger	None/None G5 / S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Presumed Present**	Suitable shrub and forest habitats are present, and there is a known occurrence within the Plan Area.
Birds				

Agelaius tricolor tricolored blackbird	None/Candidate Endangered G2G3 / S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Moderate Potential**	Suitable nesting and foraging habitat is present, and there is a known occurrence within 5 miles of the Plan Area.
Asio flammeus short-eared owl	None/None G5 / S3 SSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	**Low Potential**	Swamps and irrigated fields are not present, and there are no known occurrences within 5 miles.
Athene cunicularia burrowing owl	None/None G4 / S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**High Potential**	Suitable nesting and foraging habitat is present, and there is a known occurrence within 5 miles of the Plan Area.
Buteo regalis ferruginous hawk	None/None G4 / S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	**Moderate Potential**	Suitable foraging habitat is present, and there is a known occurrence within 5 miles of the Plan Area.

Charadrius alexandrinus nivosus western snowy plover	Threatened/None G3T3 / S2S3 SSC	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**High Potential**	Suitable nesting and foraging habitat is present, and there is a known occurrence within 5 miles of the Plan Area.
Cypseloides niger black swift	None/None G4 / S2 SSC	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	**Low Potential**	Cliffs and sea bluffs are not present, and there are no known occurrences within 5 miles.
Elanus leucurus white-tailed kite	None/None G5 / S3S4 FP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Moderate Potential**	Suitable nesting and foraging habitat is present, there are no known occurrences within 5 miles.
Eremophila alpestris actia California horned lark	None/None G5T4Q / S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	**High Potential**	Suitable nesting and foraging habitat is present, and there is a known occurrence within 5 miles of the Plan Area.

Falco mexicanus prairie falcon	None/None G5 / S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	**High Potential**	Suitable nesting and foraging habitat is present. CNDDB occurrence locations have been suppressed for this species. Recent sightings have been reported on the former Fort Ord on eBird.
Falco peregrinus anatum American peregrine falcon	Delisted/Delisted G4T4 / S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	**Presumed Present**	Buildings and prey (pigeons) are present. Occurrences have been reported from the Laguna Grande complex on eBird.
Laterallus jamaicensis coturniculus California black rail	None/Threatened G3G4T1 / S1 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**Low Potential**	Freshwater marshes in the Plan Area are limited to the Laguna Grande complex, and there are no known occurrences within 5 miles.
Oceanodroma homochroa ashy storm-petrel	None/None G2 / S2 SSC	Colonial nester on off-shore islands. Usually nests on driest part of islands. Forages over open ocean. Nest sites on islands are in crevices beneath loosely piled rocks or driftwood, or in caves.	**Low Potential (foraging only)**	No nest colonies occur in the Plan Area, and there are no known occurrences within 5 miles.

Pelecanus occidentalis californicus California brown pelican	Delisted/Delisted G4T3 / S3 FP	Colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators. Roosts communally.	**Presumed Present (foraging only)**	No nest colonies occur in the Plan Area; however many occurrences have been reported on eBird.
Rallus obsoletus obsoletus California Ridgway's rail	Endangered/Endangered G5T1 / S1 FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	**Low Potential**	Freshwater marshes in the Plan Area are limited to the Laguna Grande complex, and there are no known occurrences within 5 miles.
Riparia riparia bank swallow	None/Threatened G5 / S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**Presumed Present**	Suitable nesting and foraging habitat are present, and there is a known occurrence within the Plan Area.
Sterna antillarum browni California least tern	Endangered/Endangered G4T2T3Q / S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	**Low Potential**	No nest colonies occur in the Plan Area, and there are no known occurrences within 5 miles.
Amphibians				

Ambystoma californiense California tiger salamander	Threatened/Threatened G2G3 / S2S3 WL	Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**High Potential**	Suitable upland and aquatic habitat is present, and there are known occurrences within 5 miles of the Plan Area.
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	Endangered/Endangered G5T1T2 / S1S2 FP	Wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey counties. Aquatic larvae prefer shallow (<12 inches) water, using clumps of vegetation or debris for cover. Adults use mammal burrows.	**Low Potential**	Wetlands occur in the Plan Area; however there are no known occurrences within 5 miles.
Rana boylii foothill yellow-legged frog	None/Candidate Threatened G3 / S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	**Low Potential**	Wetlands occur in the Plan Area; however there are no known occurrences within 5 miles.
Rana draytonii California red-legged frog	Threatened/None G2G3 / S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation	**Low Potential**	Wetlands occur in the Plan Area, and there is a known occurrence within 5 miles of the Plan Area; however surveys of

habitat.

Taricha torosa Coast Range newt	None/None G4 / S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	**Low Potential**	Wetlands occur in the Plan Area; however there are no known occurrences within 5 miles.
Reptiles				
Anniella pulchra northern California legless lizard	None/None G3 / S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**High Potential**	Sandy loose soils are present, and there is a known occurrence within 5 miles of the Plan Area.
Emys marmorata western pond turtle	None/None G3G4 / S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**High Potential**	Suitable aquatic habitat is present, and there are known occurrences within 5 miles of the Plan Area.

Phrynosoma blainvillii coast horned lizard	None/None G3G4 / S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**High Potential**	Suitable habitats with loose sandy soils are present, and there are known occurrences within 5 miles of the Plan Area. Known to occur on former Fort Ord lands.
Thamnophis hammondii two-striped gartersnake	None/None G4 / S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	**Moderate Potential**	Suitable aquatic habitat is present, and there are known occurrences within 5 miles of the Plan Area.
Fish				
Eucyclogobius newberryi tidewater goby	Endangered/None G3 / S3 SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**Low Potential**	The only brackish water habitat in the Plan Area is the Laguna Grande Complex, which is connected to the Pacific Ocean via a culvert under Hwy 1. There are also no known occurrences within 5 miles.
Oncorhynchus mykiss irideus steelhead - south-central California coast DPS	Threatened/None G5T2Q / S2	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	**Low Potential**	The creek that feeds the Laguna Grande Complex is connected to the Pacific Ocean via a culvert under Hwy 1, a significant barrier for anadromous fish. There are also no known

				occurrences within 5 miles.
Spirinchus thaleichthys longfin smelt	Candidate/Threatened G5 / S1 SSC	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	**Low Potential**	The only brackish water habitat in the Plan Area is the Laguna Grande Complex, which is connected to the Pacific Ocean via a culvert under Hwy 1. There are also no known occurrences within 5 miles.
Insects				
Danaus plexippus pop. 1 monarch - California overwintering population	None/None G4T2T3 / S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**High Potential**	Suitable winter roost sites are present, and there are known occurrences within 5 miles of the Plan Area.
Euphilotes enoptes smithi Smith's blue butterfly	Endangered/None G5T1T2 / S1S2	Most commonly associated with coastal dunes & coastal sage scrub plant communities in Monterey & Santa Cruz counties. Hostplant: *Eriogonum latifolium* and *Eriogonum parvifolium* are utilized as both larval and adult foodplants.	**High Potential**	Coastal dunes and coastal sage scrub are present, and there are known occurrences within 5 miles of the Plan Area.
Crustaceans				

Branchinecta lynchi Vernal pool fairy shrimp	Threatened/None G3 / S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Not expected**	Vernal pools may be present on former Fort Ord lands; however there are no known occurrences within 5 miles.
Sensitive Natural Communities				
Central Dune Scrub Central Dune Scrub	None/None G2 / S2.2		**High Potential**	Documented in previous surveys of the former Fort Ord, and known occurrences within 5 miles of the Plan Area.
Central Maritime Chaparral Central Maritime Chaparral	None/None G2 / S2.2		**Presumed Present**	Documented in previous surveys of the former Fort Ord, and known occurrence mapped within the Plan Area
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	None/None G3 / S2.1		**High Potential**	Known occurrences within 5 miles of the Plan Area.
Coastal Brackish Marsh Coastal Brackish Marsh	None/None G2 / S2.1		**Moderate Potential**	Known occurrences within 5 miles of the Plan Area.

Monterey Cypress Forest Monterey Cypress Forest	None/None G1 / S1.2	**Moderate Potential**	Not documented in previous surveys of the former Fort Ord. Known occurrences within 5 miles of the Plan Area.
Monterey Pine Forest Monterey Pine Forest	None/None G1 / S1.1	**Moderate Potential**	Not documented in previous surveys of the former Fort Ord. Known occurrences within 5 miles of the Plan Area.
Monterey Pygmy Cypress Forest Monterey Pygmy Cypress Forest	None/None G1 / S1.1	**Moderate Potential**	Not documented in previous surveys of the former Fort Ord. Known occurrences within 5 miles of the Plan Area.
Northern Bishop Pine Forest Northern Bishop Pine Forest	None/None G2 / S2.2	**Moderate Potential**	Not documented in previous surveys of the former Fort Ord. Known occurrences within 5 miles of the Plan Area.
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	None/None G3 / S3.2	**Low Potential**	Known occurrences within 5 miles of the Plan Area at the mouth of the Salinas River.
Valley Needlegrass Grassland Valley Needlegrass Grassland	None/None G3 / S3.1	**High Potential**	Documented in previous surveys of the former Fort Ord, and known occurrences within 5 miles of the Plan Area.