DRAFT INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

for the

FORT ORD VILLAGE LIFT STATION &
FORCE MAIN REPLACEMENT PROJECT

Prepared for:

Marina Coast Water District

11 Reservation Road

Marina, CA 93933-2099

Prepared by:

Denise Duffy & Associates

947 Cass Street, Suite 5

Monterey, CA 93940

September 2019

This Page Intentionally Left Blank

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1. BACKGROUND INFORMATION

1. **Project Title**: Fort Ord Village Lift Station and Force Main Replacement Project

2. **Lead Agency/Project Proponent Name and Address:** Marina Coast Water District (MCWD), 11 Reservation Road, Marina, CA 93933

3. **Contact Person & Phone Number**: Michael Wegley, MCWD District Engineer, (831) 883-5925

4 **Project Location:** The project is located in California within the City of Seaside, in Monterey County; unincorporated Monterey County; and Fort Ord Dunes State Park (FODSP). Specifically, the existing Fort Ord Village Lift Station is located on the west side of Highway 1, within the FODSP, in unincorporated Monterey County, on assessor parcel number (APN) 031-051-001-000. The proposed replacement lift station would be located along Monterey Road, east of Highway 1, on the edge of a City of Seaside percolation pond, next to the existing gravity sewer pipeline within APN 031-051-023-000. The existing force main would be accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road within APNs 031-141-004-000 and 031-141-002-000. Staging areas for construction would be contained within APN 031-141-004-000.

   The new sanitary sewer force main (SSFM) is proposed to go under existing roadways from the new pump station to the MCWD's Sanitary Sewer Manhole (SSMH) C6. Specifically, the new SSFM would follow Monterey Road, then turn into the U.S. Army housing area at Bougainville Road, turn onto Buna Road, then Kiska Road, and finally turn onto Okinawa Road, where it would reconnect to the MCWD's SSFM.

5. **Project Summary**: The existing Fort Ord Village Lift Station and Force Main have exceeded their service life and require replacement. The existing lift station is located on the west side of Highway 1, within the FODSP, but the area served, and the majority of the force main alignment, are on the east side of Highway 1. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 linear feet (LF) of existing gravity and force main pipelines and two highway crossings. The new lift station site would be 1,600 square feet (SF) (40 feet by 40 feet). The total length of new pipeline is approximately 5,600 LF from the proposed lift station to where it connects to the existing gravity sewer. The existing Fort Ord Village Lift Station west of Highway 1 would be demolished and removed. Pipelines and manholes outside the site would be abandoned in place.

6. **Land Use Designations**: The City of Seaside General Plan designates the proposed replacement lift station area as Parks and Open Space (POS). The proposed pipeline would be within existing roadways. The existing Fort Ord Village Lift Station is located on an easement on California Department of Parks and Recreation (State Parks) property within FODSP and the California Coastal Zone. As a result, the existing Fort Ord Village Lift Station is subject to the requirements of the California Coastal Act of 1976, as amended, as well as the FODSP General Plan, which identifies the project site as a natural resource management zone. In addition, the entire project site lies within the former Fort Ord and is subject to the requirements of the Fort Ord Habitat Management Plan (HMP). The parcel containing the existing lift station is designated by the HMP as "development with reserve areas or development with restrictions" and the parcel containing the proposed replacement pump station and pipeline designated as "development."

This Page Intentionally Left Blank

2. PROJECT SUMMARY

2.1 INTRODUCTION

This Initial Study has been prepared to evaluate the potential environmental effects associated with the Fort Ord Village Force Main Replacement Project (project or proposed project), with a portion of the project (the existing lift station) located in unincorporated Monterey County and the other portion of the project (the proposed lift station and replacement force main) located in the City of Seaside, in Monterey County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 et. seq., and the state CEQA Guidelines, California Code of Regulations (CCR) §15000 et. seq.

An Initial Study is an informational document prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines §15063, subd. (a)). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by, or agreed to by, the applicant mitigate the potentially significant effects to a less-than-significant level, a Negative Declaration (ND) or Mitigated Negative Declaration (MND) may be prepared instead of an EIR (CEQA Guidelines §15070, subd. (b)). The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This Initial Study conforms to the content requirements under CEQA Guidelines §15071.

The MCWD (or District) is acting as the Lead Agency pursuant to CEQA Guidelines §15050(a). The District is a special district established in 1960 and provides potable water and wastewater collection services to the City of Marina and the former Fort Ord. The MCWD serves approximately 33,000 residents through 10,000 connections (LAFCO, 2019). As the Lead Agency, the District prepared an Initial Study pursuant to CEQA Guidelines §15063, §15070, and §15152.

This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. This Initial Study will be circulated for agency and public review during a 30-day public review period pursuant to CEQA Guidelines §15073. During the public review period comments concerning the analysis contained in the Draft IS/MND should be sent to: Mike Wegley, MCWD, 11 Reservation Road, Marina, CA 93933; or via email at MWegley@mcwd.org or facsimile at (831) 883-5995. Comments received by the District on the Initial Study will be reviewed and considered as part of the deliberative process in accordance with CEQA Guidelines §15074.

The following section is consistent with the requirements of CEQA Guidelines §15124 to the extent that it is applicable to the project. This section contains a detailed description of the historical background and context, project location, project components and relevant project characteristics, project goals and objectives, and applicable regulatory requirements.

2.2 PROJECT BACKGROUND

The MCWD is a County Water District organized and operating under the County Water District Law, Water Code §30000. The MCWD is located on the coast of Monterey Bay at the northwest end of the Salinas Valley and occupies an area of about 4.5 square miles. The District was formed in 1960 and

provides potable water, wastewater collection, and reclaimed water services within the City of Marina and the Ord Community. In 1992 the District joined the Monterey Regional Water Pollution Control Agency, now Monterey One Water (M1W), and connected to the Regional Treatment Plant. In 2018, the District conveyed approximately 2,200 acre-feet of sewage to M1W for treatment.

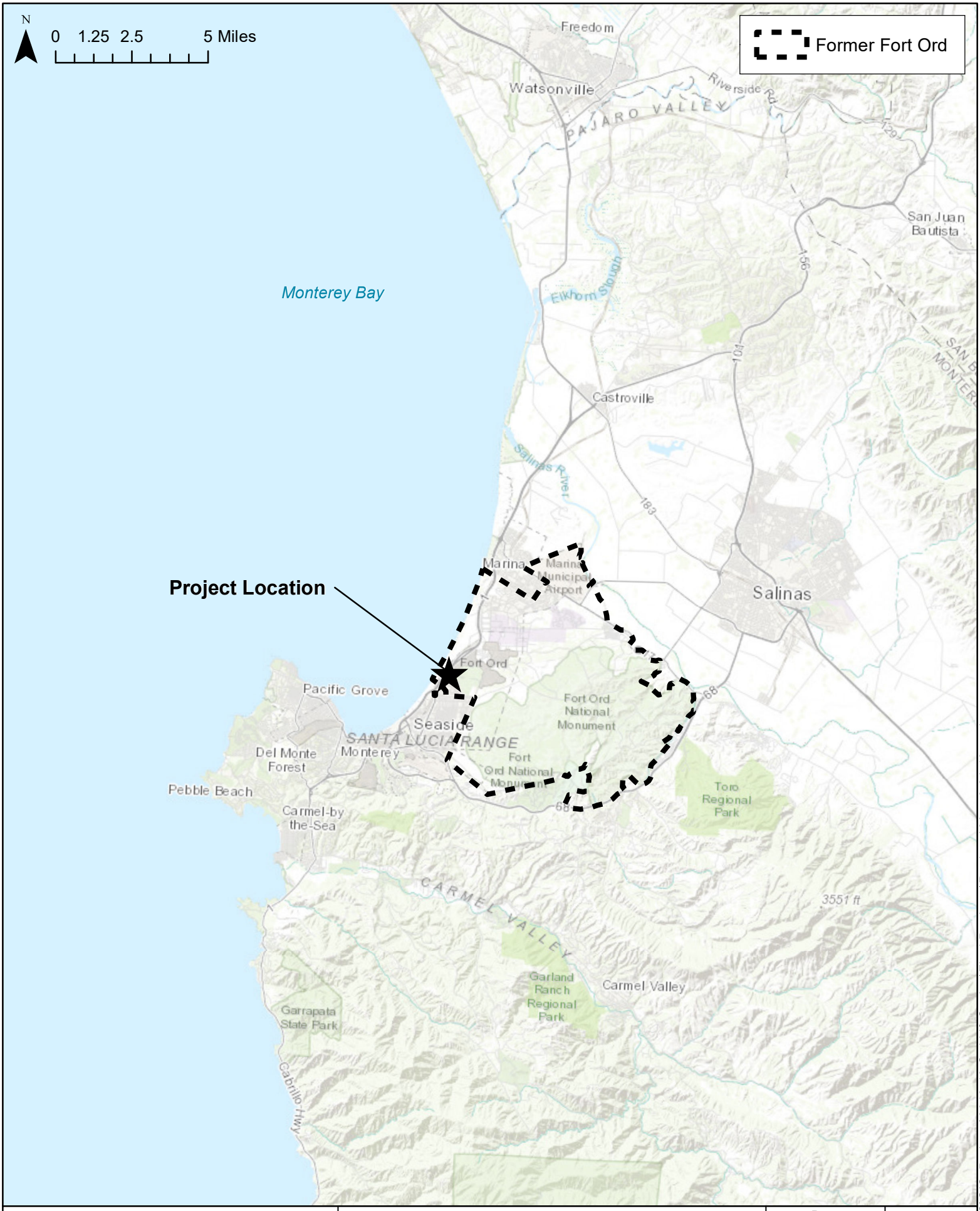
In 2001, the U.S. Army conveyed ownership of the water and wastewater infrastructure on the former Fort Ord through the Fort Ord Reuse Authority (FORA) to the MCWD.[1] As part of this transfer of ownership, the MCWD was conveyed the Fort Ord Village Lift Station. The Fort Ord Village Lift Station was originally a small wastewater treatment plant serving the housing areas along Coe Avenue. When the U.S. Army built the main wastewater treatment plant located at 10th Street, the Fort Ord Village wastewater treatment plant was converted into a sewer lift station, with a force main running north toward the main plant. When the M1W Regional Treatment Plant was constructed, the U.S. Army retired their treatment plant and now the sewage enters the M1W wastewater interceptor by gravity at the old plant site. In the 1970's, Del Monte Road was widened into the current Highway 1, separating the Fort Ord Village Lift Station from the area it serves.

The existing force main pipeline is a 10-inch diameter steel pipe. The pipeline runs east from the lift station, crosses Highway 1 and turns north, running outside the highway right-of-way to a high point near the corner of Buna and Kiska Roads. At that point is continues as a gravity sewer, running north to the Gigling Lift Station. The steel pipeline has broken six times in the past ten years, requiring emergency shut-downs and repairs. A large-diameter Pacific Gas & Electric (PG&E) gas main runs parallel to the force main, limiting the available space for a parallel replacement force main. The District would like to replace this pipeline before a break occurs within the Highway 1 corridor. The Fort Ord Village Lift Station is configured as a wet-pit/dry-pit station, requiring confined space entry controls for routine maintenance work. The District would like to replace this with a submersible pump lift station to eliminate that risk. The electrical equipment at the site is also experiencing corrosion due to the close proximity to the ocean.

2.3 PROJECT LOCATION

The project, described below, is located in California within the City of Seaside, in Monterey County; unincorporated Monterey County; and FODSP (see **Figure 1 Regional Map** and **Figure 2 Project Location**). Specifically, the existing Fort Ord Village Lift Station is located on the west side of Highway 1, within the FODSP, in unincorporated Monterey County, on a disturbed site at APN 031-051-001-000. The proposed replacement lift station would be located on the east side of Highway 1, along Monterey Road on the edge of a City of Seaside percolation pond, next to the existing gravity sewer on APN 031-051-023-000 (see **Figure 3 Site Photos**). The site of the replacement lift station currently contains a City of Seaside percolation pond and ruderal/landscaped vegetation. The existing force main would be accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road within APNs 031-141-004-000 and 031-141-002-000. Staging areas for construction would also be contained within APN 031-051-023-000 and 031-141-004-000 as well.

[1] Assignment of Easements on Former Fort Ord and Ord Military Community, County of Monterey, and Quitclaim Deed for Water and Wastewater Systems, as and between FORA and the MCWD, dated October 24, 2001.

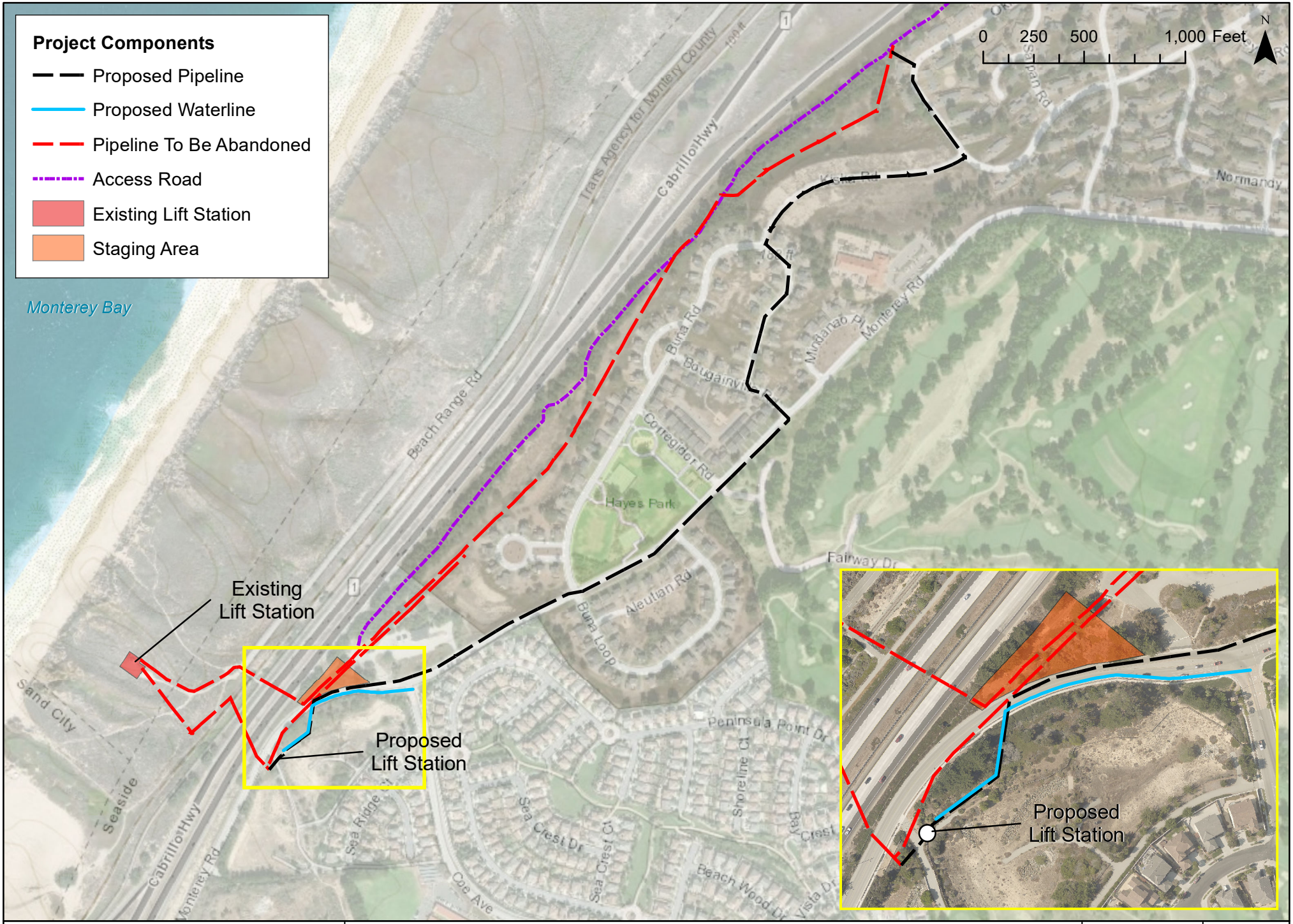


Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Regional Map

Date: 6/25/2019
Scale: 1 in = 4 mi
Figure: 1

Path: D:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Regional Map 6-24-19.mxd



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Project Location

Date: 8/2/2019
Scale: 1 in = 606 ft
Figure: 2

Path: D:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Figure 2 Project Location 6-24-19.mxd

Photo 1. View of existing Fort Ord Lift Station.

Photo 2. View of proposed replacement lift station site facing east.

Photo 3. View of proposed replacement lift station site facing north.

Denise Duffy and Associates, Inc. Planning and Environmental Consulting	Site Photos	Date 8/5/2019	Figure 3

Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Project Overview

Date
8/2/2019

Scale
1" : 150'

Figure
4

Source: Schaaf & Wheeler 2018

The new SSFM is proposed to go under existing Monterey Road from the new lift station to the existing gravity sewer, connecting near the MCWD's SSMH C6. Specifically, the new SSFM would follow Monterey Road, then turn into the U.S. Army housing area at Bougainville Road, turn onto Buna Road, then Kiska Road, and finally turn onto Okinawa Road where it would reconnect to the MCWD's gravity sewer. The total length of new pipeline is approximately 5,600 LF from the proposed lift station (see **Figure 4 Project Overview**).

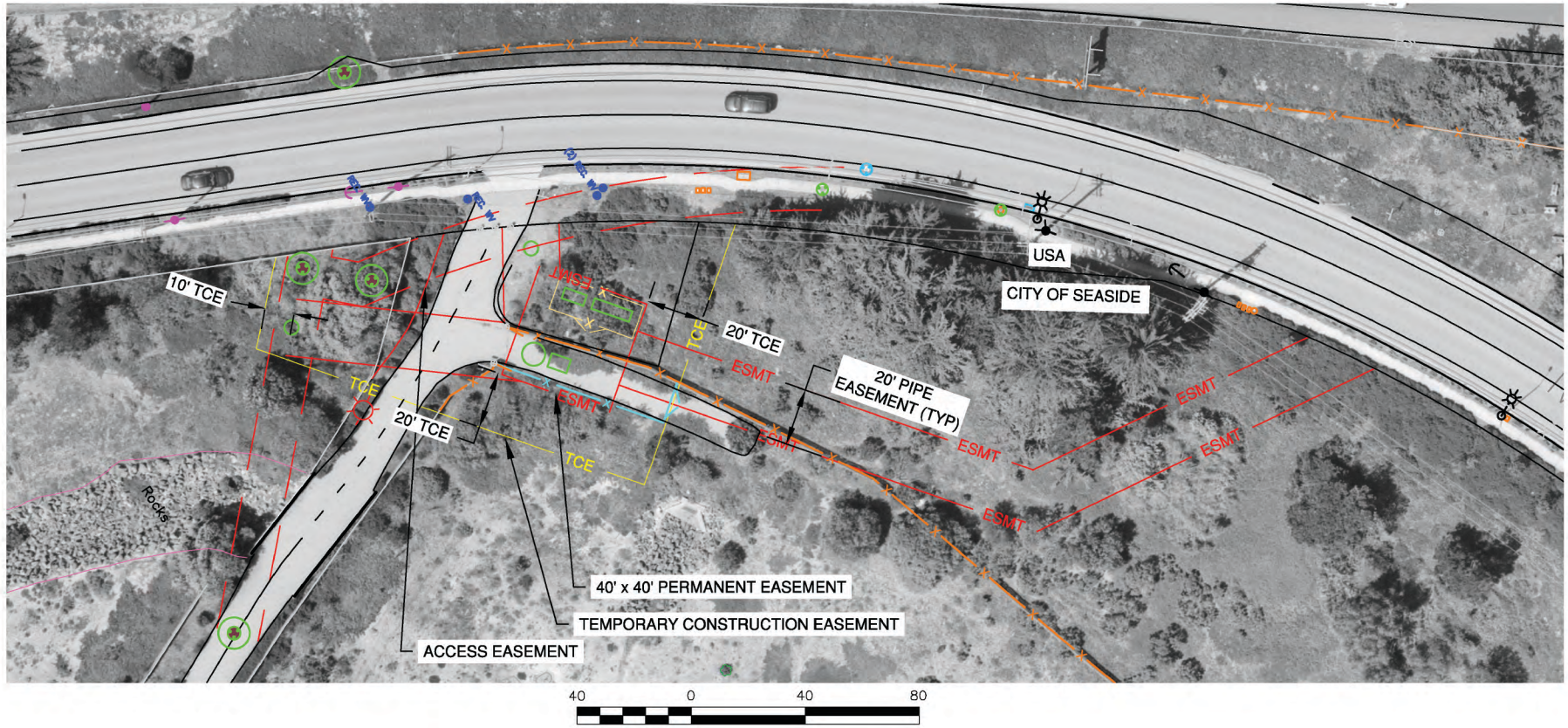
Regional access to the project site is provided from Highway 1 and Monterey Road. The existing force main is accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road. The existing Fort Ord Village Lift Station is accessed from the paved bike path/maintenance road through the FODSP. The replacement lift station site is bounded by Monterey Road to the northwest, a paved pedestrian/bicycle path to the southwest and southeast, and landscaped area to the northeast. The overall parcel is a percolation pond owned by the City of Seaside. The force main pipeline would follow existing streets through the U.S. Army housing area and is bound on all sides by residential housing. Surrounding land uses include Highway 1, open space, and residential use to the north; residential use and a golf course to the east and south of the project site; and Highway 1, and open space to the west of the project site.

2.4 PROJECT DESCRIPTION

The existing Fort Ord Village Lift Station and Force Main have exceeded their service life and require replacement. The existing lift station is located on the west side of Highway 1 within the FODSP, but the area served, and the majority of the force main alignment, are on the east side of Highway 1. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 LF of existing gravity and force main pipelines and two highway crossings. The proposed replacement lift station site would be 1,600 SF (40 feet by 40 feet). The total length of the proposed pipeline is approximately 5,600 LF from the new lift station to where it connects to the existing gravity sewer. The proposed pipeline would include approximately 4,100 LF of pressurized force main, 1,500 LF of gravity sewer, and eight new manholes. The existing Fort Ord Village Lift Station, west of Highway 1, would be demolished and removed. Approximately 6,200 LF of pipelines and manholes outside the site would be abandoned in place.

For the existing Fort Ord Village system, municipal wastewater flows through gravity pipes west under Highway 1 to the pump station, then east under Highway 1 in a pressure pipeline. The pipeline follows the west edge of the U.S. Army housing area and connects to a gravity sewer pipeline at a high point near the corner of Buna and Kiska Roads. The existing force main pipe has exceeded its service life and has deteriorated structurally, requiring emergency repairs six times in the past 10 years. The MCWD has planned for the replacement of these facilities by allocating funds to improve these facilities in the 2018-19 Five Year Capital Improvement Plan.

Various alignments were considered for relocating the force main, many of which required tree removal and/or continued access through the open space corridor for pipeline maintenance. The proposed alignment was selected as it provides all-weather maintenance access and eliminates future maintenance work next to an existing PG&E gas pipeline.



SCALE: 1 INCH = 40 FEET

LEGEND:

ESMT	EASEMENT
TCE	TEMPORARY CONSTRUCTION EASEMENT
X	(E) WOOD FENCE
X	(N) WOOD FENCE
X	(N) CHAIN LINK FENCE
	(E) UTILITY EASEMENT

Source: Schaaf & Wheeler 2019

Denise Duffy and Associates, Inc. Planning and Environmental Consulting	Site Plan	Date 8/2/2019 Scale 1" : 20'	Figure 5

Due to poor existing conditions and design considerations, the MCWD proposes to replace the existing lift station at a new location. The proposed replacement lift station would be located at the edge of a City of Seaside percolation pond along Monterey Road, at the point where the gravity sewers converge before crossing Highway 1. The proposed replacement lift station would consist of a wet well and valve vault (below grade), electrical control panel and an emergency generator, enclosed with a chain-link fence. A plan view of the replacement lift station site is shown in **Figure 5 Site Plan**.

The existing Fort Ord Village Lift Station west of Highway 1 would be demolished and removed after the replacement lift station is completed and operating. Work would be conducted within the currently disturbed area at this location. Pipelines and manholes outside the site would be abandoned in place. The following discussion provides a more detailed description of key project elements, including grading requirements, construction activities, operation, and schedule.

GRADING

The proposed project involves approximately 10,500 cubic yards of cut and 10,500 cubic yards of fill. The majority of that is trench excavation and backfill, which would be cut and backfilled in the same day. Grading for the pipeline and pipeline connections would be limited to areas already disturbed.

CONSTRUCTION

Land disturbance for construction of the proposed replacement lift station would be approximately 0.4 acres and 1.4 acres for pipeline trenching. Construction activities would include excavation to install the precast concrete manholes, wet well, valve vault, and pipelines; pavement cutting for pipeline trenches, pipeline installation using lifting equipment and trench boxes, trench and excavation backfilling and compaction, cast-in-place concrete work for manhole bases and equipment pads, and street paving. PG&E would install a new underground electrical service to the proposed replacement lift station from an existing service pole on Monterey Road. The system transition would require installing a line stop on the existing force main and pumping the force main contents into a nearby gravity sewer. Construction equipment would include, but would not be limited to, tracked excavator, backhoe, water truck, concrete trucks, dump trucks, flat-bed delivery trucks, vibratory compacters, asphalt paving equipment and trailer-mounted bypass pumps. Sheet-pile shoring may be installed around the lift station excavation using vibratory equipment. Work within roads would require traffic control and flagmen.

No separate construction access roads would be needed; existing roads would be used to access the existing and replacement pump stations and an unpaved road along the pipeline easement would be used to access the force main. During construction six round trip truck trips per day for 100 working days, and two roundtrip truck trips for equipment delivery for 50 days, are expected. Up to 10 employees are expected on the construction site per day.

Deconstruction of the existing Fort Ord Village Lift Station would include relocating the pumps to the proposed replacement lift station, salvaging metals for recycling, removing the concrete building and surface improvements within the 0.9-acre site, abandoning pipelines by flushing with clean water and setting grout plugs at the ends, abandoning manholes by removing the upper cone and filling the manhole with clean sand. PG&E may choose to remove the existing pole line serving the existing lift station. Site equipment would include excavators, dump trucks, water trucks and concrete trucks. Reseeding of the site would be coordinated with State Parks staff. Deconstruction is anticipated to take up to four weeks following start-up and commissioning of the new pump station.

PROJECT SCHEDULE

Construction activities would be limited to weekdays between the hours of 8:00 a.m. to 4:00 p.m. Night-time construction would be required for the system switch-over from existing to new, which would be a single night. Pipeline construction is anticipated to require eight weeks, and lift station site construction is anticipated to require four months. Construction is anticipated to occur between January 1 and September 30, 2020.

2.5 PROJECT GOALS AND OBJECTIVES

The primary goal of the proposed project is to relocate the existing Fort Ord Village Lift Station and reroute the sewer force main. The project's key objectives are as follows:

- Protect the environment as well as public health and safety, by improving deteriorating facilities.
- Support community needs now and in the future.

2.6 PROJECT APPROVALS AND PERMITS

This Initial Study is an informational document for both agency decision-makers and the public. The MCWD is the Lead Agency responsible for certification of this Initial Study. Below is a general list of federal, state, and local agencies that do or could have jurisdiction over the project and could issue permits in connection with site development. This list is not considered exhaustive and additional agencies and/or jurisdictions may have permitting authority.

FEDERAL AGENCIES

- Base Realignment and Closure, Construction Right-of-Entry
- U.S. Fish and Wildlife Service (if incidental take authorization is required)

REGIONAL AND STATE AGENCIES

- Regional Water Quality Control Board, National Pollution Discharge Elimination System (NPDES)
- State Water Resources Control Board (SWRCB), Construction Storm Water Pollution Prevention Plan (SWPPP)
- California Department of Transportation, Abandon Pipeline Easements
- California Coastal Commission, Coastal Development Permit (if determined required)
- State Parks, Encroachment Permit

LOCAL AGENCIES

- Monterey Bay Air Resource District, Permit for Emergency Generator, Demolition Permit
- City of Seaside Facility Easement, Encroachment, Ordnance Ordinance, and Grading Permits

3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☑ Biological Resources
- ☑ Cultural Resources
- ☐ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☑ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use
- ☐ Mineral Resources
- ☑ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☐ Tribal Cultural Resources
- ☑ Utilities and Service Systems
- ☑ Mandatory Findings of Significance

This Page Intentionally Left Blank

4. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

9/5/19
Date

This Page Intentionally Left Blank

5. ENVIRONMENTAL EVALUATION

This Initial Study evaluates the following resource sections within **Section 5.2. Environmental Setting and Impacts:** aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, mineral resources, noise, population/housing, public services, recreation, transportation, tribal resources, utilities and service systems, and wildfire.

5.1 EVALUATION OF ENVIRONMENTAL IMPACTS

The following describes how the proposed project's impacts to resource areas will be analyzed in this Initial Study in accordance with CEQA. Each resource section includes: 1) existing setting and applicable regulatory background, 2) CEQA impact checklist for the resource area, and 3) impact discussion in response to the questions in the checklist and mitigation where warranted. The impact discussion will identify the level of environmental effect from the proposed project. An explanation or discussion is required for all answers to the resource impact checklist as follows.

1. A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2. All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular environmental impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant based on the thresholds. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level mitigation measures.

5. Supporting Information Sources: A source list will be attached, and other sources used, or individuals contacted will be cited in the discussion.

6. The explanation of each issue will identify:

    a. The significance criteria or threshold, if any, used to evaluate each question; and

    b. The mitigation measure identified, if any, to reduce the impact to less than significant.

5.2 ENVIRONMENTAL SETTING AND IMPACTS

The following section describes the environmental setting and identifies the environmental impacts anticipated from implementation of the proposed project. The criteria provided in the CEQA environmental checklist was used to identify potentially significant environmental impacts associated with the project.

5.2.1 AESTHETICS

Setting

The proposed project is located adjacent to Monterey Bay, which is a notable visual resource. The replacement lift station is proposed directly east of Highway 1 on a parcel owned by the City of Seaside shared by an existing percolation pond. The project site is currently comprised of non-native invasive and ruderal plant species. The City of Seaside General Plan does not designate the proposed replacement lift station site as a "scenic vista" (City of Seaside, 2003). The operation of the replacement lift station would require new exterior lighting.

The existing Fort Ord Village Lift Station lies on the west side of Highway 1, adjacent to the Pacific Ocean on the FODSP. The FODSP is not designated as a scenic resource by the FODSP General Plan.

The State Scenic Highways Program is designed to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The proposed project is located adjacent to Highway 1. The adjacent section of Highway 1 to the proposed project is not designated as scenic; however, it is listed as eligible for scenic highway designation by the California Scenic Highway Mapping System (Caltrans, 2018). The proposed replacement lift station location is not visible from Highway 1 due to topography and vegetation screening.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
AESTHETICS. Would the project:					
a) Have a substantial adverse effect on a scenic vista?			X		1, 2, 3, 4
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				X	1, 2, 3, 4
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X		1, 2, 3, 4
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X		1, 2, 3

Explanation

a) **Less-Than-Significant Impact**. The proposed replacement pump station site would be located in an urbanized location in the City of Seaside, which is not located in an area designated by the Seaside General Plan as having any scenic vistas. A scenic vista is generally characterized as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The existing Fort Ord Village Lift Station is not designated as a scenic resource by the FODSP General Plan. However, the existing lift station would be demolished, and, therefore, would not have any permanents impacts to scenic vistas. All pipelines would be located underground in previously disturbed roadways. Any impacts to scenic vistas during demolition or construction of all the project components would be temporary in nature and are considered less than significant. As a result, the proposed project would have a less-than-significant impact to scenic vistas.

b) **No Impact**. None of the proposed project components are visible from a state scenic highway; the portion of Highway 1 in the proximity of the proposed project is not designated as a state scenic highway. Therefore, no impact to scenic resources within a state scenic highway would occur.

c) **Less-Than-Significant Impact**. The proposed facilities would be located in an urbanized area; introducing a new lift station would be consistent with the visual character the of parcel as it already contains various infrastructure improvements and a detention basin. All development would be consistent with applicable City of Seaside zoning and regulations governing scenic quality. Construction impacts would include the presence of construction vehicles, equipment and materials, stockpiles, and exposed soils. These impacts would be temporary in nature. For these reasons, construction and operation of the proposed replacement lift station and sewer pipeline would result in a less-than-significant impact to the visual quality of the site.

d) **Less-than-Significant Impact**. The proposed replacement lift station would include new exterior lighting. However, all proposed exterior lighting would be downward-facing, shielded to direct light downwards to ensure that lighting does not spill over onto nearby residential properties, and consistent with local lighting ordinances. Lighting would be switched on and only used when maintenance personnel are present. In addition, the project does not propose to introduce materials into the design that would create substantial glare. The project would have a less-than-significant impact on light and glare.

Conclusion: The project would have a less-than-significant impact on aesthetics with implementation of identified mitigation measures as well as compliance with local ordinances.

5.2.2 AGRICULTURAL AND FORESTRY RESOURCES

Setting

In California, agricultural land is given consideration under CEQA. According to Public Resources Code §21060.1, "agricultural land" is identified as prime farmland, farmland of statewide importance, or unique farmland, as defined by the U.S. Department of Agriculture land inventory and monitoring criteria, as modified for California:

- Prime Farmland (P) comprises the best combination of physical and chemical features able to sustain long-term agricultural production. Irrigated agricultural production is a necessary land use four years prior to the mapping date to qualify as Prime Farmland. The land must be able to store moisture and produce high yields.
- Farmland of Statewide Importance (S) possesses similar characteristics to Prime Farmland with minor shortcomings, such as less ability to hold and store moisture and more pronounced slopes.
- Unique Farmland (U) has a production history of propagating crops with high-economic value.
- Farmland of Local Importance (L) is important to the local agricultural economy. Local advisory committees and a county specific Board of Supervisors determine this status.
- Grazing Land (G) is suitable for browsing or grazing of livestock.

The Monterey County Important Farmlands Map classifies the land containing the existing Fort Ord Village Lift Station as "Other Land" and the proposed replacement pump station and associated pipelines as "Urban and Built Up Land." CEQA also requires consideration of impacts on lands that are under Williamson Act contract. The project site does not contain lands under Williamson Act contract (DOC, 2016).

CEQA requires the evaluation of forest and timber resources where they are present. The project site is in a parcel surrounded by residential properties. The site does not contain any forest land as defined in Public Resources Code section 12220(g), timberland as defined by Public Resources Code section 4526, or property zoned for Timberland Production as defined by Government Code section 51104(g).

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X	1, 2, 6
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X	1, 2, 6
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X	1, 2, 3, 4
d) Result in the loss of forest land or conversion of forest land to non-forest uses?				X	1, 2, 3, 4

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X	1, 2, 6

Explanation

a, b) **No Impact**. The project site is designated as "Other Land" or "Urban of Built Up Land" on the Important Farmlands Map for Monterey County and does not contain any prime farmland, unique farmland, farmland of statewide importance (farmland), or lands under Williamson Act contract. As a result, the project would not convert farmland to a non-agricultural use, nor conflict with existing zoning for agricultural use or a Williamson Act contract.

c, d) **No Impact**. The proposed project would not impact forest resources or result in the loss or conversion of forest land since the project site does not contain any forest land as defined in Public Resources Code section 12220(g), timberland as defined by Public Resources Code section 4526, or property zoned for Timberland Production as defined by Government Code section 51104(g).

e) **No Impact**. As per the discussion above, the proposed project would not involve changes in the existing environment which, due to their location or nature, could result in conversion of farmland or agricultural land, since none are present on this property. The proposed project would involve the replacement of an existing structure and would not convert any land for other use.

Conclusion: The proposed project would have no impact on agricultural and forest resources.

5.2.3 AIR QUALITY

Setting

The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these Acts, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board have established ambient air quality standards for specific "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_X), particulate matter (PM_{10}), sulfur dioxide (SO_2), and lead (Pb). Secondary criteria pollutants include ozone (O_3), and fine particulate matter ($PM_{2.5}$).

The project site is located within the North Central Coast Air Basin (NCCAB), which is comprised of Santa Cruz, San Benito, and Monterey Counties, and is regulated by the Monterey Bay Air Resources District (MBARD, formally known as Monterey Bay Unified Air Pollution Control District).

The U.S. EPA administers the National Ambient Air Quality Standards (NAAQS) under the Federal Clean Air Act. The U.S. EPA sets the NAAQS and determines if areas meet those standards. Violations of ambient air quality standards are based on air pollutant monitoring data and evaluated for each air pollutant. Areas that do not violate ambient air quality standards are considered to have attained the standard. The NCCAB is in attainment for all NAAQS and for all California Ambient Air Quality Standards (CAAQS)

except O_3 and PM_{10}. The primary sources of O_3 and PM_{10} in the NCAAB are from automobile engine combustion. To address exceedance of these CAAQS, the MBARD has developed and implemented several plans including the 2005 Particulate Matter Plan, the 2007 Federal Maintenance Plan, and the 2012-2015 Air Quality Management Plan (AQMP), a revision to the 2012 Triennial Plan. NCCAB Attainment Status to National and California Ambient Air Quality can be found in **Table 1** below.

Table 1.
North Central Coast Air Basin Attainment Status Summary as of January 2015

Pollutant	State Standards[1]	National Standards
Ozone (O_3)	**Nonattainment[2]**	Attainment / Unclassified[3]
Inhalable Particulates (PM_{10})	**Nonattainment**	Attainment
Fine Particulates ($PM_{2.5}$)	Attainment	Attainment / Unclassified[4]
Carbon Monoxide (CO)	Attainment	Attainment / Unclassified
Nitrogen Dioxide (NO_2)	Attainment	Attainment / Unclassified[5]
Sulfur Dioxide (SO_2)	Attainment	Attainment[6]
Lead	Attainment	Attainment / Unclassified[7]

Notes:
1) State designations based on 2010 to 2012 air monitoring data.
2) Effective July 26, 2007, the ARB designated the NCCAB a nonattainment area for the state ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.
3) On March 12, 2008, EPA adopted a new 8-hour ozone standard of 0.075 ppm. In April 2012, EPA designated the NCCAB attainment/unclassified based on 2009-2011 data.
4) This includes the 2006 24-hour standard of 35 µg/m3 and the 2012 annual standard of 12 µg/m^3.
5) In 2012, EPA designated the entire state as attainment/unclassified for the 2010 NO2 standard.
6) In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO2 standard. Final designations to be addressed in future EPA actions.
7) On October 15, 2008 EPA substantially strengthened the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5 µg/m3 to 0.15 µg/m^3. Final designations were made by EPA in November 2011.
8) Nonattainment designations are highlighted in Bold.

Plans to attain these standards already accommodate the future growth projections available at the time these plans were prepared. Any development project capable of generating air pollutant emissions exceeding regionally-established criteria is considered significant for purposes of CEQA analysis, whether or not such emissions have been accounted for in regional air planning. Furthermore, any project that would directly cause or substantially contribute to a localized violation of an air quality standard would generate substantial air pollution impacts. The same is true for a project that generates a substantial increase in health risks from toxic air contaminants or introduces future occupants to a site exposed to substantial health risks associated with such contaminants.

Sensitive receptors are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors include residences, schools, and health care facilities. Sensitive receptors in the vicinity of the project consist of single-family residences located approximately 400 ft east of the proposed replacement lift station site. In addition, single-family houses surround the residential streets the pipeline would be built under, which could be as close as 50 ft from installation of the pipeline.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?			X		1, 2, 7, 8

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X		1, 2, 7, 8
c) Expose sensitive receptors to substantial pollutant concentrations?			X		1, 2, 7, 8
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X		1, 2, 7, 8

Explanation

a) **Less-Than-Significant Impact**. CEQA Guidelines §15125(b) requires that a project is evaluated for consistency with applicable regional plans, including the AQMP. As stated above, the MBARD has developed and implemented several plans to address exceedance of state air quality standards, including the MBARD 2012-2015 AQMP. The MBARD is required to update their AQMP once every three years; the most recent update was approved in March 2017. This plan addresses attainment of the state ozone standard and federal air quality standard. The AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments (AMBAG) and other indicators.

The proposed project would not result in a substantial increase in employment, nor would the proposed project result in increased population growth, as it is a replacement of an existing wastewater system. The proposed project would be consistent with the MBARD 2012-2015 AQMP. In addition, as noted in Response b, below, the proposed project would not result in a significant increase in emissions. For these reasons, implementation of the proposed project is not anticipated to result in a substantial increase in either direct or indirect emissions that would conflict with or obstruct implementation of the AQMP; this impact is considered less than significant.

b) **Less-Than-Significant Impact.** Grading and filling during construction could result in impacts to air quality. Site disturbance activities could result in short-term, localized decrease in air quality due to the generation of particulate emissions (PM_{10}). The MBARD 2008 CEQA Air Quality Guidelines contains standards of significance for evaluating potential air quality effects of projects subject to the requirements of CEQA (see Table 5-1, pg. 5-14, of the MBARD 2008 CEQA Guidelines). According to MBARD, a project would violate an air quality standard and/or contribute to an existing or projected violation if it would:

- Emit (from all sources, including exhaust and fugitive dust) less than;
- 137 pounds per day of oxides of nitrogen (NOx)
- 137 pounds per day of reactive organic gases (ROG)
- 82 pounds per day of respirable particulate matter (PM_{10})
- 55 pounds per day of fine particulate matter ($PM_{2.5}$)
- 550 pounds per day carbon monoxide (CO)

Construction. According to the MBARD's criteria for determining construction impacts, a project would result in a potentially significant impact if it would result in 8.1 acres of minimal earthmoving per day or 2.2 acres per day with major grading and excavation. The proposed project would include a maximum of up to a ¼ of an acre to be graded on any given day, and, therefore, the proposed project is below the threshold. In addition, the proposed project would also implement standard construction Best Management Practices (BMPs) related to dust suppression, which would include: 1) watering active construction areas; 2) prohibiting grading activities during periods of high wind (over 15 mph); 3) covering trucks hauling soil; and, 4) covering exposed stockpiles. The implementation of BMPs would further ensure that potential construction-related emissions would be minimized. Since the proposed project is under the threshold for construction air quality impacts, this impact is considered to be less than significant.

Operation. Operation of the proposed replacement lift station and pipeline would not result in a new or substantially more severe significant impact due to air quality emissions during operations. The proposed project is a replacement of the existing lift station and pipeline. The pumps are being relocated from the existing Fort Ord Village Lift Station to the replacement station. Thus, the replacement lift station and pipeline would be consistent with the existing use and would not increase in operational emissions. The proposed project would also involve limited maintenance visits, resulting in vehicle trips; however, these trips would be consistent with the existing use. Based upon the low level of operational emissions and consistency of use, operation of the proposed replacement lift station and pipeline would not result in emissions that would cause a new or substantially more severe impact based on an exceedance or violation of the applicable air quality standards or result in a cumulatively considerable net increase of any criteria pollutants.

Project construction and operation would not result in a significant air quality impact. As stated above, all impacts would be below applicable MBARD thresholds of significance, including thresholds for ozone precursors. As there are no significant impacts, project construction and operation would not result in a cumulatively considerable net increase in any criteria pollutant. Air quality impacts associated with the project would result in a less-than-significant impact.

c) **Less-Than-Significant Impact**. A "sensitive receptor" is generally defined as: any residence including private homes, condominiums, apartments, or living quarters; education resources such as preschools and kindergarten through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. There are several single-family residences within the vicinity of the proposed project. The closest residence is located directly adjacent to the streets in which the pipeline would be placed, as well as approximately 400 ft east of the proposed replacement pump station location. The MBARD's 2008 CEQA Air Quality Guidelines state that a project would have a significant impact to sensitive receptors if it would cause a violation of any CO, PM_{10} or toxic air contaminant standards at an existing or reasonably foreseeable sensitive receptor.

As stated above in Response b, the proposed project would implement standard air quality BMPs and emissions of CO resulting from construction of the proposed project are below applicable MBARD thresholds of significance. The proposed project would not exceed any MBARD thresholds, including CO and PM_{10}. Compliance with applicable MBARD regulations also include,

but are not limited to, Rule 402,[2] which would minimize potential nuisance impacts to occupants of nearby land uses. For these reasons, construction activities would be considered to have a less-than-significant impact to sensitive receptors. Additionally, implementation of the proposed project would not result in the installation of any major stationary or mobile sources of emissions. Operational activities of the project would have a less-than-significant impact to nearby receptors as emission are minimal and consistent with the zoning of the property.

d) **Less-Than-Significant Impact**. There may be intermittent odors from construction associated with diesel exhaust and exposed sewer manholes that could be noticeable at times to residences in close proximity. However, given the limited construction duration, potential intermittent odors are not anticipated to result in odor complaints and would not affect a substantial number of people.

Conclusion: The proposed project would have a less-than-significant impact on air quality.

5.2.4 BIOLOGICAL RESOURCES

Setting

The analysis presented in this section is from information contained in the Biological Resources Report prepared for the proposed project by Denise Duffy & Associates dated August 2019 (**Appendix A**). The Biological Resources Report describes existing biological resources within and surrounding the project, identifies any special-status species and sensitive habitats within and adjacent to the project site, assess potential impacts that may occur to biological resources, and recommends appropriate avoidance, minimization, and mitigation measures necessary to reduce those impacts to a less-than-significant level.

DD&A conducted surveys of the project site in May and June 2019. Details, methods and data sources used for the botanical survey and reconnaissance-level wildlife habitat surveys can be found in **Appendix A**. Data collected during the surveys were used to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts.

Two vegetation types were observed within the project site: dune scrub and ruderal/landscaped (**Figure 6**). In addition, a portion of the project site is developed. Dune scrub habitat is listed as sensitive on the California Department of Fish and Wildlife's (CDFW's) *California Natural Communities List* and may also be considered an Environmentally Sensitive Habitat Area (ESHA) under the California Coastal Act (CCA). A portion of the project site is also within designated critical habitat for Monterey spineflower; these areas may also be considered ESHA.

[2] MBARD Rule 402 "Nuisance" states, "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

Several special-status species are known or have the potential to occur within the project site based on observations, presence of appropriate habitat, and known occurrences within the vicinity (**Figure 7**). All other species evaluated have a low potential to occur, are assumed unlikely to occur, or were determined not present within the project site for the species-specific reasons presented in **Appendix A**.

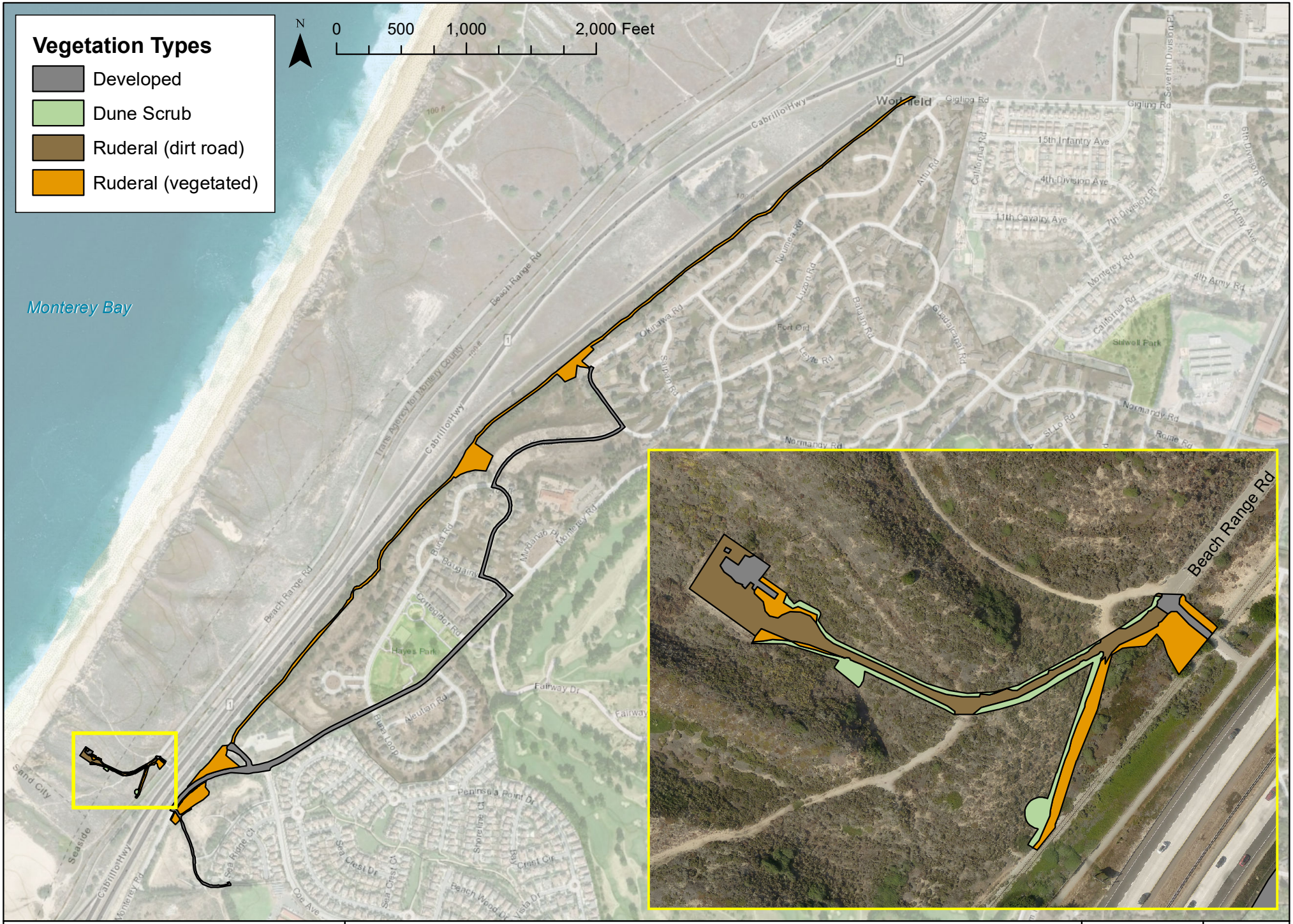
The following special-status wildlife species are known or have the potential to occur on the project site:

- Hoary bat (*Lasiurus cinereus*) – CNDDB,[3]
- Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) – CSC,
- Northern California legless lizard (*Anniella pulchra*) – CSC/HMP,
- Coast horned lizard (*Phrynosoma blainvillii*) – CSC,
- Globose dune beetle (*Coelus globosus*) – CNDDB,
- Smith's blue butterfly (SBB; *Euphilotes enoptes smithi*) – FE/HMP (**Figure 8**), and
- Nesting raptors and other protected avian species, including:
  - Cooper's hawk (*Accipiter cooperii*) – CNDDB,
  - Oak titmouse (*Baeolophus inornatus*) – BCC,
  - Wrentit (*Chamaea fasciata*) – BCC,
  - Spotted towhee (*Pipilo maculatus*) – BCC, and
  - Allen's hummingbird (*Selasphorus sasin*) – BCC.

One special-status plant species is known to occur within the project site:

- Monterey spineflower (*Chorizanthe pungens* var. *pungens*) – FT/1B/HM (**Figure 9**)

[3] Status Definitions – FT: Federally threatened; CSC: California Species of Concern; CFP: California Fully Protected Species; BCC: USFWS Bird of Conservation Concern; HMP: Fort Ord Habitat Management Plan Species; CRPR 1B: California Rare Plant Rank (CRPR) 1B; CNDDB: animal species on the CNDDB "Special Animals" list that are not assigned any of the other status designations but the CDFW considers to be those of greatest conservation need, regardless of their legal or protection status.

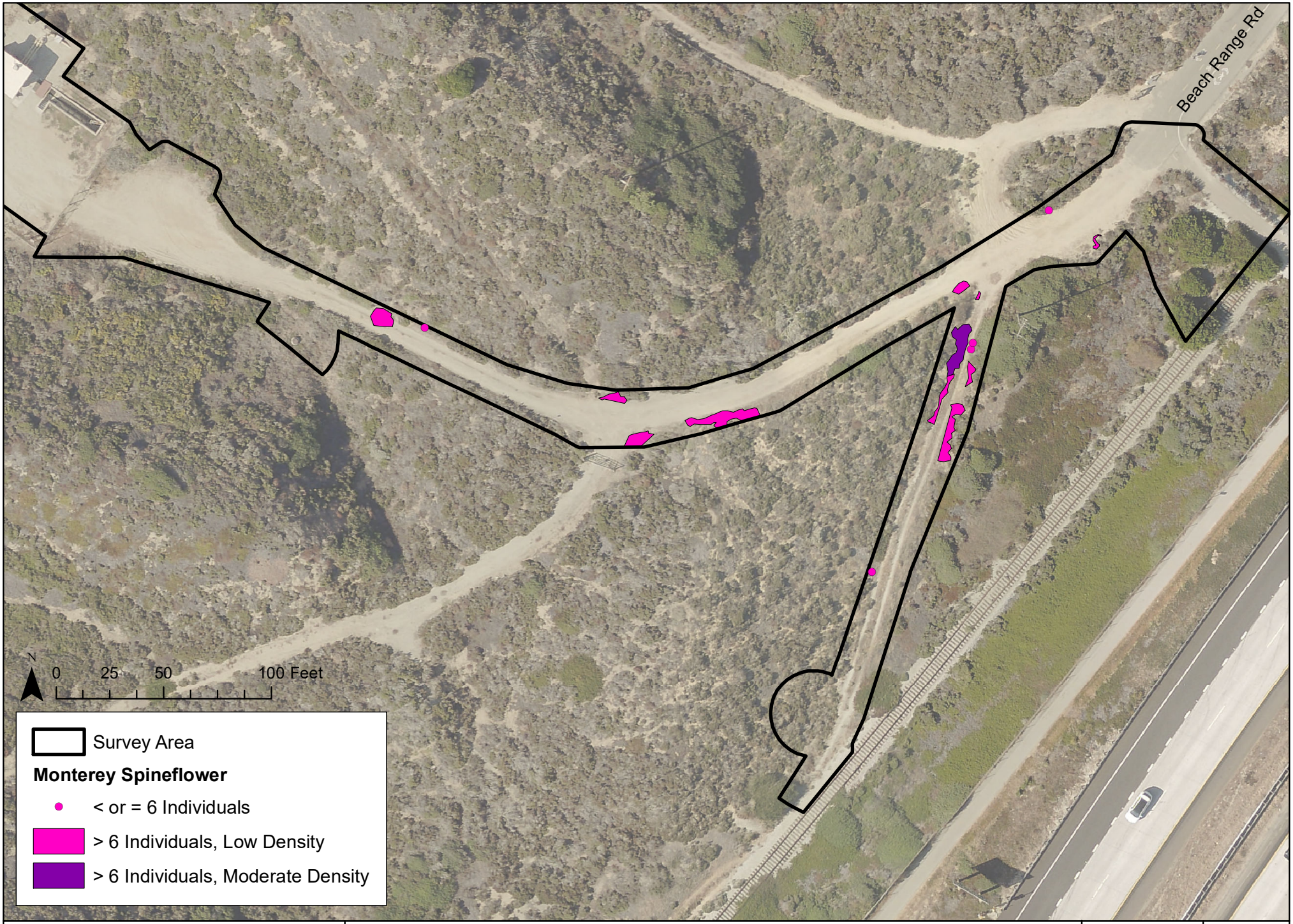


Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Vegetation Types Map

Date: 7/18/2019
Scale: 1 in = 944 ft
Figure: 6

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Vegetation Types Map.mxd



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

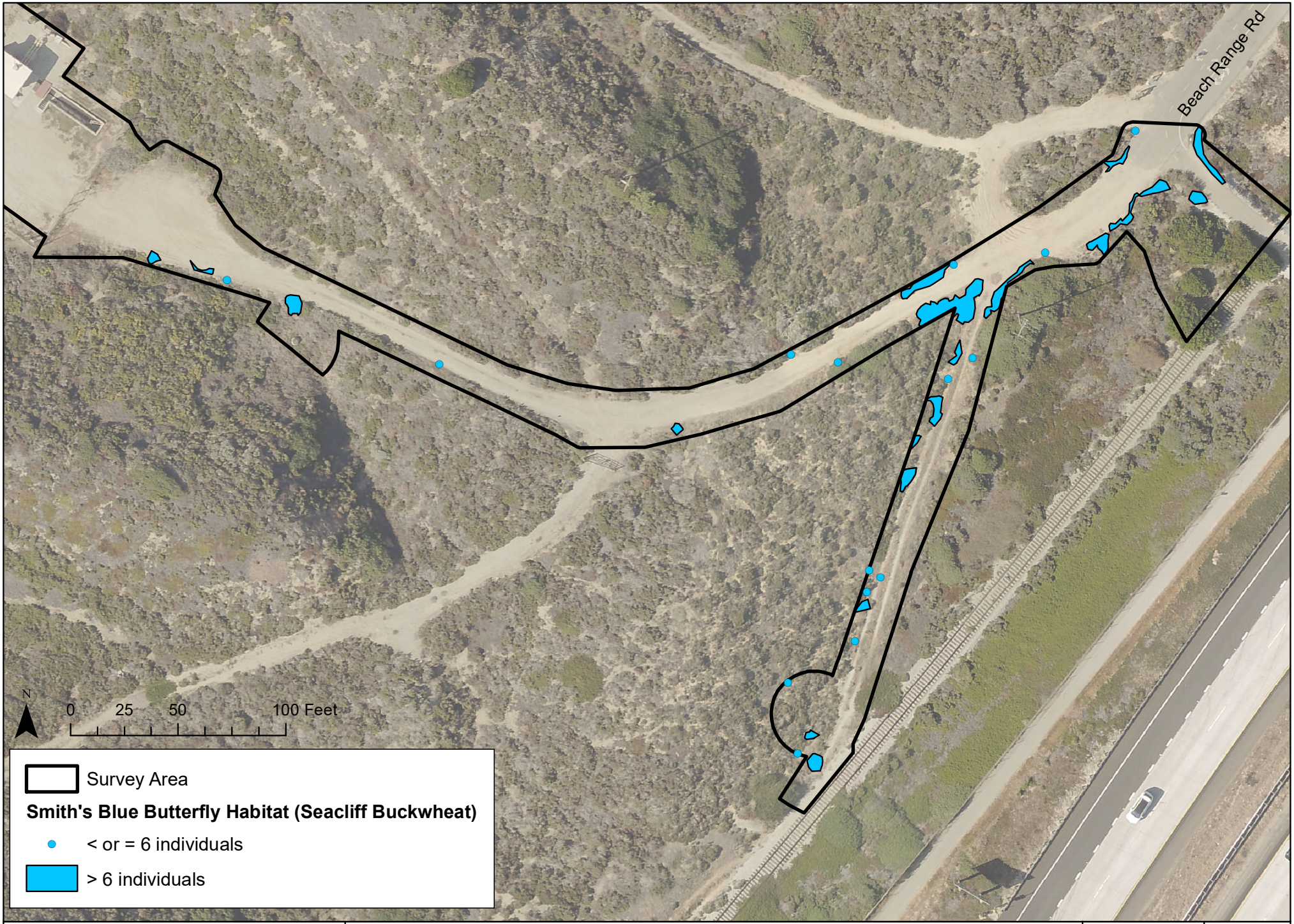
Special-Status Plant Species Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
7

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Special Status Plant Species Map.mxd



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

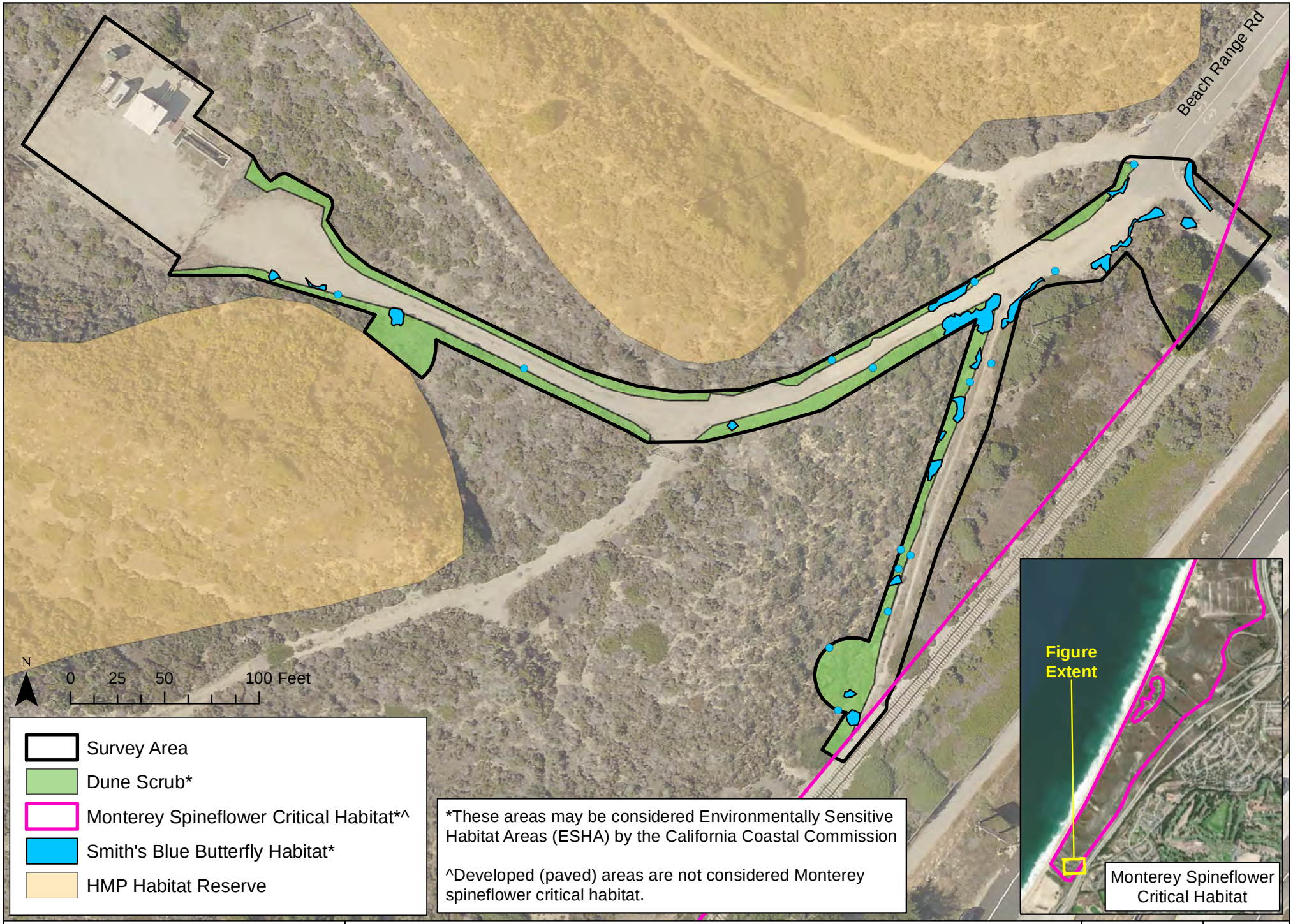
Smith's Blue Butterfly Habitat Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
8

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\SBB Habitat Map Map.mxd



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Sensitive Habitats Map

Date: 9/4/2019
Scale: 1 in = 65 ft
Figure: 9

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Sensitive Habitats Map.mxd

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
BIOLOGICAL RESOURCES. Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X			1, 2, 9
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X			1, 2, 9
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X	1, 2, 9
d) 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?			X		1, 2, 9
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X	1, 2, 9
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		X			1, 2, 9

Approach to Analysis

The project site is located within parcels designated under the HMP as "development" and "development with reserve areas or development with restrictions." Through implementation of the HMP, impacts to HMP species and habitats occurring within the designated development parcels were anticipated and mitigated through the establishment of habitat reserves and corridors and the implementation of habitat management requirements within habitat reserve parcels on former Fort Ord. Parcels designated as "development" have no management restrictions. However, the 2017 Programmatic Biological Opinion (BO) and HMP require the identification of sensitive botanical resources within these parcels that may be salvaged for use in restoration activities in reserve areas (USFWS, 2017b and ACOE, 1997). Additional management restrictions are identified for parcels designated as "development with reserve areas or development with restrictions" within the HMP. [4]

The HMP species that are known or have a moderate to high potential to occur within the proposed project site include Monterey spineflower, Northern California legless lizard, and SBB. With the designated habitat reserves and corridors and habitat management requirements of the HMP in place, the loss of these species is not expected to jeopardize the long-term viability of these species and their populations on the former

[4] Please refer to **Appendix A** for additional information regarding the approach to analysis as it relates to the HMP.

Fort Ord (USFWS, 1993). This is such because the recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and deed covenants. In addition to the HMP species identified, impacts to sensitive dune scrub habitat are also addressed in the HMP and, therefore, impacts to this habitat are also considered mitigated through the implementation of the HMP based on the same conclusions. The proposed project is:

1. Located within designated "development" or "development with reserve areas or restrictions" parcels;

2. Required to comply with the habitat management restrictions identified in the HMP; and

3. Would not result in any additional impacts to HMP species and habitats beyond those anticipated in the HMP.

Therefore, no additional mitigation measures for these HMP species or dune scrub habitat are required. However, the HMP does not exempt existing or future land recipients from the federal and state requirements of ESA and CESA. Of the three HMP species known or with a potential to occur within the project site, one federally listed wildlife species, SBB, has a moderate potential to be impacted by the project and may require take authorization from the USFWS. Additionally, Monterey spineflower, a federally listed plant species, is present within the project site west of Highway 1. As described in Section 3.5 "Regulatory Setting," if there is the potential for incidental take of a federally listed fish or wildlife species, take of the listed species can be authorized through either the Section 7 consultation process for federal actions, or a Section 10 incidental take permit process for non-federal actions. This analysis assumes that the project will be required to comply with Section 10 of the ESA. The ESA does not prohibit incidental take of federally listed plant species.

It is also important to note that SBB is a covered species in the Draft Fort Ord HCP, which is currently in progress. If the HCP is approved and the ESA incidental take permit is issued, the incidental take of this species resulting in covered activities (including, but not limited to, development in designated development areas) would be authorized base-wide, and project-specific permits would not be required. It is anticipated that these base-wide federal and state permits will be issued in early 2020. In the event that base-wide permits are not issued, impacts resulting in incidental take of SBB would need to be authorized by the USFWS through Section 10 consultation with the USFWS to avoid violation of the ESA.

Where suitable habitat exists within the project site, the proposed project has the potential to impact special-status species that were not addressed in the HMP. The non-HMP species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, coast horned lizard, globose dune beetle, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird).

Explanation

a) **Less-Than-Significant Impact with Mitigation.**

HMP Special-Status Species

Implementation of the project could result in impacts to the following HMP species: SBB, Northern California legless lizard, and Monterey spineflower. As described above, impacts within development parcels to special-status plant and wildlife species addressed in the HMP are considered less than significant. However, Monterey spineflower and habitat for SBB occur in the DHZ on parcels designated as "development with reserve areas or restrictions." As described in the HMP, the DHZ is intended for the preservation of restored coastal dunes habitats and for visitor service facilities but also includes access for minor improvements to existing utilities and infrastructure.

While not required to reduce a significant impact, **Mitigation Measure BIO-1** would be implemented to further reduce impacts to SBB. This measure would require that SBB habitat be avoided and if avoidance is not feasible, that compliance with the ESA and/or CESA occurs in advance of construction. In the absence of an approved based-wide incidental take permit, impacts to species listed as threatened or endangered by the USFWS may also require agency consultation and/or incidental take permits. Therefore, although SBB is an HMP species, **Mitigation Measure BIO-1** acknowledges that the take of this species is prohibited under the ESA and may require Section 10 consultation or other authorization. Impacts resulting in take of SBB would need to be authorized by the USFWS through the issuance of an incidental take permit from the USFWS to avoid violation of ESA.

Mitigation Measures BIO-2, BIO-3, and **BIO-4** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat; however, HMP special-status species and habitats would also benefit from the implementation of these measures. These measures would reduce construction-related impacts through a combination of protective measures during construction, education, monitoring, and invasive species controls. Please see the **Non-HMP Special-Status Species** discussion below for details regarding these measures.

The HMP and the 2017 Programmatic BO require salvage of HMP species if feasible to support reseeding and restoration efforts on- or off-site in habitat reserve areas. Monterey spineflower occurs along the margin of the access routes to the manholes and existing lift station areas of the project site. Monterey spineflower individuals may be temporarily impacted by construction traffic; however, no ground disturbance would occur. As such, seed and topsoil salvage in these areas is unnecessary as the seedbank would remain intact. However, while not required to reduce a significant impact, **Mitigation Measure BIO-5** would be implemented to further reduce impacts to Monterey spineflower by avoiding areas known to support this species to the greatest extent feasible.

Therefore, potential impacts to HMP special-status species and habitat resulting from implementation of the project are less than significant. Implementation of **Mitigation Measures BIO-1** through **BIO-5** would further reduce impacts to these species.

Non-HMP Special-Status Wildlife Species

Suitable habitat for several non-HMP special-status wildlife species is present within the project site. The non-HMP wildlife species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, globose dune beetle, coast horned lizard, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird). **Mitigation Measures BIO-2, BIO-4,** and **BIO-6** through **BIO-8** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat. These measures would reduce construction-related impacts through a combination of protective measures during all phases of construction by providing construction crew education, construction-phase monitoring, and invasive species controls.

The project site contains suitable habitat for the coast horned lizard and globose dune beetle (i.e., within dune scrub). Project implementation could result in direct impacts to individuals and loss of habitat. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4**, which avoid and minimize impacts through implementing construction best management practices, construction-phase monitoring, and invasive species controls, would reduce potentially significant impacts to the coast horned lizard and globose dune beetle to a less-than-significant level.

The project site contains trees that may provide roosting habitat for hoary bat. Trimming of trees, construction noise, dust, and vibration adjacent to large trees could cause direct and indirect impacts to hoary bats, including roost abandonment and death of young. It is unlikely that hoary bats birth and rear young in California. As a result, this species would not be breeding within the vicinity of the project site. However, impacts to individuals and roosting habitat would be a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-6** would reduce potentially significant impacts to hoary bats to a less-than-significant level through a combination of: implementing protective measures during construction; construction crew education; pre-construction monitoring; avoidance, preservation, and protection of hoary bat, as identified during pre-construction surveys for potential roost sites, if feasible; and replacement of roost sites if avoidance is not feasible.

The project site contains suitable habitat for the Monterey dusky-footed woodrat (i.e., dune scrub and portions of the ruderal areas) and project implementation could result in direct impacts to individuals and loss of habitat. Construction noise, dust, and vibration adjacent to large trees could cause indirect impacts to Monterey dusky-footed woodrat such as nest abandonment and death of young. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-7** would reduce potentially significant impacts to Monterey dusky-footed woodrat to a less-than-significant level through a combination of: implementing protective measures during construction; education; pre-construction monitoring; and avoidance, preservation, and protection of active nests, as identified during pre-construction woodrat nest surveys.

Large trees within the project site provide suitable nesting habitat for tree-nesting raptors, including the special-status Cooper's hawk, and other nesting birds. In addition, other protected avian species may nest or forage within the site, including oak titmouse (trees within ruderal areas), wrentit (dune

scrub), and spotted towhee and Allen's hummingbird (all undeveloped areas of the site). Construction-related activities (e.g., trimming and removal of vegetation, and equipment noise, vibration) that result in harm, injury, or death of individuals, or abandonment of an active nest would be a significant impact. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual birds constitute a violation of California law and would be a significant impact under CEQA. This is a potentially significant impact that would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-8**, which includes surveys to identify the presence of active nests prior to construction and measures to avoid active nests if found.

Therefore, potentially significant impacts to non-HMP special-status wildlife species would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-4** and **BIO-6** through **BIO-8**.

Special-Status Species Habitat

Implementation of the project would result in impacts to approximately 6.7 acres of potential habitat for special-status species. As discussed in the "Regulatory Setting" section, the Fort Ord HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat conservation areas and wildlife corridors to compensate for future development in other areas of the former base. The HMP identifies what type of activities can occur on each parcel at former Fort Ord and parcels are designated as "development with no restrictions," "development with reserve area or restrictions," or "habitat reserve." The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation should be necessary for impacts to species and habitats considered in the HMP. This plan has been approved by USFWS; the HMP, deed restrictions, and Memoranda of Agreement between the U.S. Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document, and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP would be obligated to implement those specific measures through the HMP and through deed covenants. Approximately 18,500 acres of the former Fort Ord would be preserved in permanent open space through implementation of the HMP.

The project is proposed within designated development and development with reserve areas or restrictions parcels. Therefore, implementation of the project would not have a significant impact on special-status species habitat, particularly when taken into context with the over 18,500 acres of preserved habitat for special-status species within the former Fort Ord. This is a less-than-significant impact. No mitigation is required.

Mitigation Measure

MM BIO-1*:* Smith's Blue Butterfly

SBB habitat (i.e. seacliff buckwheat) shall be avoided to the greatest extent feasible. SBB habitat that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

If all SBB habitat is avoided, no additional mitigation is necessary. If the project will impact SBB habitat, compliance with the ESA shall occur in advance of construction:

With Approved Base-Wide HCP and Permits:

As described above, impacts to SBB and its habitat would be authorized under the base-wide incidental take permit issued by USFWS. The MCWD shall comply with the avoidance and minimization measures and mitigation measures in the approved HCP. No additional mitigation is required.

Without Approved Base-Wide HCP and Permits:

The MCWD will comply with the ESA and obtain necessary authorizations prior to construction due to the assumed presence of the federally listed SBB. The MCWD shall be required to initiate consultation with the USFWS to receive take authorization. Take authorization would be granted through the issuance of an individual, project-specific incidental take permit, which requires preparation and implementation of an HCP. Mitigation for take likely would require restoration at a 3:1 ratio of impacted habitat. Buckwheat plants and/or seed salvage may also be required prior to ground disturbing activities.

MM BIO-2: Construction Best Management Practices

The following best management practices will be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:

- A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the project site.
- Trees and vegetation not planned for removal or trimming will be protected prior to and during construction to the maximum possible through the use of exclusionary fencing,

such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

- Following construction, disturbed areas will be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist. Any revegetation on State Park property shall be conducted in coordination with State Parks.
- Grading, excavating, and other activities that involve substantial soil disturbance will be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).
- No firearms will be allowed on the project site at any time.
- All food-related and other trash will be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel will not feed or otherwise attract wildlife to the area.

MM BIO-3: Construction-Phase Monitoring

The MCWD will retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species will be determined in coordination with CDFW prior to any ground disturbing activities, and will be conducted by a qualified biologist with appropriate scientific collection permit. After ground disturbing project activities are complete, the qualified biologist will train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor will be the contact for any special-status wildlife species encounters, will conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and will ensure that all installed fencing stays in place throughout the construction period. The qualified biologist will then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. Both the qualified biologist and the construction biological monitor have the ability cease construction contractor work and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project. The log will also include any special-status wildlife species observed and relocated.

MM BIO-4: Non-Native, Invasive Species Controls

The following measures will be implemented to reduce the introduction and spread of non-native, invasive species:

- Any landscaping or replanting required for the project will not use species listed as noxious by the California Department of Food and Agriculture (CDFA) or invasive by the California Invasive Plant Council (Cal-IPC).
- Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the project site. Species to be seeded or planted within State Parks property shall be approved by State Parks prior to planting.
- Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.
- All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

MM BIO-5: Special-Status Plant Species Avoidance

Monterey spineflower shall be avoided to the greatest extent feasible. Areas of Monterey spineflower that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

MM BIO-6: Pre-Construction Surveys for Hoary Bat

To avoid and reduce impacts to hoary bat, the MCWD will retain a qualified bat specialist or wildlife biologist to conduct site surveys to characterize bat utilization of the site and potential species present (techniques utilized to be determined by the biologist) prior to any tree removal or trimming. Based on the results of these initial surveys, one or more of the following will occur:

- If it is determined that hoary bats are not present at the site, no additional mitigation is required.
- If it is determined that hoary bats are utilizing the site and may be impacted by the proposed project, pre-construction surveys will be conducted within 100 feet of construction limits no more than 30 days prior to any tree removal. If, according to the bat specialist, no hoary bats or bat signs are observed in the course of the pre-construction surveys, tree removal may proceed. If hoary bats and/or hoary bat signs are observed during the pre-construction surveys, removal or trimming of trees may proceed after the bats have been safely excluded from the roost. Exclusion techniques will be determined by the biologist and depend on the roost type; the biologist will prepare a mitigation plan for provision of alternative habitat to be approved by CDFW.

MM BIO-7: Pre-Construction Surveys for Monterey Dusky-Footed Woodrat

Not more than thirty (30) days prior to the start of construction (including vegetation removal), a qualified biologist shall conduct a survey of the project site to locate existing Monterey dusky-footed woodrat nests. All Monterey dusky-footed woodrat nests shall be mapped and flagged for avoidance. Graphics depicting all Monterey dusky-footed woodrat nests shall be provided to the

construction contractor. Any Monterey dusky-footed woodrat nests that cannot be avoided shall be relocated according to the following procedures:

Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere. After the nests have been disturbed, the nest sticks shall be removed from the impact areas and placed outside of areas planned for impacts. Nests shall be dismantled during the non-breeding season (between October 1 and December 31), if possible. If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for two to three weeks, after this time the nest will be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling.

MM BIO-8: Pre-Construction Surveys for Protected Avian Species

Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species will be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist will be retained by the MCWD to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys will be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing of these continued surveys will be determined by the qualified biologist based on review of the final construction plans and in coordination with the CDFW, as needed.

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist will notify the MCWD and an appropriate no-disturbance buffer will be imposed within which no construction activities or disturbance should take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

b) **Less-Than-Significant Impact with Mitigation.** Habitats occurring within the project site that are listed as sensitive on the CDFW's *California Natural Communities List* include dune scrub. Approximately 0.2-acre of dune scrub occurs within the project site and may be impacted by the project. Dune scrub adjacent to, but outside of the project site may be impacted if work occur outside of the project boundaries.

As stated in the "Approach to Analysis," the implementation of the HMP mitigates for the loss of dune scrub by preserving this habitat within the habitat reserve areas on the former Fort Ord. The HMP requires an analysis to determine if seed and topsoil salvage is feasible to support reseeding and restoration efforts on- or off-site in habitat reserve areas. Dune scrub vegetation occurs around two of the manholes that would be abandoned and along the margins of the access routes to the existing lift station and manhole locations. The vegetation may be removed around the manholes

during construction; however, this would be a temporary impact and no ground disturbance would occur. As such, seed and topsoil salvage in these areas is unnecessary.

However, dune scrub vegetation may be considered ESHA by the CCC. As such, impacts to dune scrub could be considered a potentially significant impact. Therefore, **Mitigation Measure BIO-9** would be implemented to reduce impacts to dune scrub vegetation. This measure would require that dune scrub be avoided to the greatest extent feasible and that any dune scrub vegetation removed be replanted at a 2:1 ratio.

Approximately 0.7-acre of Monterey spineflower critical habitat is present within the project site west of Highway 1. Monterey spineflower critical habitat may also be considered ESHA by the CCC. The majority of the Monterey spineflower critical habitat area that occurs within the project site is currently degraded as a result of ongoing use and maintenance within the existing lift station fence and the access road. However, areas of dune scrub within the project site represent more intact Monterey spineflower critical habitat. Temporary impacts may include vegetation removal for access to manholes, construction traffic, and ground disturbance during demolition of the existing lift station. However, no new structures would be constructed within Monterey spineflower critical habitat and no permanent loss of Monterey spineflower critical habitat would occur. Conversely, demolition of the existing lift station is likely to increase the available area of critical habitat for Monterey spineflower. This would be considered a beneficial impact and no mitigation is necessary.

Mitigation Measure

MM BIO-9: Dune Scrub

Dune scrub vegetation shall be avoided to the greatest extent feasible. Dune scrub vegetation not planned for removal shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

Dune scrub that cannot be avoided shall be quantified prior to construction and replanted at a 2:1 ratio for the area removed. A restoration plan shall be prepared by a qualified biologist and shall be implemented by the MCWD or a contracted entity. The restoration plan shall be prepared in coordination and compliance with State Parks restoration guidelines and shall include:

a) A planting palette of only locally-occurring native species collected from the Project vicinity or acquired from approved local suppliers.

b) Procedures to control non-native species invasion.

c) Provisions to ensure compliance with the requirements of the plan.

d) A detailed description of seeding and planting specifications.

e) A description of a monitoring program, including specific methods of vegetation monitoring, data collection and analysis, goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

c) **No Impact.** There are no state or federally protected wetlands present on site or adjacent to the site. There is not impact.

d) **Less-Than-Significant Impact.** Wildlife movement corridors are pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or man-made factors, such as urbanization. The fragmentation of natural habitat creates isolated "islands" of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, and, therefore, adversely affect both genetic and species diversity. Corridors often partially or largely mitigate the adverse effects of fragmentation by 1) allowing animals to move between remaining habitats to replenish depleted populations and increase the gene pool available; 2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (e.g., fire and disease) would result in population or species extinction; and 3) serving as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The 2010 Monterey County General Plan EIR identified a number of significant wildlife movement corridors and linkages within the vicinity of the former Fort Ord, including Linkage 308: Fort Ord – Ventana; Linkage 322: Highway 68 Western Crossing; Linkage 350: Sierra de Salinas – Toro Peak; Linkage 339: Salinas Valley Floor; and Linkage 378: Salinas River – Pinnacles National Monument (County of Monterey, 2010). Of particular importance for wildlife movement from the former Fort Ord lands to outlying areas are Linkages 308 and 322. Specifically, Linkage 322 runs along El Toro Creek in the southeastern portion of former Fort Ord and through a large, bridge undercrossing Highway 68. This corridor has been identified as a significant wildlife corridor for mammals, amphibians, and reptiles moving between former Fort Ord lands and connecting to the Sierra de Salinas and Santa Lucia Ranges.

The HMP considered conservation area connectivity as an essential component of the design of the conservation areas and corridors within the former Fort Ord. The HMP created conservation areas and corridors with the purpose of linking the plant and animal populations in the northern portion of the former base at the Marina Municipal Airport to the populations in the south to the Fort Ord National Monument and the El Toro Creek undercrossing of Highway 68. The implementation of the HMP preserves over 18,500 acres of a variety of habitats supporting a variety of common and special-status plant species, and maintains a north-south wildlife corridor across the former Fort Ord lands to connect with the primary, significant wildlife linkages.

The project site is located in the western portion of the former Fort Ord. East of Highway 1, the project is adjacent to existing developed areas. West of Highway 1, the project site is surrounded by open space associated with the FODSP and, further west, the Monterey Bay. As discussed in the "Results" section, the project site is partially in undeveloped land that is comprised of two vegetation units (dune and ruderal/disturbed/landscaped); however, portions of the site are also developed area (paved roads and structures). The implementation of the proposed project would involve impacts to these habitat types; however, the project site also supports wildlife movement, as there are various vegetative communities, vegetative cover, and the adjacency of open space areas with high quality wildlife habitat.

Chain-link fencing is currently in place surrounding the existing lift station and along the Highway 1 boundary. Following construction, the fencing surrounding the existing lift station would be removed, which would improve wildlife movement and use of the area. Fencing would be installed around the electrical equipment associated with the new pump station; however, the fencing is not considered a significant structure that would impede wildlife movement as the enclosed area is not very large and the habitat value in the area is low. In addition, the site is surrounded by some undeveloped lands, which can be utilized by wildlife. Therefore, habitat within the project site supports species movement on-site and would not substantially interfere with wildlife movement across the site. The proposed project would impact only a small percentage of wildlife habitat within the former Fort Ord. The HMP preserves approximately 18,500 acres of large, contiguous areas of wildlife habitat that will remain on the former Fort Ord and will be preserved in perpetuity. As a result, the development of the project, would not disconnect, fragment, or otherwise impeded wildlife movement in the primary, significant wildlife movement corridors between the former Fort Ord lands and other lands. This is a less-than-significant impact. No mitigation is required.

e) **No Impact**. The Project would be required to comply with all applicable guidelines in the FODSP General Plan and Seaside General Plan, as well as mitigation measures contained in the FODSP General Plan EIR and Seaside General Plan EIR to the extent they are applicable. Applicable guidelines in the FODSP General Plan include: BIO-1, BIO-2, BIO-4, BIO-5, BIO-8, BIO-10, and BIO-17. These policies generally promote identifying, protecting, and ensuring perpetuation of park plant and wildlife species populations. Applicable mitigation measures in the FODSP General Plan EIR include: Mitigation Measure BIO-1 and Mitigation Measure BIO-2. These measures address potential impacts to native habitats and species, including special-status species. Implementation Plan COS-4.1.1 of the Seaside General Plan is applicable to the project, which requires the use of proper land use planning and environmental review to minimize the impacts of urban development of sensitive ecological and biological resources. There are no biological measures in the Seaside General Plan EIR applicable to the project. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources. No impact would occur and no mitigation is required.

f) **Less-Than-Significant Impact with Mitigation.** The project site is not located within an approved HCP or Natural Community Conservation Planning (NCCP) area. However, it is located within the Fort Ord HMP boundaries and the plan area associated with the Draft HCP. The project site is designated for development (with no restrictions) in the HMP for Fort Ord and is located within a designated development area in the Draft HCP. As described in the "Approach to Analysis," the proposed project is consistent with the approved HMP. This is a less-than-significant impact. No mitigation is required.

A portion of the project site is located adjacent to a parcel designated as "habitat reserve" in the HMP. Impacts to the habitat reserve parcel would be considered a significant impact if work were to be conducted outside of the project boundaries. Therefore, **Mitigation Measure BIO-10** would be implemented to avoid impacts to habitat reserve areas and reduce the impact to less than significant.

Mitigation Measure

MM BIO-10: Habitat Reserve

No work shall occur within areas designated as habitat reserve by the Fort Ord HMP. Habitat reserve areas shall be protected prior to and during construction through the use of exclusionary fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

Conclusion: The project would have a less-than-significant impact with mitigation incorporated on biological resources.

5.2.5 CULTURAL RESOURCES

Setting

An Archaeological Literature Review was prepared by BASIN Research Associates in June 2019 to determine if significant cultural resources could be affected as defined by CEQA. The review effort included a records search, a literature review and consulting archival materials on file at BASIN for the former Fort Ord.[5]

The project's Area of Potential Effects (APE) for archaeological resources is commensurate with the footprint of the proposed project which includes demolition of the Fort Ord Village Lift Station west of Highway 1, the construction of the new pump lift station, installation of new pipe to Okinawa Road, and the termination of the new pipe with the SSFM at the Okinawa Road termination. The vertical APE for the proposed project extends from the ground surface to 20 feet for the pump lift station and from the surface to 10 feet for the pipeline(s). Research suggests a low potential for the presence of subsurface prehistoric and/or historic deposits either within or adjacent to the APE except for the Fort Ord Village Lift Station which is located within a dune area identified as a "high probability area" for archaeological resources.[6] However, the disturbance caused by the installation of the lift station and surrounding area appears to resulted in considerable surface and subsurface impacts.

A prehistoric and historic site record and literature search was completed by the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park (CHRIS/NWIC File No. 18-2203 dated 6/5/2019 by Hagel). The CHRIS/NWIC records review noted four cultural resources studies within or adjacent to the proposed project alignment. The four studies were negative for cultural resources. No recorded prehistoric and/or historic era archaeological sites are within or adjacent to the APE. One reported prehistoric archaeological site, CA-MNT-280/P-27-00385, without

[5] A field inventory was not completed due to the extensive disturbance of both the horizontal and vertical APE by the installation of hardscape, the lift station west of Highway 1, percolation ponds and sewer and natural gas pipelines. The existing setting does not appear to have native sediment available for inspection due to prior disturbance and the presence of paved trails, roads and residential streets.

[6] Previous research completed for the Ford Ord Reuse Plan in the 1990s later resulted in the identification of prehistoric archaeological sensitivity zones based on the presence/absence of sites and selected topographic features. High probability areas include all terraces and benches adjacent to the Salinas River and El Toro Creek, the peripheries of the wet cycle lakes, areas adjacent to Bureau of Land Management land (southeast section of the former Fort Ord property) and the coastal beaches. All other lands within the former military reservation were assigned either a low or medium potential for archaeological resources.

a definite location has been mapped as including the beach and dunes, Fort Ord Village and other surrounding areas including the APE. The resource was recorded in 1950 based on information reported to the University of California Archaeological Survey with its location provided as "on the Fort Ord Military Reservation." The site form notes that the resource was destroyed by bulldozing in ca. 1940. No Native American villages, traditional use areas or contemporary use areas or other features of significance have been previously identified in or adjacent to the proposed project APE. No Hispanic era features have been identified in or adjacent to the proposed APE. No American Period archaeological sites have been recorded, reported, or identified in or adjacent to the proposed project APE.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA 15064.5?				X	1, 2, 10
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA 15064.5?		X			1, 2, 10
c) Disturb any human remains, including those interred outside of formal cemeteries?		X			1, 2, 10

Explanation

a) **No Impact.** No listed or known potential National Register of Historic Places and/or California Register of Historical Resources are located in or adjacent to the proposed APE. No other significant or potentially significant local, state or federal cultural resources/historic properties, landmarks, points of interest, etc. have been identified in or adjacent to the project APE. Therefore, no impacts would result to historical resources as defined in CEQA 15064.5.

b, c) **Less-Than-Significant Impact with Mitigation.** The Archaeological Literature Review found no archaeologically, historically, or architecturally significant sites, structures, landmarks, or points of interest in or immediately adjacent to the project APE. No known archaeological resources or human remains have been documented in the APE. However, no subsurface testing for buried archaeological resources was completed, and, therefore, there is the possibility of inadvertently uncovering human remains during construction. The potential inadvertent discovery of archaeological resources and/or human remains and potential inadvertent damage or disturbance during construction is considered a potentially significant impact. This impact can be mitigated to a less-than-significant level with the implementation of **Mitigation Measure CR-1**.

Mitigation Measure

MM CR-1: Cultural Resources Protection Measures

Protection measures will be required, consistent with the recommendations listed in the Archaeological Literature Review conducted by BASIN Research Associates June 2019:

(a) The project proponent shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources including prehistoric Native American burials.

(b) The project proponent shall retain a Professional Archaeologist on an "on-call" basis during ground disturbing construction to review, identify and evaluate prehistoric or historic cultural resources that may be inadvertently exposed during construction.[7] The archaeologist shall review and evaluate any discoveries to determine if they are historical resource(s) and/or unique archaeological resources under CEQA.

(c) If the Professional Archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource under CEQA, he/she shall notify the project proponent and other appropriate parties of the evaluation and recommend mitigation measures to mitigate to a less-than significant impact in accordance with California Public Resources Code Section 15064.5. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery among other options. The completion of a formal *Archaeological Monitoring Plan* (AMP) and/or *Archaeological Treatment Plan* (ATP) that may include data recovery may be recommended by the Professional Archaeologist if significant archaeological deposits are exposed during ground disturbing construction. Development and implementation of the AMP and ATP and treatment of significant cultural resources will be determined by the project proponent in consultation with any regulatory agencies.

(d) The treatment of human remains and any associated or unassociated funerary objects discovered during any soil-disturbing activity within the APE shall comply with applicable state laws in regard to Native American burials (Chapter 1492, Section 7050.5 to the Health and Safety Code, Sections 5097.94, 5097.98 and 5097.99 of the Public Resources Code).

---

[7]. Significant prehistoric cultural resources are defined as human burials, features or other clusterings of finds made, modified or used by Native American peoples in the past. The prehistoric and protohistoric indicators of prior cultural occupation by Native Americans include artifacts and human bone, as well as soil discoloration, shell, animal bone, sandstone cobbles, ashy areas, and baked or vitrified clays. Prehistoric materials may include:

a. Human bone - either isolated or intact burials.
b. Habitation (occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
e Isolated artifacts.

Historic cultural materials may include finds from the late 19th through early 20th centuries. Objects and features associated with the Historic Period can include.

a. Structural remains or portions of foundations (bricks, cobbles/boulders, stacked field stone, postholes, etc.).
b. Trash pits, privies, wells and associated artifacts.
c. Isolated artifacts or isolated clusters of manufactured artifacts (e.g., glass bottles, metal cans, manufactured wood items, etc.).
d. Human remains.

In addition, cultural materials including both artifacts and structures that can be attributed to Hispanic, Asian and other ethnic or racial groups are potentially significant. Such features or clusters of artifacts and samples include remains of structures, trash pits, and privies.

This shall include immediate notification of the appropriate county Coroner/Medical Examiner and the project proponent.

(e) A *Monitoring Closure Report* shall be filed with the project proponent at the conclusion of ground disturbing construction if archaeological and Native American monitoring of excavation was undertaken.

Conclusion: The project would have a less-than-significant impact on cultural resources after incorporation of the mitigation measure identified above.

5.2.6 ENERGY

Setting

Starting in 2018, all PG&E customers within Monterey, San Benito, and Santa Cruz Counties were automatically enrolled in Monterey Bay Community Power (MBCP). MBCP is a locally-controlled public agency providing carbon-free electricity to residents and businesses. Formed in February 2017, MBCP is a joint powers authority, and is based on a local energy model called community choice energy. MBCP partners with PG&E, which continues to provide billing, power transmission and distribution, customer service, grid maintenance services and natural gas services to Monterey County. MBCP's standard electricity offering, is carbon free and is classified as 30 percent renewable. Of the electricity provided by MBCP in 2018, 40 percent was hydroelectric, and 30 percent was solar and wind (eligible renewables) (MBCP, 2019).

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
6. ENERGY. Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X		1, 2
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X		1, 2

Explanation

a) **Less-Than-Significant Impact**. Since the proposed project would involve a replacement lift station and wastewater pipeline, the energy use consumed by the proposed project would be consistent with the previous usage of the existing Fort Ord Village Lift Station. Energy use was estimated based on the 2018 usage of the Fort Ord Village Lift Station (Andy Sterbenz, personal communication, August 2019). The replacement system would only consist of and electricity consumption; no natural gas usage is proposed. A discussion of the project's effect on energy use is presented below.

Operational. Operation of the proposed replacement lift station would consume energy primarily for operation of the pumps and lighting. **Table 2** summarizes the estimated energy use of the proposed project.

Table 2
Estimated Annual Energy Use of Proposed Project

Proposed Project	Electricity Use (kWh)	Natural Gas Use (kBtu)
Replacement Lift Station	44,285	Not applicable
Source: Personal communication, Andy Sterbenz, 2019		

The proposed project would not result in an increase in traffic to/from the site as traffic required for maintenance activities associated with the proposed project would be consistent with the existing usage. Therefore, implementation of the proposed project would not result in a substantial increase on transportation-related energy use.

Construction. The anticipated construction schedule assumes that the project would be completed over a period of approximately nine months. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., excavation, and grading), and the actual construction of project components Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks. The construction energy use has not been determined at this time. However, the project would not cause inefficient, wasteful, or unnecessary consumption of energy as the construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. Equipment and fuel are not typically used wastefully during construction due to the added expenses associated with renting, maintaining, and fueling the equipment. Hand tools would be used when possible in order to avoid use of heavy machinery. Furthermore, energy used required to complete construction would be limited and short-term.

Based on the discussion above, the project would not result in potentially significant environmental impact, during operation or construction, due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

b) **Less-Than-Significant Impact**. The construction and operation of the proposed project would have a less-than-significant impact due to energy usage and efficiency and, thus, would not conflict with local or state plans for energy efficiency. Furthermore, design of the proposed replacement lift station would use minimal energy (i.e., no natural gas and minimal electricity for pumps and lighting). As a result, the project would comply with existing state energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Conclusion: The project would have less-than-significant impacts related to energy use.

5.2.7 GEOLOGY AND SOILS

Setting

Soils at the project site are mostly disturbed. Elevation at the existing Fort Ord Village Lift Station is 60 ft above mean sea level; the proposed replacement lift station is about 75 ft above mean sea level. At the highest point, the pipeline replacement alignment reaches 185 ft above mean sea level (Google Earth, 2019).

Current and historic ground disturbance are due mostly to grading for access roads and residential development. The Monterey County Soil Survey indicates several mapping units within the project area, including:

- Baywood sand, two to 15 percent slopes (BbC) characterizes the project site east of Highway 1, which is a majority of the site. Baywood soils are prevalent on Fort Ord and used for military trainings maneuvers, they have limited use for grazing and wildlife. The BbC consists of gently sloping to rolling soils on stabilized sand dunes. Runoff is slow to medium, and the erosion hazard is slight to moderate.
- Areas west of Highway 1 are characterized by Dune Land (Df). Df soils consists of gently sloping to steep areas of loose wide-deposited quartz and feldspar sand on hummocks, mounds, and hills. Some dunes are partially stabilized by coastal or inland vegetation, and other dunes are blowing, shifting, and encroaching onto adjacent lands. Drainage is excessive, and permeability is rapid. Runoff is slow, and soil blowing hazard is high to very high. This land is used mostly for recreation and some wildlife habitat, some stabilized dune locations are used for golf courses and building sites. (NRCS, 1978)

The project site is located within a seismically-active area. The largest earthquake fault in the region is the San Andreas, a major active fault located about 21 miles west of the project site. The Ord Terrace fault lies 0.3 miles west of the project site, the Seaside-Chupines fault is 1 mile west, and the Navy fault is 2.73 miles west. No major earthquakes have occurred on these faults during the past 100 years (Monterey County, 2007).

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
GEOLOGY AND SOILS. Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X	1, 2, 4
ii) Strong seismic ground shaking?			X		1, 2, 3, 4
iii) Seismic-related ground failure, including liquefaction?			X		1, 2, 3, 4
iv) Landslides?			X		1, 2, 3, 4
b) Result in substantial soil erosion or the loss of topsoil?			X		1, 2

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X		1, 2, 3, 4
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X		1, 2, 3, 4
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X	1, 2
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X	1, 2, 4, 10

Explanation

ai) **No Impact**. The site is not located within a State of California Earthquake Fault Hazard Zone and no known active faults cross the site. The project site is not mapped within an Alquist-Priolo Earthquake Fault Zone. Therefore, no impact would occur.

aii) **Less-Than-Significant Impact**. Although the proposed project is not located within a State of California Earthquake Fault Hazard Zone and no known active faults cross the site the project is located in a seismically active region. As part of the grading permit (pursuant City of Seaside Municipal Code Section 15.32.090), engineering reports would be required as deemed necessary by the city engineer, these include soil and/or civil engineering reports and/or engineering geology reports. These reports would be required prior to construction to identify potential geotechnical hazards and provide recommendations to minimize these hazards. Furthermore, the project would be constructed to standard engineering and seismic safety design techniques. The project would be designed and constructed in accordance with all state, federal, and other laws, rules, regulations to avoid or minimize potential direct or indirect damage from seismic ground shaking. In addition, the proposed project does not include habitable structures thereby further reducing the risk of loss, injury, or death. This is considered a less-than-significant impact.

aiii) **Less-Than-Significant Impact**. The project site is located in an area of low to medium liquefaction potential. As described above, the project site may be subject to strong ground shaking in the event of a major earthquake and would be required to incorporate the recommendations provided during geotechnical evaluation as required by the City of Seaside grading permit (pursuant City of Seaside Municipal Code Section 15.32.090). The project would be designed and constructed in accordance with all state, federal, and other laws, rules, regulations to avoid or minimize potential direct or indirect damage from seismic related ground failure, including liquefaction. This is considered a less-than-significant impact.

aiv) **Less-than-Significant Impact**. The project site has no appreciable vertical relief and is mapped by the Seaside General Plan as in an area of low landslide potential. The potential for landslides is low and this is considered a less-than-significant impact. See also aiii) above.

b) **Less-Than-Significant Impact**. The project site has a moderate to high susceptibility for erosion. Specifically, lands west of Highway 1 have a higher susceptibility for soil erosion than lands on the west side of Highway 1, where most of the development would occur. Development of the project would require grading of 10,500 cubic yards of fill and 10,500 cubic yards of cut, which could result in a temporary increase in erosion. As described in aiii) above, the project would be required to obtain a grading permit from the City of Seaside which would require submittal of an erosion control plan and drainage plan prior to issuance of a grading permit.

Furthermore, the proposed project would also be subject to the requirements of the NPDES Program General Storm Water Permit, which includes the preparation of a SWPPP, as outlined in *Section 5.2.10 Hydrology and Water Quality* for construction activities disturbing one acre or more. Any temporary erosion related to construction would be minimized through the implementation of standard construction phase BMPs related to erosion. Erosion control measures and associated BMPs would be consistent with the recommended measures contained in the California Stormwater Best Management Practices Handbooks. Applicable measures may include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil.
- Protecting existing storm drain inlets and stabilizing disturbed areas.
- Hydroseeding/re-vegetating disturbed areas.
- Minimizing areas of impervious surfaces.
- Implementing runoff controls (e.g., percolation basins and drainage facilities).
- Properly managing construction materials.
- Managing waste, aggressively controlling litter, and implementing sediment controls.
- Limiting grading to the minimum area necessary for construction and operation of the project.

Compliance with City and state requirements, and the above BMPs would ensure that construction activities associated with the project would not cause substantial soil erosion under CEQA and potential erosion related impacts would be reduced to a less-than-significant level.

c) **Less-Than-Significant Impact**. The project may contain soil and geologic hazards that could result in lateral spreading, subsidence, or liquefaction, which could damage proposed structures. Impacts associated with these soil and geotechnical hazards would be minimized by applying appropriate engineering and construction techniques. Engineering studies would be required as part of the City of Seaside grading permit process to provide recommendations to minimize these hazards as described in aiii) above. This would reduce any potentially significant geotechnical impacts to a less-than-significant level.

d) **Less-Than-Significant Impact**. The project may contain expansive soils, which could damage proposed structures on the site. Impacts associated with expansive soils or other soil hazards would be minimized by applying appropriate engineering and construction techniques. Engineering studies would be required as part of the City of Seaside grading permit process would be prepared to provide recommendations to minimize these hazards as described in aiii) above. This would reduce any potentially significant geotechnical impacts to a less-than-significant level.

e) **No Impact**. The project is a replacement lift station and pipeline and does not propose any septic tanks or alternative wastewater disposal system.

f) **No Impact**. There are no known paleontological resources or unique geologic features on the project site. The project site is not listed within an area identified as containing paleontological resources nor is it located in close proximity to any known paleontological resources. The project would not impact any paleontological resources, since none are known in the project area.

Conclusion: The project would have a less-than-significant impact on geology and soils with implementation of identified standard permit conditions.

5.2.8 GREENHOUSE GAS EMISSIONS

Setting

Various gases in the earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, the radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide (CO_2), methane (CH_4), O_3, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect. In California, the transportation sector is the largest emitter of GHGs.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
GREENHOUSE GAS EMISSIONS. Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		1, 2, 7, 8
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		1, 2, 7, 8

Explanation

a) **Less-Than-Significant Impact**. Implementation of the proposed project would contribute GHG emissions that are associated with global climate change. GHG emissions attributable to future development would be primarily associated with increases of CO_2 and, to a lesser extent, other GHG pollutants, such as CH_4 and N_2O. The major sources of GHG emissions associated with the project include, emission during construction and mobile sources.

The project is located in the NCCAB, where air quality is regulated by MBARD. Neither the state, MBARD, Monterey County, nor the City of Seaside have adopted GHG emissions thresholds or a GHG emissions reduction plan that would apply to the project. However, it is important to note, that other air districts within the State of California have adopted recommended CEQA significance thresholds for GHG emissions. For instance, on March 28, 2012 the San Luis Obispo Air Pollution Control District (SLOAPCD) approved thresholds of significance for the evaluation of project-related increases of GHG emissions. The SLOAPCD's significance thresholds include both qualitative and quantitative threshold options, which include a qualitative threshold that is consistent with the AB 32 scoping plan measures and goals and a quantitative bright-line threshold of 1,150 metric tons of carbon dioxide equivalent (MTCO2e) per year. The GHG significance thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in the California Air Resources Board's Scoping Plan. Development projects located within these jurisdictions that would exceed these thresholds would be considered to have a potentially significant impact on the environment which could conflict with applicable GHG-reduction plans, policies and regulations. Projects with GHG emissions that do not exceed the applicable threshold would be considered to have a less-than-significant impact on the environment and would not be anticipated to conflict with AB 32 GHG emission reduction goals. Given that the MBARD has not yet adopted recommended GHG significance thresholds, the above thresholds were relied upon for evaluation of the proposed project.

As discussed in *Section 5.2.3 Air Quality*, above, operation and construction of the proposed project would not exceed established thresholds for air quality emissions. The proposed project would replace the existing lift station and pipeline and would not increase operational energy demand beyond existing use. The project would generate temporary construction-related GHG emissions, with most of the emissions generated during the grading phase of construction, which would be minimal and is not anticipated to generate GHG emissions in excess of the above thresholds. Construction would generate an estimated six round trip truck trips per day for 100 working days, and two round-trip truck trips for equipment delivery for 50 days. An additional 10 one-way vehicle trips per day for worker commutes. As such, the project would not generate substantial new or altered sources of GHGs emissions. Any potential impacts from GHG generation during construction would be short-term and temporary. As a result, the project is not anticipated to generate GHG, either directly or indirectly, that may have a significant impact on the environment.

b) **Less-Than-Significant Impact**. Neither the state, MBARD, Monterey County, nor the City of Seaside have adopted GHG emissions thresholds or a GHG emissions reduction plan that would apply to the project. However, as shown above, the project is not expected to generate GHG emissions that would exceed applicable thresholds. The proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases as described above. This represents a less-than-significant impact.

Conclusion: The project would have a less-than-significant impact related to GHG emissions.

5.2.9 HAZARDS AND HAZARDOUS MATERIALS

Setting

Hazardous materials, as defined by the CCR, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. Hazardous materials and waste can result in public health hazards if improperly handled, released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer.

The proposed project would replace an existing lift station and wastewater pipeline. It would not create new hazards, nor would it handle or release hazardous materials. The project site is located within a residential area on a parcel owned by the City of Seaside, and the facilities proposed for decommission are owned by the State Parks. Neither area is within the vicinity of hazardous waste facilities. Although the project site is not specifically identified, the entire former Fort Ord is included on the Federal National Priority List (NPL), also known as the Superfund list. Fort Ord was established in 1917 and closed in 1994.

The project site is comprised of multiple former U.S. Army parcels. The existing Fort Ord Village Lift Station is located within U.S. Army parcel number S3.1.2, and was transferred to State Parks. The proposed pump station (L29), proposed pipeline (L.13.2), and access easement (L30) have been transferred to the City of Seaside. U.S. Army Parcel F2.2, where the northern half of the pipeline would be placed and connect to the SSMH C6, was retained by the Department of Defense (DoD). Multiple groundwater plumes exist within the former military base from multiple source areas and consist of chlorinated VOCs. However, no groundwater plumes exist under the proposed project site. The plumes have been evaluated, monitored, and remediated.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X			1, 2
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X			1, 2
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?		X			1, 2

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X			1, 2
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X	1, 2
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X	1, 2
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X		1, 2, 11

Explanation

a, b) **Less-Than-Significant Impact with Mitigation.** Construction and operation of the project would not create a significant impact due to routine transport, use, or disposal of hazardous materials. No hazardous materials are anticipated to be stored on site during operation of the proposed project. Construction activities would, however, require the temporary use of hazardous substances, such as fuel for construction equipment, oil, solvents, or paints. In addition, there is also low possibility of a wastewater spill during construction. As a result, the project could result in the exposure of persons and/or the environment to an adverse environmental impact due to the accidental release of a hazardous material. These materials would be handled and stored in compliance with all local, state, and federal regulations pertaining to hazardous materials. In addition, the following mitigation would minimize potential impacts to less than significant.

Mitigation

MM HAZ-1: Spill Prevention and Control Plan

Prior to commencement of construction-related activities, the MCWD or Contractor shall prepare a Spill Prevention and Control Plan that addresses potential impacts associated with hazardous material usage during construction and operation. The Spill Prevention and Control Plan shall, at a minimum, consist of the following:

- Identify applicable safety and clean-up procedures in the event of a spill.
- Designate construction staging areas where hazardous materials may be stored. All staging areas shall be located outside of sensitive biological areas. Staging areas shall be designed to contain runoff to prevent contaminants (e.g., oil, grease, fuel products, etc.) from draining towards receiving waters and sensitive areas.
- Identify appropriate emergency notification procedures and emergency contacts.

- Designated location where a spill kit shall be maintained on-site throughout the project.
- Identify dedicated storage areas where hazardous material may be stored and/or used during construction

The MCWD or Contractor will be responsible for implementing the Spill Prevention and Control Plan on-site for the duration of construction, and all personnel working on the site would be notified of its location.

With the incorporation of the above Mitigation Measure, as well as local, state, and federal regulations and agreements, impacts related to accidental release of a hazardous materials would be less than significant.

c) **Less-Than-Significant Impact with Mitigation**. The proposed pump station site is located within ¼ mile of a school (Seaside High School to the south). However, the project is a replacement sewer project and would not routinely emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Any impacts due to accidental release during construction would be reduced to a less-than-significant level with **Mitigation Measure HAZ-1** described above. See also Response a, above.

d) **Less-Than-Significant Impact with Mitigation**. The proposed project is located on the former Fort Ord, which is included on a hazardous materials site compiled pursuant to Government Code Section 65962.5. Due to the sites historical use as part of a former military installation, construction activities within this area have the potential to encounter unexploded ordnance which, if not identified and properly handled, could cause injury or death to construction workers.

The proposed project components east of Highway 1 have already undergone remediation actions and either have been transferred or retained by the DoD. In order for any ground disturbance activities to commence, the MCWD and its contractors must comply with the FORA Right-of-Entry process and the City of Seaside Municipal Code Chapter 15.34 (i.e., the "Ordnance Remediation District Regulations of the City" in Ordinance 924). This ordinance establishes special standards and procedures for digging and excavation on those properties in the former Fort Ord military base which are suspected of containing ordnance and explosives (also called munitions and explosives of concern). This ordinance requires that a permit be obtained from the City for any excavation, digging, development, or ground disturbance of any type involving the displacement of ten cubic yards or more of soil. The permit requirements include providing each site worker a copy of the Ordnance and Explosives Safety Alert; complying with all requirements placed on the property by an agreement between the City, FORA, and Department of Toxic Substances Control (DTSC); obtaining ordnance and explosives construction support; ceasing soil disturbance activities upon discovery of suspected ordnance and notifying the Seaside Police department, the Presidio law enforcement, the U.S. Army and DTSC; coordinating appropriate response actions with the U.S. Army and DTSC; and reporting of project findings. Compliance with existing regulations for construction work at the former Fort Ord would reduce the potential impact of encountering unexploded ordnance by construction workers to less than significant.

The project site located west of Highway 1 on the FODSP has been transferred to the State Parks. It has been identified at this location that there is the potential for residual hazards due to former military use. The U.S. Army identified that the project site could contain Munitions and Explosives

of Concern (MEC), lead-based paint (LBP), and asbestos containing material (ACM). As a result, the project could result in additional impacts due to historical hazardous material contamination on the site. According to the U.S. Army, the project could expose construction personnel or future site occupants to existing hazards, including MEC related hazards and the presence of LBP, and ACM in existing structures.[8] The demolition of the existing Fort Ord Village Lift Station could, therefore, expose construction personnel and future site occupants to potential hazards. Mitigation measures are necessary to ensure that impacts due to historical contamination are less than significant.

Due to potential concerns related to residual hazards, State Parks and DTSC entered into a memorandum of understanding (MOU) that specifies additional safety precautions (e.g. safety training, soil management, etc.). This MOU is in addition to the requirements of the transfer deed, which stipulates additional restrictions related to residential land uses and groundwater use in specified areas of the FODSP, consistent with the MOU. Any activities proposed within the "restricted area" are subject to specific soil management requirements contained in the MOU, the project site proposed for decommission is within the "restricted area."

Consistent with the requirements of the MOU, transfer deed, FODSP policies, this IS/MND includes mitigation to minimize potential residual hazards (e.g. LBP, ACM, MEC, etc.) associated with former military use. The incorporation of these requirements as mitigation would reduce impacts to a less-than-significant level by ensuring that adequate measures are in place to remediate potential hazards (if present), provide appropriate safety training, and implement necessary safety precautions in accordance with applicable regulatory requirements. The following mitigation measures are consistent with the requirements of the MOU and transfer deed, as well as mitigation contained in the FODSP General Plan EIR. Implementation of the following mitigation would minimize impacts to a less-than-significant level.

Mitigation

MM HAZ-2: Survey of Existing Buildings for Asbestos

In order to reduce human health risks to construction personnel and future site occupants due to the potential presence of ACM at the existing Fort Ord Village Lift Station, the MCWD or Contractor will retain a qualified consultant to survey all buildings for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition or subsequent reuse. Asbestos removal activities will be conducted by a California-licensed asbestos abatement contractor, and appropriate notifications to the state Occupational Health and Safety Administration and Central Coast Air Quality Management District shall occur if ACM are present. The MCWD or the Contractor will dispose of renovation or demolition wastes in accordance with federal and

[8] The FOST also identified that groundwater underlying the site may be contaminated by volatile organic compounds (VOCs), primarily trichloroethene (TCE). Base activities resulted in the presence of organic compounds in the groundwater beneath Fort Ord. Organic contaminants, most commonly TCE, formed a groundwater plume in the various aquifers underlying the former Fort Ord near the former landfill. Efforts are currently being undertaken by the U.S. Army to address groundwater contamination. Historical groundwater contamination would not affect the proposed project; land use restrictions, as part of the land transfer process, prohibit the use of groundwater underlying the site. All potable water would be from existing municipal supplies, which are not affected by the TCE plume.

state waste disposal requirements and will follow all federal and state Occupational Health and Safety Administration requirements.

MM HAZ-3: Survey of Existing Buildings for LBP

In order to reduce human health risks to construction personnel and future site occupants due to the potential presence of LBP at the existing Fort Ord Village Lift Station, the MCWD or Contractor will retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint prior to demolition or renovation of existing on-site structures. If lead-based paint is observed within existing buildings and the surrounding area, the MCWD or the Contractor will remove and dispose of all peeling and flaking lead-based paint separately from building debris, in accordance with current DTSC policies. All site soils contaminated by lead-based paint will be removed and properly disposed prior to any construction activities.

MM HAZ-4: MEC Safety Measures

In order to minimize potential health and safety risks due to the exposure to MEC, prior to the commencement of any ground disturbing activity proposed, the MCWD or the Contractor, will coordinate with the State Parks to develop a safety program that specifies protocols relative to MEC in accordance with State Parks, Cal-OSHA, and U.S. Army regulations. In the event that MEC are uncovered during the course of construction and other site disturbing activities, all work will cease and the MCWD or Contractor will notify the State Parks and Presidio Police. Work will not commence until the ordnance has been removed from the site and the surrounding site soils have been sampled and remediated to acceptable levels if soil sampling reveals lead or other soil contamination has occurred due to the presence of munitions.

MM HAZ-5: MEC Safety Training

In order to minimize potential health and safety risks due to the exposure to MEC, all construction personnel will attend a U.S. Army sponsored MEC safety debriefing, prior to the any ground-disturbing activities. This briefing will identify the variety of MEC that is expected to exist on the former Fort Ord and the necessary actions to be taken if a suspicious item is discovered during the course of project construction.

With the incorporation of the above mitigation measures, as well as local, state, and federal regulations and agreements, impacts related to hazardous materials sites would be less than significant.

e) **No Impact**. The project site is located approximately 2.5 miles northwest of the Monterey Regional Airport. The project site is not located within an airport land use plan or within two miles of a public airport or public use airport and would not result in a safety hazard or be exposed to excessive noise due to airport operations.

f) **No Impact.** The project would not impede emergency response or evacuation plans, as it is not part of vehicular transportation network used by emergency vehicles.

g) **Less-Than-Significant Impact**. The project site is surrounded by residential development and is not located within a state responsibility area, as designated by the California Department of Forestry and Fire Protection (Cal Fire). Due to the project's residential location and lack of interface with any natural areas susceptible to wildfire this is a less-than-significant impact (also see *Section 5.2.20 Wildfire*).

Conclusion: The project would have a less-than-significant impact related to hazards and hazardous materials with incorporated mitigation measures identified above.

5.2.10 HYDROLOGY AND WATER QUALITY

Setting

The site is currently open space with an existing drainage basin. Runoff from the site flows into the adjacent City drainage basin. The project site does not contain any natural drainages or waterways. The Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA) indicate that a majority of the project site, east of Highway 1, is located within Zone X (shaded); the area west of Highway 1 is located within Zone X (unshaded). Zone X is defined as an area of moderate and minimal flood risk. Shaded areas are characterized as moderate risk within the 0.2-percent-annula-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. Unshaded areas are characterized as moderate risk areas outside the 1-percent and 0.2-percent-annual-chance floodplains. No base flood elevations or base flood depths are shown within these zones.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
HYDROLOGY AND WATER QUALITY. Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X		1, 2
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X		1, 2
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			X		1, 2
i) Result in substantial erosion or siltation on- or off-site;			X		1, 2
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X		1, 2

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X		1, 2
iv) impede or redirect flood flows?			X		1, 2
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X		1, 2
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X		1, 2

Explanation

a) **Less-Than-Significant Impact**. The proposed project is located in an urban environment and operations would not utilize materials that would significantly harm water quality. Furthermore, the project would comply with applicable regulations and laws to ensure proper discharge into the City's stormwater and sanitary infrastructure as described below.

b) **Less-Than-Significant Impact**. The depth of groundwater in the site vicinity is expected to be at sea level. The project proposes grading to 20 ft for the pump station and 10 ft at the bottom of the trench for pipeline installation. Since the lowest point of the proposed project (the location of the proposed pump station) sits at 75 ft above sea level, the proposed project would not decrease groundwater supplies or interfere substantially with groundwater recharge (such that the project may impede sustainable groundwater management of the basin) because it would not access groundwater.

ci) **Less-Than-Significant Impact**. Construction of the project would require grading activities that could result in a temporary increase in erosion affecting the quality of storm water runoff. The project would be required to obtain a grading permit through the City of Seaside as well as comply with the SWRCB's NPDES General Construction Activities Permit. The MCWD would develop, implement and maintain a SWPPP to control the discharge of stormwater pollutants including sediments associated with construction activities. This stormwater permit would be administered by the SWRCB.

As part of the NPDES permit and Grading Permit, the project shall incorporate BMPs into the project to control the discharge of stormwater pollutants including sediments associated with construction activities. Examples of BMPs include preventing spills and leaks, cleaning up spills immediately after they happen, storing materials under cover, and covering and maintaining dumpsters. Prior to the issuance of a grading permit, MCWD may be required to submit an Erosion Control Plan to the Department of Public Works (pursuant City of Seaside Municipal Code Section 15.32.180).

When construction is complete, a Notice of Termination (NOT) for the General Permit for Construction shall be filed with the SWRCB. The NOT shall document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of,

and a post-construction stormwater management plan is in place as described in the SWPPP for the site.

The project would somewhat increase impervious surfaces on the proposed replacement lift station site and slightly modify the drainage pattern on-site. Consistent with the regulations and policies described above, the project would follow the standard permit conditions associated with the NPDES and City Grading Permit.

In conclusion, the project would not substantially alter existing drainage patterns, cause alteration of streams or rivers, or result in substantial erosion or siltation on or off site by complying with the state's Construction Stormwater Permit and the City's Grading Ordinance.

cii) **Less-Than-Significant Impact**. The project would result in an increase of 1,600 SF of impervious surface at the proposed replacement lift station site compared to existing developed conditions. The project would implement a stormwater control plan to manage runoff from the site. Runoff would be collected in the adjacent stormwater detention basin. As a result, the proposed project would have a less-than-significant impact associated with flooding on- or off-site due to increased surface runoff.

ciii) **Less-Than-Significant Impact**. The project proposes to connect to the existing detention basin adjacent to the proposed pump station. The proposed pipelines would be underground and, therefore, would not provide a source of polluted runoff. The project is not expected to contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems or result in substantial additional sources of polluted runoff. See also Response ci, above.

civ) **Less-Than-Significant Impact**. The project is located outside the 100-year floodplain, as mapped by FEMA (site is within Flood Zone X) and would not significantly impede or redirect flood flows.

d) **Less-Than-Significant Impact**. As described above, the project is not located within a 100-year floodplain or flood hazard zone. In addition, the project site is not located in an area subject to significant seiche or release of pollutants due to project inundation. The project site is located two miles away from Roberts Lake and Laguna Grande Lake, which are identified in the Seaside General Plan Safety Element as susceptible to flooding and other impacts from seiches. These lakes would not create a large enough seiche that would put the project site at risk of inundation. Therefore, the risk associated with possible seiche waves is not considered a potential constraint or a potentially significant impact of the proposed project. In addition, although the project site is located adjacent to Monterey Bay, according to the Tsunami Inundation Map for Emergency Planning for the Seaside Quadrangle (2009), the project site is not located within the Tsunami inundation zone. The risk associated with tsunamis is, therefore, not considered a potential hazard or a potentially significant impact.

e) **Less-Than-Significant Impact**. The project consists of development in a residential area. The proposed project would be required to comply with the City Grading Permit standard permit conditions, as well as standard BMPs during construction. As described above, the project would not result in significant water quality or groundwater quality impacts that would conflict or obstruct

implementation of a water quality control or sustainable groundwater management plan since, as outlined above.

Conclusion: The project would have a less-than-significant impact on hydrology and water quality.

5.2.11 LAND USE

Setting

A majority of the project is located on the east side of Highway 1 within the City of Seaside limits. The portion of the project proposed for demolition on the west side of Highway 1 is within State Parks land. The site of the proposed pump station is currently within a residential area and contains a detention basin. The proposed pipelines would run through residential neighborhoods in the existing right-of-way. The project site is surrounded by the following uses:

- North: Residential;
- East: Residential;
- South: Residential; and
- West: Monterey Road, Highway 1, State Parks, and the Pacific Ocean.

The applicable planning document for the proposed pump station and pipeline is the City of Seaside General Plans. The proposed new lift station area is designated and zoned Community Commercial (CC). The new pipeline would occur within existing roadways. The existing Fort Ord Village Lift Station is located in an easement on State Parks lands within the FODSP, which is governed by the FODSP General Plan. The FODSP General Plan identifies the project site as a natural resource management zone. In addition, the existing Fort Ord Village Lift Station is located within the California Coastal Zone and is subject to the requirements of the California Coastal Act of 1976, as amended.

The entire project site lies within the former Fort Ord and is subject to the requirements of the HMP. The existing lift station site is designated by the HMP as "development with reserve areas or development with restrictions," and the proposed replacement pump station and pipeline are located within areas designated as "development."

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
LAND USE AND PLANNING. Would the project:					
a) Physically divide an established community?				X	1, 2, 3
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X		1, 2, 3, 4

Explanation

a) **No Impact**. The project is the replacement of the existing Fort Ord Village Lift Station, force main, and associated wastewater system, therefore, it would not physically divide an established community.

b) **Less-Than-Significant Impact**. The project would not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding and/or mitigating an adverse environmental effect. A consistency analysis was performed to ensure the proposed project would be consistent with all relevant plans, policies, and regulations (e.g. FODSP, City of Seaside General Plan, California Coastal Act, HMP). In addition to the proposed project being consistent with relevant planning documents, the replacement of the existing Fort Ord Village Lift Station, force main, and associated wastewater system would be consistent with current zoning and land use designations. The proposed project would be required to obtain a number of approvals and permits, listed in *Section 2.6 Project Approval and Permits*, which would further ensure consistency with applicable regulations. Furthermore, the proposed project is located within the plan area of the HMP and proposed HCP for former Fort Ord; this is addressed in *Section 5.2.4 Biological Resources* (checklist item f) and the proposed project was determined to be consistent with these plans. Where appropriate, this IS/MND has identified a number of mitigation measures to further ensure that potentially significant impacts would be reduced to a less-than-significant. As a result, the proposed project is not anticipated to conflict with any policies adopted for the purposes of avoiding and/or substantially lessening an adverse impact.

Conclusion: The project would have a less-than-significant impact on land use and planning.

5.2.12 MINERAL RESOURCES

Setting

In accordance with the Surface Mining and Reclamation Act of 1975 (SMARA), the California Geological Survey (CGS) maps the regional significance of mineral resources throughout the state, with priority given to areas where future mineral resource extraction could be precluded by incompatible land use or to mineral resources likely to be mined during the 50-year period following their classification. The CGS delineates Mineral Resource Zones (MRZs) based on their mineral resource potential.

The proposed project site is classified MRZ-2 which applies to areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists of their presence.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
MINERAL RESOURCES. Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X		1, 2, 3, 4

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?			X		1, 2, 3, 4

Explanation

a, b) **Less-Than-Significant Impact**. Although the project site is classified MRZ-2 by the CGS, the proposed project is located in an already disturbed residential area and is consistent the zoning designation. Further, implementation of the proposed project would not result in any large-scale development or other activities requiring significant removal of the mineral deposits present. This is considered a less-than-significant impact.

Conclusion: The project would have a less-than-significant impact on mineral resources.

5.2.13 NOISE

Setting

In the context of this document, "noise" is defined as unwanted sound. The primary source of existing noise in the proposed project area is traffic on adjacent roadways.

The project site is located in a residential area east of Highway 1 and on State Parks land west of Highway 1. Policies in the City of Seaside General Plan identify noise standards to avoid conflicts between noise-sensitive uses and noise source contributors. In addition, FODSP General Plan includes a number of guidelines to address potential noise-related impacts; applicable guidelines include NOI-1 through NOI-3. These guidelines generally require that State Parks: 1) include setbacks from SR 1 to minimize traffic noise (NOI-1); 2) reduce noise generated from new uses (NOI-2); and, 3) implement noise abatement measures as part of new projects (NOI-3).The only significant source of noise in the project area is from traffic along the local roadways.

Sensitive noise receptors in the vicinity of the project consist of existing residences surrounding the areas proposed for the replacement lift station and pipeline as well as Seaside High School, which lies approximately 0.25 mile south from the proposed replacement lift station. The nearest residences are located approximately 400 ft from the proposed replacement lift station, and residences occur adjacent to the roads proposed for pipeline installation.

The City has adopted a noise ordinance (Chapter 9.12 of the Municipal Code), which seeks to control noise by determining time periods when activities are allowed or prohibited. For example, excessive unnecessary or unusually loud construction noise activity before 7:00 a.m. or after 7:00 p.m. daily (except Saturday, Sunday, and holidays when the hours are before 9:00 a.m. and after 7:00 p.m.) are prohibited. The City's Municipal Code does not contain quantitative noise limits.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
NOISE. Would the project result in					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X			1, 2, 3
b) Generation of excessive groundborne vibration or groundborne noise levels?			X		1, 2, 3, 5
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X	1, 2, 3

Explanation

a) **Less-Than-Significant Impact with Mitigation**. The project includes the replacement of an existing lift station, which would result in the relocation of an existing permanent noise source. The primary source of noise associated with the replacement lift station is the associated pumps. However, the proposed lift station is located adjacent to Monterey Road and Highway 1 and the noise generated by pumps associated with the lift station would be minimal compared to the existing traffic noise. The replacement lift station would not result in an increase in the ambient noise levels within the vicinity, and this is considered a less-than-significant impact. An emergency generator would be on-site, but would include a sound enclosure.

Construction of the project would result in short-term noise increases in the project vicinity. Noise impacts from construction activities depend on the type of construction equipment used, the timing and length of activities, the distance between the noise generating construction activities and receptors, and shielding. Demolition of the existing lift station is estimated to take four weeks, pipeline construction is anticipated to require eight weeks, and lift station construction is anticipated to require four months. Construction equipment would include, but would not be limited to, tracked excavator, backhoe, water truck, concrete trucks, dump trucks, flat-bed delivery trucks, vibratory compacters, asphalt paving equipment, and trailer-mounted bypass pumps.

Typical hourly average construction noise levels could be as loud as 75 - 80 decibels at a distance of $\pm$100ft from the construction area during active construction periods (DOT, 2006). Noise associated with the construction of the project would be temporary and intermittent, and would be limited to weekdays between the hours of 8:00 a.m. and 4:00 p.m. City of Seaside Municipal Code exempts noise level impacts when construction work occurs between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday and between the hours of 7:00 p.m. and 9:00 a.m. on weekends and holidays. This exemption recognizes that construction activity is typically short-term in duration and a normal part of the daytime urban environment.

However, one night of night-time construction would be required for the system switch-over from existing to new at the proposed replacement lift station. In order to safely switch over to the new system, construction is required at night as this is the time of the lowest flow. The closest sensitive receptors to proposed nighttime construction are single-family residences located approximately 400 ft east from the proposed replacement lift station site. This is considered a potentially significant impact that can be mitigated to a less-than-significant level with implementation of **MM NOISE-1** below.

Mitigation

MM NOISE-1: Night-time Construction Notification

Residents and other sensitive receptors within 900 ft of nighttime construction shall be notified of the construction location, nature of activities, and schedule, in writing, at least 14 days prior to the commencement of nighttime construction activities. The notice shall also be posted at the proposed replacement lift station location. As a part of the notification process the MCWD and/or its Contractor shall designate a construction disturbance coordinator who would be responsible for responding to nighttime construction complaints. The MCWD and/or its Contractor shall return all calls within 24 hours to answer noise questions and handle complaints. A contact number for the construction disturbance coordinator shall be conspicuously placed at the proposed replacement pump station and included in the notice. Prior to distributing the notice to nearby residences, the MCWD or the Contractor shall first submit the notice to the City of Seaside Planning Department for review and approval.

With incorporation of **MM NOISE-1** above, temporary construction noise impacts would be less than significant.

b) **Less-Than-Significant Impact**. Construction of the project would generate temporary groundborne vibration. Construction activities would include site clearing and vegetation removal, demolition of the existing Fort Ord Village Lift Station, excavation, grading and trenching, site preparation work, and project construction.

Vibration amplitudes are usually expressed as peak particle velocity (PPV) or the velocity of a parcel (real or imaged) in a medium as it transmits a wave. The Federal Transit Authority has published standard vibration levels and peak particle velocities for construction equipment. As stated previously, sensitive receptors in the vicinity of the project consist of single-family residences located approximately 400 ft east from the proposed pump station site. As well as additional single-family houses surround the residential streets the pipeline would be built under, which could be as close as 50 ft from installation of the pipeline. **Table 3** identifies anticipated approximate velocity level at 25 ft and PPV for each type of equipment at a distance of 25, 50, and 400 ft.

Table 3 Vibration Velocities for Construction Equipment				
Equipment	**Approximate Velocity Level at 25ft (VdB)**	**Approximate PPV at 25ft (inches/second)**	**Approximate PPV at 50ft (inches/second)**	**Approximate PPV at 400ft (inches/second)**
Pile Driving (sonic)	104	0.644	N/A[1]	0.006
Pile Driver (impact)	112	1.518	N/A[1]	0.015
Large Bulldozers	87	0.089	0.031	0.001
Small Bulldozer	58	0.003	0.001	0.000
Loaded Trucks	86	0.076	0.027	0.001
Jackhammer	79	0.035	N/A[1]	0.000
Note: Data reflects typical vibration level. Source: U.S. Department of Transportation, *Transportation and Construction Vibration Guidance Manual,* September 2013.				

The City of Seaside does not have any policies regulating construction vibration, therefore, for purposes of this analysis, excessive groundborne vibration would be 0.3 PPV (as derived from the California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*).[9] Ground disturbing activities associated with project grading could involve the operation of large and small bulldozers, vibratory compactors, and loaded trucks. As shown above, the vibration level associated with these types of equipment would attenuate to a maximum of approximately 0.003 inches per second at 25 ft, which would be barely perceptible and would be well under the threshold of 0.3 inches per second. Moreover, sheet-pile shoring may be installed around the lift station excavation using vibratory equipment. As such, vibration associated with the construction of the proposed project would not be excessive. For these reasons, this represents a less-than-significant impact.

c) **No Impact**. The project is not located within an airport land use plan, public airport, or private airstrip.

Conclusion: With incorporation of the mitigation measure above identified, the proposed project would result in a less-than-significant noise impact.

5.2.14 POPULATION AND HOUSING

Setting

The proposed project would demolish the existing Fort Ord Village Force Main and construct a replacement lift station and wastewater pipeline. The project is located adjacent to residential neighborhoods on a parcel owned by the City of Seaside and would not displace any existing housing.

[9] While the proposed project is not subject to Caltrans regulations these groundborne vibration and noise thresholds are commonly used for projects in the State of California.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
POPULATION AND HOUSING. Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X	1, 2
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	1, 2

Explanation

a, b) **No Impact**. The proposed project consists of the construction of a replacement lift station and wastewater pipeline, and is located in an undeveloped parcel or within existing roadways. The project would not constitute a change which would induce substantial population growth in the area, nor would the project affect housing availability, or displace residents. Therefore, no impact to population and housing would occur.

Conclusion: The project would have no impact on population and housing.

5.2.15 PUBLIC SERVICES

Setting

Fire Protection: Fire protection services are provided to the replacement lift station project site by the Seaside Fire Department. The City operates one fire station located at 1635 Broadway Avenue that is located approximately 2.5 miles from the project site by way of surface streets.

Cal Fire is responsible for providing fire protection services within FODSP. Emergency response is provided from the Carmel Hill fire station, which is located in Pebble Beach. This station is staffed 24 hours a day, seven days a week, with eight persons and one Battalion Chief. Fire protection services are also provided via mutual aid agreements with the Presidio of Monterey Fire Department and the City of Seaside Fire Department.

Police Protection: Police protection services are provided to the replacement lift station project site by the Seaside Police Department. The City operates one police station which is located at 440 Harcourt Avenue, which is located approximately 2.5 miles from the project site by way of surface streets.

Law enforcement and emergency medical response services within the FODSP are the responsibility of State Parks. Park Rangers and Lifeguards are responsible for providing police protection services. Department Rangers and Lifeguards have the primary public safety and law enforcement responsibility for the FODSP property; the Monterey County Sheriff Department and Seaside Police Department have concurrent jurisdiction with support from other law enforcement agencies.

Schools: There are numerous educational facilities in proximity to proposed project, including schools located in the cities of Marina and Seaside. The proposed project is located within the Seaside School District. The schools in the Seaside School District serving the project are as follows: Gearhart and Heights Elementary School, Broadway Middle School, and Seaside High School. In addition, the California State University Monterey Bay (CSUMB), which is located in the former Fort Ord, is also in close proximity to the proposed project.

Parks: The existing Fort Ord Village Lift Station, proposed for demolition, is located within the FODSP, and is adjacent to the Monterey Bay Coastal Recreational Trail.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
a) Fire protection?			X		1, 2, 3
b) Police protection?			X		1, 2, 3
c) Schools?				X	1, 2, 3
d) Parks?			X		1, 2, 3
e) Other public facilities?				X	1, 2, 3

Explanation

a, b) **Less-Than-Significant Impact**. The proposed project consists of a replacement lift station and wastewater pipeline and is consistent with the existing use and zoning of the parcel, it would have no post-construction impact on police or fire services. Although unlikely, City of Seaside Police or Fire could be required to respond to potential construction-related emergency. Pipeline construction is anticipated to require eight weeks, and lift station construction is anticipated to require four months. The limited construction duration would not significantly impact fire protection or police protection services or require the construction of new or remodeled facilities.

c, e) **No Impact**. Since the project is a replacement lift station and wastewater pipeline, and consistent with the current use and zoning of the parcel, it would not be considered a project that could induce population growth that would generate new students or impact other public facilities, such as libraries. As a result, the project would have no physical impact on schools or other public facilities and would not require the construction of new or remodeled facilities.

d) **Less-Than-Significant Impact**. The existing Fort Ord Village Lift Station is located on the FODSP and adjacent to the Monterey Bay Coastal Recreational Trail. However, construction of the project would not interfere with any potential or ongoing park activities or trails. Moreover,

these impacts would be temporary. See *Section 5.2.15 Recreation*, for further discussion. This is a less-than-significant impact.

Conclusion: The project would have a less-than-significant impact on public services.

5.2.16 RECREATION

Setting

The portion of the project proposed for demolition is within the FODSP. The City of Seaside, where a majority of the project is proposed, owns and/or maintains 28 park and recreation areas totaling 50.71 acres (City of Seaside, 2005).

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
RECREATION. Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X	1, 2
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				X	1, 2

Explanation

a, b) **No Impact**. The existing Fort Ord Village Lift Station is within the FODSP; however, demolition of these facilities would not impact park operations. Furthermore, the proposed replacement lift station and pipeline proposed on the east side of Highway 1 would not increase the use of existing neighborhood parks or require the construction of additional facilities. The proposed project is consistent with the current use and would not induce population growth that would generate new park users. Therefore, no impact to recreational facilities would occur.

Conclusion: The project would have no impact on recreational facilities.

5.2.17 TRANSPORTATION

Setting

Regional access to the project site is provided from Highway 1 onto surface streets. The proposed replacement lift station would be accessed via Monterey Road, a two-lane arterial roadway with sidewalks but no bike lanes or parking spots. During construction, the existing force main would be accessed via an unpaved road along the pipeline easement starting at the west end of Gigling Road, and the existing Fort Ord Village Lift Station would be accessed from the bike lane/paved maintenance road through the FODSP.

The City of Seaside maintains Level of Service (LOS) standards that define the minimum acceptable operating characteristics for intersections and streets. LOS is a standard measure of traffic service along a roadway or at an intersection. It ranges from A to F, where LOS A is best and LOS F is worst. The City considers LOS C to be the upper limit of satisfactory operations for signalized intersections. For unsignalized intersections, the City considers LOS E for two-way stop-controlled intersections, and LOS C for all-way stop-controlled intersections.

The project would require excavation within City of Seaside right-of-way. The MCWD would be responsible for obtaining an encroachment permit from the City of Seaside prior to the start of construction. The encroachment permit would require a traffic control plan.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
TRANSPORTATION/TRAFFIC. Would the project:					
a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X		1, 2, 3
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X		1, 2, 3
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X		1, 2, 3
d) Result in inadequate emergency access?			X		1, 2, 3

Explanation

a) **Less-Than-Significant Impact**. The proposed replacement lift station and wastewater pipeline would have no post-construction impacts on traffic and transportation. The proposed project would require minimal maintenance trips; however, these would not be in excess of maintenance trips associated with the existing system and would not constitute a significant impact. The project would result in a temporary increase in traffic during construction. Construction would generate an estimated six round trip truck trips per day for 100 working days, and two round-trip truck trips for equipment delivery for 50 days. An additional 10 one-way vehicle trips per day for worker commutes. These impacts would be temporary and relatively low. Additionally, work within roads would require traffic control and flagmen. As a result, traffic increases would constitute a less-than-significant impact.

b) **Less-Than-Significant Impact**. The proposed project consists of a replacement lift station and wastewater pipeline to support an existing system and would not generate additional vehicle miles traveled (VMT) as defined by Guidelines Section 15064.3, subdivision (b). Furthermore, as stated above, the City of Seaside utilize LOS as the primary measures of traffic impacts and has not adopted threshold for Guidelines Section 15064.3, subdivision (b) which uses vehicle miles traveled (VMT) as the metric to assess transportation impacts from new development under CEQA.

Therefore, the project would not conflict with CEQA Guidelines Section 15064.3(b), which calls for evaluation of a project's transportation impacts based on VMT. As a result, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

c) **Less-Than-Significant Impact**. The replacement lift station and pipeline would not substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses. Overall, the site plan shows adequate access to the site and operational issues associated with maintenance trips. No additional roads or design features are required.

d) **Less-Than-Significant Impact**. The proposed replacement lift station would only require minimal maintenance trips. The MCWD would work with the City to assure that emergency vehicle and firefighter access are adequately addressed in the final project design. The impacts to emergency access would, therefore, be less than significant.

Conclusion: The project would have a less-than-significant impact on transportation.

5.2.18 TRIBAL CULTURAL RESOURCES

Setting

California Assembly Bill (AB) 52, in effect since July 2015, provides CEQA protections for tribal cultural resources. All lead agencies approving projects under CEQA are required, if formally requested by a culturally affiliated California Native American Tribe, to consult with such tribe regarding the potential impact of a project on tribal cultural resources before releasing an environmental document. Under California Public Resources Code §21074, tribal cultural resources include site features, places, cultural landscapes, sacred places, or objects that are of cultural value to a tribe and that are eligible for or listed on the California Register of Historical Resources (CRHR) or a local historic register, or that the lead agency has determined to be of significant tribal cultural value.

The Native American Heritage Commission (NAHC) was contacted for a review of the Sacred Lands Files, which yielded negative results for the project site. Furthermore, the MCWD has not been notified under AB 52 to any tribes for consultation. Mr. Michael Wegley, the MCWD District Engineer, contacted NAHC and was provided a list of Native American tribes and individuals for further consultation (Gayle Totton, personal communication, May 2019).

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
TRIBAL CULTURAL RESOURCES. Would the project:					
Cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					1, 2

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
a) Listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			X		1, 2
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X		1, 2

Explanation

a) **Less-Than-Significant Impact**. As indicated above in *Section 5.2.17 Cultural Resources,* the proposed project would not result in any adverse impacts to historical resources within the proposed project area.

b) **Less-Than-Significant Impact**. The NAHC review of their Sacred Lands Files did not yield any results for the project site. Furthermore, no tribal cultural resources or Native American resources have been identified to date, and findings of these resources are unlikely. In addition, pursuant Public Resources Code Section 21080.3.1, Native American Tribes are required to request notification by the District of potential projects. If consultation is requested, the District shall provide formal written notification to the California Native American tribe or tribes that are traditionally and culturally affiliated with the project area. The tribe has 30 days of the notification to request consultation to determine if the project may have a significant effect on a tribal cultural resource. Since the District has not received a request for notification by any Native American tribes and the sacred lands search yielded a negative finding, this is considered a less-than-significant impact.

5.2.19 UTILITIES AND SERVICE SYSTEMS

Setting

Utilities and services are furnished to the project site by the following providers:

- Wastewater Treatment: MCWD;
- Water Service: MCWD;
- Solid Waste: Monterey Regional Waste Management District; and
- Natural Gas & Electricity: MBCP & PG&E.

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
UTILITIES AND SERVICE SYSTEMS. Would the project:					
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?		X			1, 2, 3
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X		1, 2
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X		1, 2
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X		1, 2
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X		1, 2

Explanation

a) **Less-Than-Significant Impact with Mitigation**. The existing Fort Ord Village Lift Station and force main have exceeded their service life and require replacement. The proposed project involves the demolition and replacement of this system. In addition, PG&E would install a new underground electrical service to the replacement lift station from an existing service pole on Monterey Road. Further, a hose bib would be installed at the replacement lift station for minimal water usage associated with the proposed project. However, all these services would be a replacement of the existing services and would not expand water, wastewater, storm water, or electric power usage beyond that which is already being used. The proposed project would not generate any natural gas or require telecommunication facilities. However, the proposed project does consist of the relocation of wastewater facilities, which may result in potentially significant impacts. Mitigation measures have been identified throughout this Initial Study to reduce any potential impacts due to wastewater relocation to a less-than-significant level.

b) **Less-Than-Significant Impact**. As stated above, the project would require minimal water services to the replacement pump station (i.e. hose bib would be installed for minimal water usage). However, this use is consistent with the use at the existing Fort Ord Village Lift Station, this represents a less-than-significant impact to water supplies.

c) **Less-Than-Significant Impact**. The proposed project involves the replacement of the existing Fort Ord Village Lift Station and force main and would not require additional wastewater treatment

beyond that which is already being provided for the existing system. This represents a less-than-significant impact to wastewater systems.

d, e) **Less-Than-Significant Impact**. The proposed project would result in a less-than-significant impact in terms of solid waste generation. Deconstruction of the existing Fort Ord Village Lift Station would include relocating the pumps to the replacement lift station location and salvaging metals for recycling. Any trash would be hauled to the Monterey Regional Waste Management District facility north of the City of Marina. The proposed project involves a replacement lift station and pipeline and is not anticipated to generate additional waste beyond the current use. The project would comply with all federal, state, and local statutes and regulations related to solid waste.

Conclusion: The project would have a less-than-significant impact on utilities and service systems.

5.2.20 WILDFIRE

Setting

The project site is surrounded by residential development and is not located within or near a state responsibility areas, as designated by Cal Fire (Cal Fire, Fire Hazard Severity Maps, 2007, 2008).

CEQA Thresholds

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X		3, 11
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X	11
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X	2, 11
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X	1, 11

Explanation

a) **Less-Than-Significant Impact**. As stated above in *Section 5.2.9 Hazards and Hazardous Materials*, the project would not create any barriers to emergency or other vehicle movement as it is not part of vehicular transportation network used by emergency vehicles. Work within roads during construction would require traffic control and flagmen. Furthermore, final design would

incorporate all Fire Code requirements. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

b) **No Impact**. The project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors due to the project's urbanized location away from natural areas susceptible to wildfire. The project site is not located within an area of moderate, high, or very high Fire Hazard Severity for the Local Responsibility Area nor does it contain any areas of moderate, high, or very high Fire Hazard Severity for the state responsibility area.

c) **No Impact**. Due to the project's urbanized location and lack of interface with any natural areas susceptible to wildfire, the project would not require the installation or maintenance of associated fire suppression or related infrastructure.

d) **No Impact**. The project would not expose people or structures to significant wildfire risks given its highly urban location away from natural areas susceptible to wildfire.

Conclusion: The project would result in a less-than-significant impact related to wildfire.

5.2.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL IMPACTS	Potentially Significant Issues	Less-Than-Significant Impact with Mitigation	Less-Than-Significant Impact	No Impact	Checklist Source(s)
MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:					
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X			1-12
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.		X			1-12
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?			X		1-12

Explanation

a) **Less-Than-Significant Impact with Mitigation**. Based on the analysis provided in this Initial Study, the proposed project would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or

eliminate important examples of the major periods of California history or prehistory. Mitigation measures and standard permit conditions are identified for potential impacts of the project on biological and cultural resources, hazards, noise, and utilities impacts to reduce these effects to a less-than-significant level.

b) **Less-Than-Significant Impact with Mitigation**. Based on the analysis provided in this Initial Study, the proposed project would not significantly contribute to cumulative impacts since the project is a replacement of an existing wastewater system. The project impacts identified throughout the document would be minimized by implementation of standard permit conditions and mitigation, and would not significantly contribute to cumulative impacts in the area.

c) **Less-Than-Significant Impact**. Based on the analysis provided in this Initial Study, the proposed project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

Conclusion: The project would have a less-than-significant impact on the environment with the incorporation of mitigation measures and standard permit conditions identified in this document.

6. DOCUMENT PREPARATION & REFERENCES

LEAD AGENCY

Marina Coast Wastewater District
Mike Wegley, District Engineer

REPORT PREPARATION

Schaaf & Wheeler
Andrew Sterbenz, Project Engineer

Denise Duffy & Associates, Inc.
Denise Duffy, Principal
Erin Harwayne, AICP, Senior Project Manager
Ashley Quackenbush, Associate Planner
Jami Davis, Senior Environmental Scientist
Robyn Simpson, Editor

CHECKLIST SOURCES

1. CEQA Guidelines and professional expertise of consultant
2. Project Plan and site review
3. City of Seaside General Plan & FEIR, 2003 & 2004
4. FODSP General Plan & Initial Study, 2004
5. Transportation and Construction Vibration Guidance Manual, 2013
6. Monterey County Important Farmlands Map, 2016
7. MBARD CEQA Guidelines, 2008
8. MBARD 2012-2015 Air Quality Management Plan, 2017
9. Biological Report, 2019
10. Archeological Records Search, 2019
11. Cal Fire, Fire Hazard Severity Maps, 2007 & 2008

REFERENCES

[DOC] California Department of Conservation. 2016. Monterey County Important Farmlands Map. Accessed May 2019. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Monterey.aspx

California Department of Parks and Recreation. March 2013. Fort Ord Dunes State Park Campground Project Draft Initial Study. Available at: http://www.parks.ca.gov/pages/980/files/final%20fodsp%20draft_is_mnd%203_15_2013.pdf

California Department of Parks and Recreation. Approved September 17, 2004. Fort Ord Dunes State Park General Plan and Draft Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/fodsp_gp_eir_vol_1.pdf

[DTSC] California Department of Toxic Substances Control, 2019. EnviroStor Database, accessed May 23, 2019. Available at: https://www.envirostor.dtsc.ca.gov/public/

[Caltrans] California Department of Transportation. Monterey County Scenic Highway Map. Accessed March 2018. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/monterey.htm

City of Seaside Code of Ordinances. Accessed May 2019. Available at: https://www.codepublishing.com/CA/Seaside/.

City of Seaside. October 2005. Parks, Recreation, Community Services Plan.

Google Earth. Accessed May 2019. Available at: https://www.google.com/earth/

City of Seaside. August 2003. Seaside General Plan.

County of Monterey. September 2008. 2007 Monterey County General Plan Draft Environmental Impact Report.

County of Monterey. October 2010. 2010 Monterey County General Plan.

County of Monterey. 2019. Online Geographic Information System. Accessed: May 2019. Available at: https://www.co.monterey.ca.us/government/departments-i-z/information-technology/gis-mapping-data

Google Maps. 2019. Available at: http://maps.google.com

[LAFCO] Local Agency Formation Commission of Monterey County. April 22, 2019. 2019 Municipal Services Review and Sphere of Influence Study: Marina Coast Water District. Accessed May 2019. Available at: http://www.monterey.lafco.ca.gov/studies-maps/MCWD%20Final%20Adopted%204-22-19.pdf

[MBARD] Monterey Bay Unified Air Pollution Control District. 2008. CEQA Air Quality Guidelines.

[MBARD] Monterey Bay Air Resources District. 2017. 2012-2015 Air Quality Management Plan.

[MBCP] Monterey Bay Community Power. 2019. FAQ. Accessed on April 5, 2019. Available at: https://www.mbcommunitypower.org/about/faq/.

[MCWD] Marina Coast Water District. 2018-19. Draft Five-Year Capital Improvement Plan. Accessed May 2019. Available at: https://www.mcwd.org/docs/engr_files/2018-19_Five_Year_CIP-Final.pdf

[NRCS] Natural Resources Conservation Science, U.S. Department of Agriculture. 1978. Soil Survey of Monterey County.

Sterbenz, Andy. August 2019. Personal Communication.

Totton, Gayle. May 2019. Personal Communication.

Tsunami Inundation Map for Emergency Planning for the Seaside Quadrangle (2009)

[USACE] U.S. Army Corps of Engineers. April 1997. Habitat Management Plan for the Former Fort Ord, California.

[DOT] U.S. Department of Transportation. September 2013. Transportation and Construction Vibration Guidance Manual.

[DOT] U.S. Department of Transportation. August 2006. Federal Highway Administration Highway Construction Noise Handbook.

.

Appendix A

Fort Ord Village Lift Station & Force Main Replacement Project
Biological Resources Report

This Page Intentionally Left Blank

Ord Village
Force Main Replacement Project

DRAFT
BIOLOGICAL RESOURCES REPORT

September 2019

Prepared by

Denise Duffy & Associates, Inc.
947 Cass St. Suite 5
Monterey, California 93940

Prepared for

Marina Coast Water District
11 Reservation Road
Marina, CA 93933-2099

This page left intentionally blank

TABLE OF CONTENTS

Figures

1.0 PROJECT SUMMARY

The Marina Coast Water District (MCWD or District) is proposing to implement the Ord Village Force Main Replacement Project (project or proposed project), located in the City of Seaside, Monterey County, California (**Figure 1**). The existing force main pipe has exceeded its service life and has deteriorated structurally, requiring emergency repairs six times in the past ten years. The MCWD has planned for the replacement of these facilities by allocating funds to improve these facilities in the 2018-19 Five Year Capital Improvements Plan. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 linear feet (LF) of existing gravity and force main pipelines and two highway crossings (**Figure 2**). The former Ord Village Lift Station west of Highway 1 would be demolished and removed. Work would be conducted within the currently disturbed area at this location. Pipelines and manholes outside the site would be abandoned in place. Pipeline construction is anticipated to require 8 weeks, and lift station site construction is anticipated to require 4 months. Construction is anticipated to occur between January 1 and September 30, 2020.

1.1 Summary of Results

Two vegetation types were observed within the project site: dune scrub and ruderal/landscaped. In addition, a portion of the project site is developed. Dune scrub habitat is listed as sensitive on the California Department of Fish and Wildlife's (CDFW's) *California Natural Communities List* and may also be considered an Environmentally Sensitive Habitat Area (ESHA) under the California Coastal Act (CCA). A portion of the project site is also within designated critical habitat for Monterey spineflower; these areas may also be considered ESHA.

Several special-status species are known or have the potential to occur within the project site based on observations, presence of appropriate habitat, and known occurrences within the vicinity. All other species evaluated have a low potential to occur, are assumed unlikely to occur, or were determined not present within the project site for the species-specific reasons presented in **Appendix A**.

The following special-status wildlife species are known or have the potential to occur on the project site:

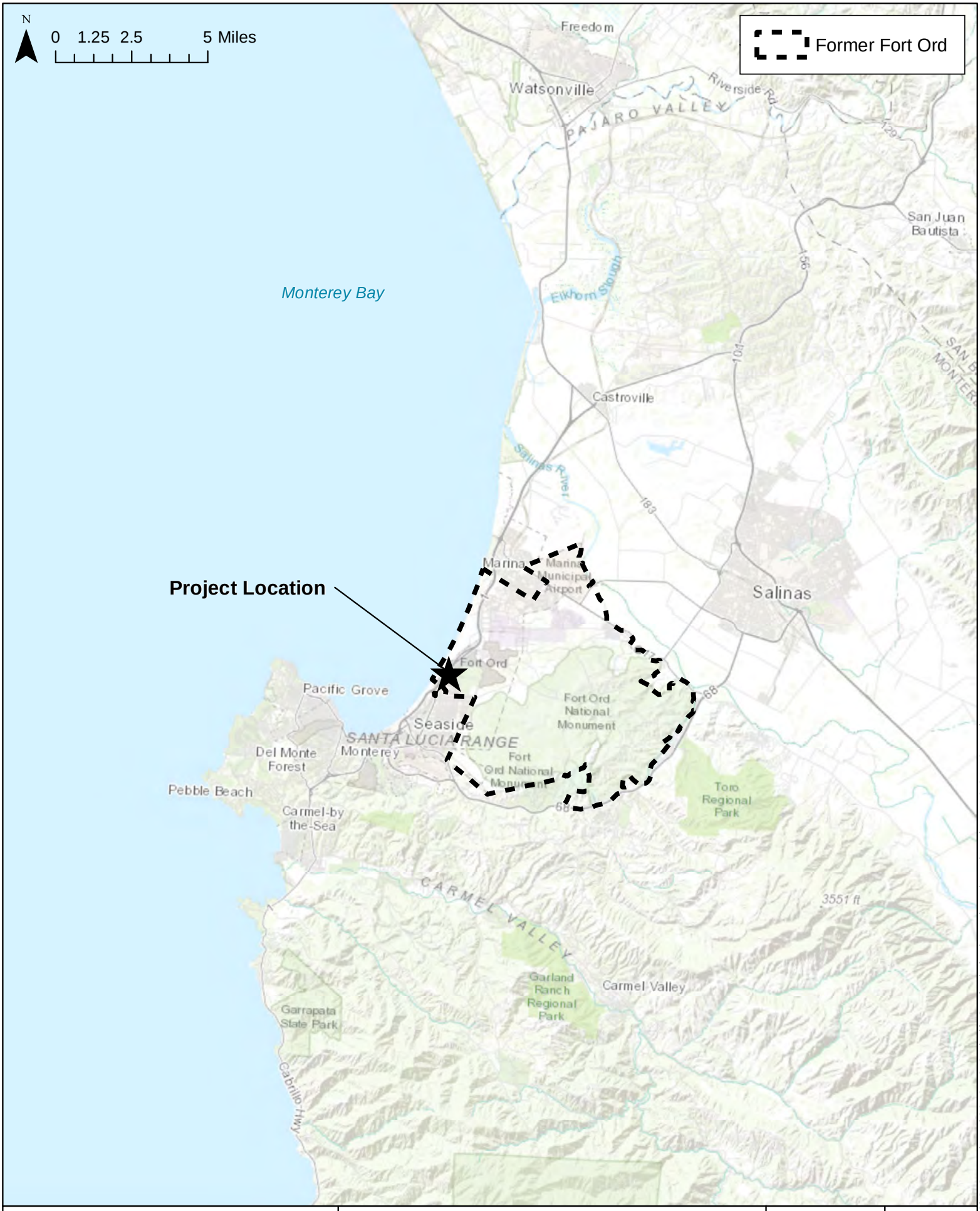
- Hoary bat (*Lasiurus cinereus*) – CNDDB[1],
- Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) – CSC,
- Northern California legless lizard (*Anniella pulchra*) – CSC/HMP,
- Coast horned lizard (*Phrynosoma blainvillii*) – CSC,
- Globose dune beetle (*Coelus globosus*) – CNDDB,
- Smith's blue butterfly (SBB; *Euphilotes enoptes smithi*) – FE/HMP, and

[1] Status Definitions – FT: Federally threatened; CSC: California Species of Concern; CFP: California Fully Protected Species; BCC: USFWS Bird of Conservation Concern; HMP: Fort Ord Habitat Management Plan Species; CRPR 1B: California Rare Plant Rank (CRPR) 1B; CNDDB: animal species on the CNDDB "Special Animals" list that are not assigned any of the other status designations but the CDFW considers to be those of greatest conservation need, regardless of their legal or protection status.

- Nesting raptors and other protected avian species, including:
  - Cooper's hawk (*Accipiter cooperii*) – CNDDB,
  - Oak titmouse (*Baeolophus inornatus*) – BCC,
  - Wrentit (*Chamaea fasciata*) – BCC,
  - Spotted towhee (*Pipilo maculatus*) – BCC, and
  - Allen's hummingbird (*Selasphorus sasin*) – BCC.

One special-status plant species is known to occur within the project site:

- Monterey spineflower (*Chorizanthe pungens* var. *pungens*) – FT/1B/HMP

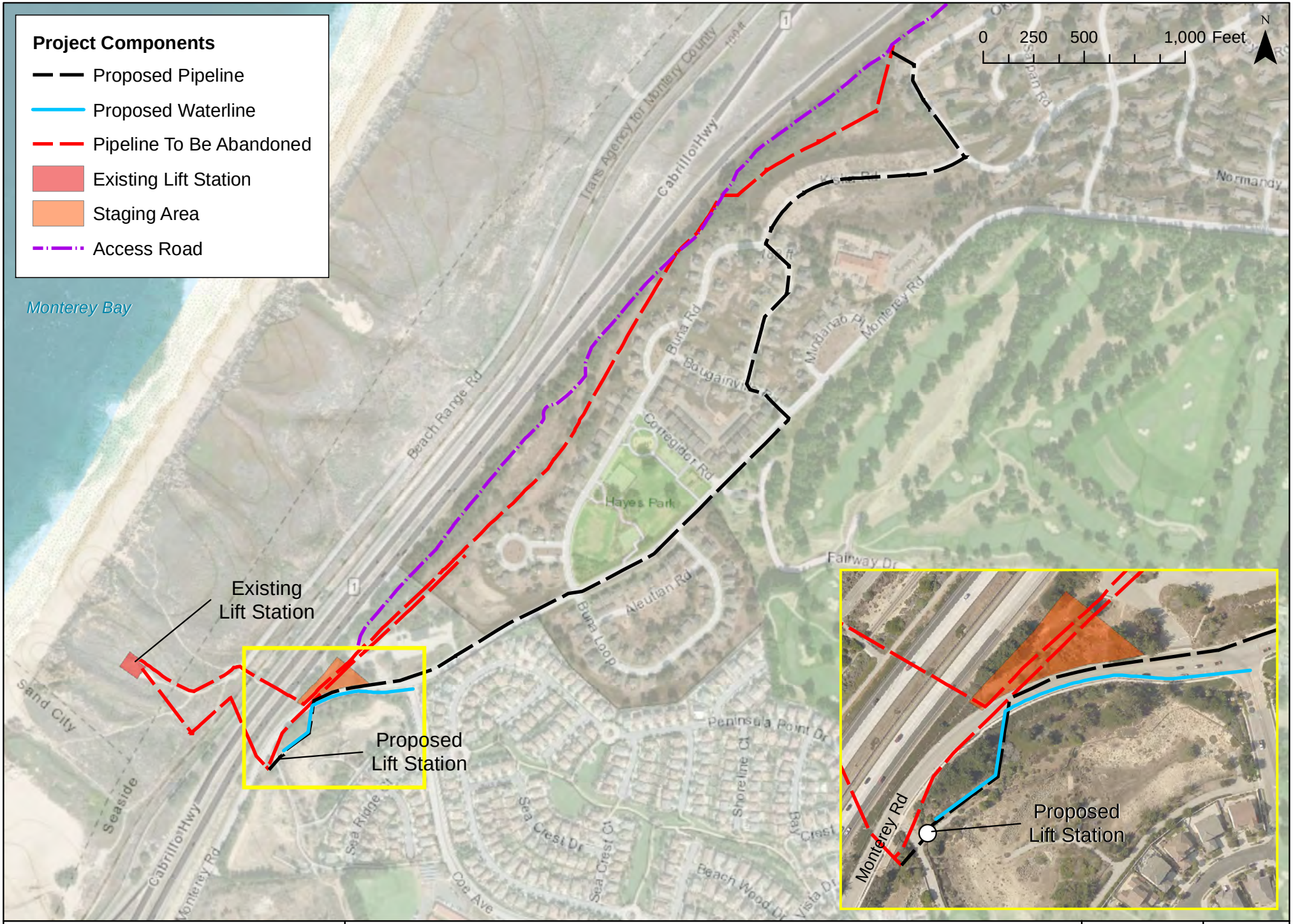


Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Vicinity Map

Date: 7/18/2019
Scale: 1 in = 4 mi
Figure: 1

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Regional Map 6-24-19.mxd



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Project Site Map

Date: 7/18/2019
Scale: 1 in = 606 ft
Figure: 2

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Project Site Map.mxd

2.0 INTRODUCTION

The MCWD is proposing to implement the Ord Village Force Main Replacement Project (project or proposed project), located in the City of Seaside, Monterey County, California (**Figure 1**). This report presents the findings of a biological resource assessment conducted by Denise Duffy & Associates, Inc. (DD&A) for the proposed project. The emphasis of this study is to describe existing biological resources within and surrounding the project, identify any special-status species and sensitive habitats within and adjacent to the project site, assess potential impacts that may occur to biological resources, and recommend appropriate avoidance, minimization, and mitigation measures necessary to reduce those impacts to a less-than-significant level in accordance with the California Environmental Quality Act (CEQA).

2.1 Project Background

The MCWD is a County Water District organized and operating under the County Water District Law, Water Code §30000. The MCWD is located on the coast of Monterey Bay at the northwest end of the Salinas Valley and occupies an area of about 4.5 square miles. The District was formed in 1960 and provides potable water, wastewater collection, and reclaimed water services within the City of Marina and the Ord Community. In 1992 the District joined the Monterey Regional Water Pollution Control Agency, now Monterey One Water (M1W), and connected to the Regional Treatment Plant. In 2018, the District conveyed approximately 2,200 acre-feet of sewage to M1W for treatment.

In 2001, the U.S. Army conveyed ownership of the water and wastewater infrastructure on the former Fort Ord through the Fort Ord Reuse Authority (FORA) to the MCWD.[2] As part of this transfer of ownership, the MCWD was conveyed the Ord Village Lift Station. The Ord Village Lift Station was originally a small wastewater treatment plant serving the housing areas along Coe Avenue. When the Army built the main wastewater treatment plant located at 10th Street, the Ord Village wastewater treatment plant was converted into a sewer lift station, with a force main running north toward the main plant. When the M1W Regional Treatment Plant was constructed, the U.S. Army retired their treatment plant and now the sewage enters the M1W wastewater interceptor by gravity at the old plant site. In the 1970's, Del Monte Road was widened into the current Highway 1, separating the Ord Village Lift Station from the area it serves.

The existing force main pipeline is 10-inch diameter steel pipe. The pipeline runs east from the lift station, crosses Highway 1 and turns north, running outside the highway right-of-way to a high point near the corner of Buna and Kiska Roads. At that point is continues as a gravity sewer, running north to the Gigling Lift Station. The steel pipeline has broken six times in the past ten years, requiring emergency shut-downs and repairs. A large-diameter Pacific Gas & Electric (PG&E) gas main runs parallel to the force main, limiting the available space for a parallel replacement force main. The District would like to replace this pipeline before a break occurs within the Highway 1 corridor. The Ord Village Lift Station is configured as a wet-pit/dry-pit station, requiring confined space entry controls for routine maintenance work. The District would like to replace this with a submersible pump lift station to eliminate that risk. The electrical equipment at the site is also experiencing corrosion due to the close proximity to the ocean.

[2] Assignment of Easements on Former Fort Ord and Ord Military Community, County of Monterey, and Quitclaim Deed for Water and Wastewater Systems, as and between FORA and MCWD, dated October 24, 2001.

2.2 Project Location and Area

The project site is located within the within the City of Seaside in Monterey County, California (**Figures 1 and 2**). The existing Ord Village Lift Station is located on a disturbed site on the west side of Highway 1, on assessor parcel number (APN) 031-051-001-000. The proposed replacement lift station would be located along Monterey Road on the edge of a City of Seaside percolation pond, next to the existing gravity sewer on APN 031-051-023-000. The existing force main would be accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road within APNs 031-141-004-000 and 031-141-002-000. Staging areas for construction would also be contained within APN 031-141-004-000 as well.

The new sanitary sewer force main (SSFM) is proposed to go under Monterey Road from the new lift station to the existing gravity sewer, connecting near the MCWD's Sanitary Sewer Manhole (SSMH) C6. Specifically, the new SSFM would follow Monterey Road, then turn into the Army housing area at Bougainville Road, turn onto Buna Road, then Kiska Road, and finally turn onto Okinawa Road where it would reconnect to the MCWD's gravity sewer.

2.3 Project Description

The existing Ord Village Lift Station and Force Main have exceeded their service life and require replacement. The existing lift station is located on the west side of Highway 1 within the FODSP, but the area served and the majority of the force main alignment are on the east side of Highway 1. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 LF of existing gravity and force main pipelines and two highway crossings. The proposed replacement lift station site would be 1,600 square feet (SF) (40 feet by 40 feet). The total length of the proposed pipeline is approximately 5,600 LF from the new lift station to where it connects to the existing gravity sewer. The proposed pipeline would include approximately 4,100 LF of pressurized force main, 1,500 LF of gravity sewer, and eight new manholes. The former Ord Village Lift Station west of Highway 1 would be demolished and removed. Approximately 6,200 LF of pipelines and manholes outside the site would be abandoned in place.

For the existing Ord Village system, sewage flows through gravity pipes west under Highway 1 to the pump station, then east under Highway 1 in a pressure pipeline. The pipeline follows the west edge of the Army housing area, and connects to a gravity pipeline at a high point near the corner of Buna and Kiska Roads. The existing force main pipe has exceeded its service life and has deteriorated structurally, requiring emergency repairs six times in the past ten years. The MCWD has planned for the replacement of these facilities by allocating funds to improve these facilities in the 2018-19 Five Year Capital Improvements Plan.

Various alignments were considered for relocating the force main, many of which required tree removal and/or continued access through the open space corridor for pipeline maintenance. The proposed alignment was selected as it provides all-weather maintenance access and eliminates future maintenance work next to the existing PG&E gas pipeline.

Due to poor existing conditions and design considerations, the MCWD proposes to replace the existing lift station at a new location. The proposed replacement lift station would be located at the edge of a City of seaside percolation pond along Monterey Road, at the point where the gravity sewers converge before

crossing Highway 1. The proposed replacement lift station would consist of a wet well and valve vault (below grade), electrical control panel and an emergency generator, enclosed with a chain-link fence.

The existing Ord Village Lift Station west of Highway 1 would be demolished and removed after the proposed replacement lift station is completed and operating. Work would be conducted within the currently disturbed area at this location. Pipelines and manholes outside the site would be abandoned in place. The following discussion provides a more detailed description of key project elements, including grading requirements, construction activities, operation, and schedule.

2.3.1 Grading

The proposed project involves approximately 10,500 cubic yards of fill and 10,500 cubic yards of cut. The majority of that is trench excavation and backfill, which would be cut and backfilled in the same day. Grading for the pipeline and pipeline connections would be limited to areas already disturbed.

2.3.2 Construction

Land disturbance for construction of the proposed replacement lift station would be approximately 0.4 acres and 1.4 acres for pipeline trenching. Construction activities would include excavation to install the precast concrete manholes, wet well, valve vault, and pipelines; pavement cutting for pipeline trenches, pipeline installation using lifting equipment and trench boxes, trench and excavation backfilling and compaction, cast-in-place concrete work for manhole bases and equipment pads, and street paving. PG&E would install a new underground electrical service to the proposed replacement lift station from an existing service pole on Monterey Road. The system transition would require installing a line stop on the existing force main and pumping the force main contents into a nearby gravity sewer. Construction equipment would include, but would not be limited to, tracked excavator, backhoe, water truck, concrete trucks, dump trucks, flat-bed delivery trucks, vibratory compacters, asphalt paving equipment and trailer-mounted bypass pumps. Sheet-pile shoring may be installed around the lift station excavation using vibratory equipment. Work within roads would require traffic control and flagmen.

No separate construction access roads would be needed; existing roads will be used to access the existing and replacement pump stations and an unpaved road along the pipeline easement will be used to access the force main. No separate construction access roads would be needed. During construction 6 round trip truck trips per day for 100 working days, and 2 roundtrip truck trips for equipment delivery for 50 days, are expected. Up to 10 employees are expected on the construction site per day.

Deconstruction of the existing Ord Village Lift Station would include relocating the pumps to the proposed replacement lift station, salvaging metals for recycling, removing the concrete building and surface improvements within the 0.9 acre site, abandoning pipelines by flushing with clean water and setting grout plugs at the ends, abandoning manholes by removing the upper cone, and filling the manhole with clean sand. PG&E may choose to remove the existing pole line serving the existing lift station. Site equipment would include excavators, dump trucks, water trucks and concrete trucks. Reseeding of the site would be coordinated with California State Parks staff. Deconstruction is anticipated to take up to 4 weeks following start-up and commissioning of the new pump station.

2.3.3 Project Schedule

Construction activities would be limited to weekdays between the hours of 8:00 AM to 4:00 PM. Night-time construction would be required for the system switch-over from existing to new, which would be a single night. Pipeline construction is anticipated to require 8 weeks, and lift station site construction is anticipated to require 4 months. Construction is anticipated to occur between January 1 and September 30, 2020.

3.0 METHODS

3.1 Personnel and Survey Dates

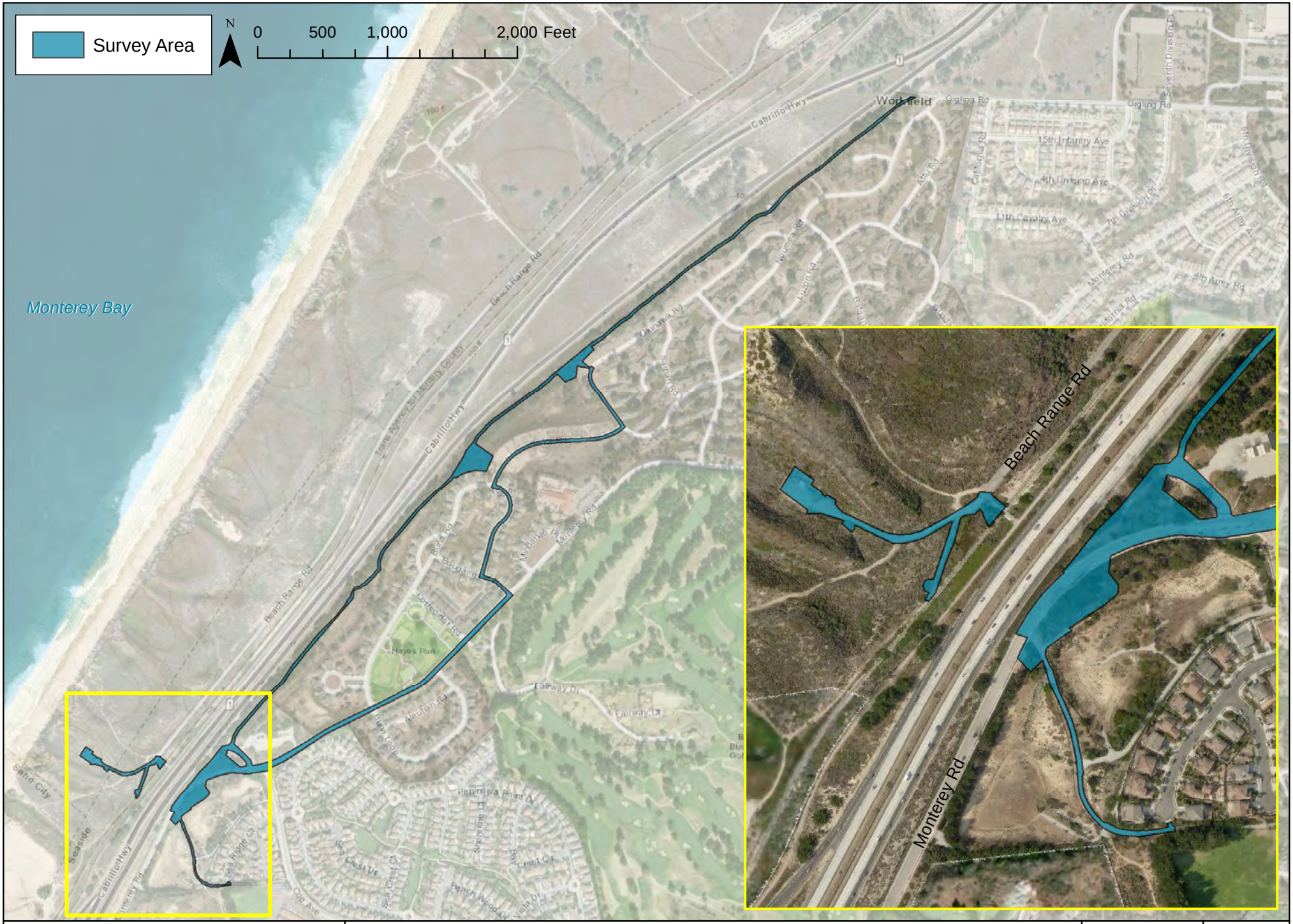
DD&A conducted surveys of the project site in May and June 2019. The survey area was defined by placing buffers around project components based on data provided by Schaaf & Wheeler and GPS data collected of manhole locations, and identifying staging and access areas using aerial imagery (Figure 3). Botanical survey methods included walking the survey area and using aerial maps to identify general vegetation types and potential sensitive vegetation types, and conducting focused surveys for special-status plant species. Concurrently, reconnaissance-level wildlife habitat surveys were conducted to identify suitable habitat and observe any special-status wildlife species. Data collected during the surveys were used to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts.

The project site was surveyed for botanical resources following the applicable guidelines outlined in: *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (U.S. Fish and Wildlife Service [USFWS], 2000), *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018c), and *CNPS Botanical Survey Guidelines* (CNPS, 2001). All special-status plant species identified were mapped using a Trimble Pro XH GPS unit. Populations of plants with greater than six individuals were mapped as a polygon and the density of the population was documented. Densities were recorded as low (1-33% cover), medium (34-66% cover), and high (67-100% cover). Individual plants or populations of less than six individuals were mapped as a point and a count of the number of individual plants was documented. Populations included all individuals within approximately three feet of another individual; individual plants further than three feet apart were mapped as a separate polygon or point. General and sensitive vegetation types were also mapped during the survey effort using a combination of GPS and hand drawing on aerial maps, which were later digitized using ArcGIS software.

3.2 Special-Status Species

Special-status species are those plants and animals that have been formally listed or proposed for listing as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Listed species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Section 15380 are also considered special-status species. Animals on the CDFW's list of "species of special concern" (most of which are species whose breeding populations in California may face extirpation if current population trends continue) and avian species on USFWS's "Birds of Conservation Concern" list (birds that, without additional conservation actions, are likely to become candidates for listing under ESA) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA. Additionally, the CDFW also includes some animal species that are not assigned any of the other status designations in the CNDDB "Special Animals" list; however, these species have no legal or protection status.

Plants listed as rare under the California Native Plant Protection Act (CNPPA) or included in California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR; formerly known as CNPS Lists) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Survey Area Map

Date
7/18/2019

Scale
1 in = 944 ft

Figure
3

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Survey Area Map.mxd

of the CESA and in accordance with CEQA Guidelines Section 15380.[3] In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2019) be fully considered during the preparation of environmental documents relating to CEQA.[4] In addition, species of vascular plants, bryophytes, and lichens listed as having special-status by the CDFW are considered special-status plant species (CDFW, 2018a). CNPS CRPR 4 species (plants of limited distribution) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA. While other species (i.e., CRPR 3 or 4 species) are sometimes found in database searches or within the literature, these were not included within the analysis as they did not meet the definitions of Section 2062 and 2067 of CESA.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected in California under Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto."

In addition, fully protected species under the Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

3.3 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted vegetation types. Vegetation types considered sensitive include those listed on the CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2018b), those that are occupied by species listed under ESA or are critical habitat in accordance with ESA, and those that are defined as ESHA under the CCA. Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act [CWA] and Executive Order [EO] 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

3.4 Data Sources

The primary literature and data sources reviewed in order to determine the occurrence or potential for occurrence of special-status species at the project site are as follows:

[3] CNPS initially created five CRPR to categorize degrees of concern; however, to better define and categorize rarity in California's flora, the CNPS Rare Plant Program and Rare Plant Program Committee have developed the new CRPR 2A and CRPR 2B.

[4] CRPR 3 species (Plants about which we need more information - a review list) and CRPR 4 species (Plants of limited distribution - a watch list) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA.

- Current agency status information from USFWS and CDFW for species listed, proposed for listing, or candidates for listing as threatened or endangered under ESA or CESA, and those considered CDFW "species of special concern", including:
  - CNDDB occurrences reports from the Marina quadrangle and the six surrounding quadrangles, including Monterey, Moss Landing, Prunedale, Salinas, Seaside, and Spreckels (CDFW, 2019; **Appendix B**); and
  - USFWS IPaC Resource List (USFWS, 2019; **Appendix C**).
- CDFW's Special Animals List (CDFW, 2018a);
- The CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2019);
- The *Flora and Fauna Baseline Study of Fort Ord* (U.S. Army Corps of Engineers [ACOE], 1992); and
- The *Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord* (HMP) (ACOE, 1997).

From these resources, a list of special-status plant and wildlife species known or with the potential to occur in the vicinity of the project site was created (**Appendix A**). This list presents these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur.

3.4.1 Botany

Vegetation types identified in *A Manual of California Vegetation* (Sawyer et.al., 2009) were utilized to determine if vegetation types identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2018b) are present within the project site. Information regarding the distribution and habitats of local and state vascular plants was also reviewed (Howitt and Howell, 1964 and 1973; Munz and Keck, 1973; Baldwin et al., 2012; Matthews and Mitchell, 2015; Jepson Flora Project, 2019). All plants observed within the project site during the surveys were identified to species or intraspecific taxon necessary to eliminate them as being special-status species using keys and descriptions in *The Jepson Manual: Vascular Plants of California, Edition 2* (Baldwin et al., 2012) and *The Plants of Monterey County an Illustrated Field Key* (Matthews and Mitchell, 2015). Scientific nomenclature for plant species identified within this document follows Baldwin, et. al, (2012); common names follow Matthews and Mitchell (2015). A full botanical inventory was recorded for the project site and the dominant species within each habitat were noted. Dominant plant species are those which are more numerous than its competitors in an ecological community or makes up more of the biomass; generally, the species that are most abundant. Most ecological communities are defined by their dominant species.

The California Invasive Plant Council (Cal-IPC) Inventory (Cal-IPC, 2019) was reviewed to determine if any invasive plant species are present within the project site.

3.4.2 Wildlife

The following literature and data sources were reviewed: CDFW reports on special-status wildlife (Remsen, 1978; Williams, 1986; Jennings and Hayes, 1994; Thelander, 1994; Thomson et. al, 2016); California Wildlife Habitat Relationships Program species-habitat models (Zeiner et al., 1988 and 1990); and general wildlife references (Stebbins, 1972, 1985, and 2003).

3.5 Regulatory Setting

The following regulatory discussion describes the major laws that may be applicable to the project.

3.5.1 Federal Regulations

Federal Endangered Species Act

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The ESA is administered by USFWS or National Oceanic and Atmospheric Administration Marine Fisheries Service (NMFS). In general, the NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

The U.S. Army's decision to close and dispose of the Fort Ord military base was considered a major federal action that could affect listed species under the ESA. USFWS issued a Final Biological Opinion (BO) on the disposal and reuse of former Fort Ord on October 19, 1993. USFWS issued five additional BOs and one amendment between 1999 and 2014 as a result of consultation reinitiated by the Army. On May 28, 2015, USFWS issued a Programmatic BO that superseded the previous BOs. Then on June 7, 2017, USFWS issued a reinitiated Programmatic BO that supersedes the 2015 Programmatic BO. The 2017 Programmatic BO is the current and relevant BO for activities at the former Fort Ord; the 2017 Programmatic BO contains additional conservation measures and recommendations relating to environmental cleanup actions at former Fort Ord cleanup sites.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Recovery Plans

The ultimate goal of the ESA is the recovery (and subsequent conservation) of endangered and threatened species and the ecosystems on which they depend. A variety of methods and procedures are used to recover listed species, such as protective measures to prevent extinction or further decline, consultation to avoid adverse impacts of federal activities, habitat acquisition and restoration, and other on-the-ground activities for managing and monitoring endangered and threatened species. The collaborative efforts of USFWS and its many partners (federal, state, and local agencies, tribal governments, conservation organizations, the business community, landowners, and other concerned citizens) are critical to the recovery of listed species.

Two recovery plans have been prepared for listed species known or with the potential to occur within the Project site:

- Smith's Blue Butterfly Recovery Plan (USFWS, 1984), and
- Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan (USFWS, 1998a).

Executive Order 13112 - Invasive Species

EO 13112 - Invasive Species requires the prevention of introduction and spread of invasive species. Invasive species are defined as "alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health." Each federal agency whose actions may affect the status of invasive species on a project site shall, to the extent practicable and permitted by law, subject to the availability of appropriations, use relevant programs and authorities to: 1) prevent the introduction of invasive species; 2) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; 3) monitor invasive species populations accurately and reliably; 4) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; 5) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and 6) promote public education on invasive species and the means to address them. A national invasive species management plan was prepared by the National Invasive Species Council and the Invasive Species Advisory Committee (ISAC) that recommends objectives and measures to implement the EO.

3.5.2 State Regulations

California Endangered Species Act

The CESA was enacted in 1984. The California Code of Regulations (Title 14, §670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize "take" of any state listed species.

California Fish and Game Code

Birds. Section 3503 of the Fish and Game Code states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal MBTA. Section 3800 prohibits take of nongame birds.

Fully Protected Species. The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (§5515), mammals (§4700), amphibians and reptiles (§5050), and birds (§3511). Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully protected species may not be taken or possessed at any time

and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Species of Special Concern. As noted above, the CDFW also maintains a list of animal "species of special concern." Although these species have no legal status, the CDFW recommends considering these species during analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

Native Plant Protection Act

The CNPPA of 1977 directed the CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in the state." The CNPPA prohibits importing rare and endangered plants into California, taking rare and endangered plants, and selling rare and endangered plants. The CESA and CNPPA authorized the Fish and Game Commission to designate endangered, threatened and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the CNPPA are not protected under CESA.

California Coastal Act

The California Coastal Commission (CCC) was established by voter initiative in 1972 (Proposition 20) and later made permanent by the California State Legislature through adoption of the CCA of 1976. The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. California's coastal zone generally extends 1,000 yards inland from the mean high tide line. In significant coastal estuarine habitat and recreational areas, it extends inland to the first major ridgeline or five miles from the mean high tide line, whichever is less. In developed urban areas, the boundary is generally less than 1,000 yards. Development activities, which are broadly defined by the CCA to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a Coastal Development Permit (CDP) from either the CCC or the local government if a Local Coastal Program (LCP) has been certified. After certification of a LCP, coastal development permit authority is delegated to the appropriate local government, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). The Commission also has appellate authority over development approved by local governments in specified geographic areas as well as certain other developments. A CDP is required in addition to any other permit required from resource agencies.

The CCC or the local government may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as ESHA. Section 30107.5 of the CCA defines an "environmentally sensitive area" as any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Development is restricted within the coastal zone and prohibited within designated ESHA, unless the development is coastal dependent and does not have a significant effect on the resources. Section 30240 of the CCA states that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." This section also states that "development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and

designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."

The project site area west of Highway 1 is under original jurisdiction of the CCA and is regulated by the CCC. The remainder of the project site is not within the coastal zone.

3.5.3 Local Regulations

Fort Ord Dunes State Park General Plan and EIR

The former Ord Village Lift Station is located in an easement on State Parks Lands within Fort Ord Dunes State Park (FODSP), which is governed by the FODSP General Plan. The FODSP General Plan identifies the project site as a resource management zone.

The FODSP General Plan evaluated the potential impacts of utilities construction and management within the Park at a programmatic-level and requires that specific facilities and plans be reviewed at the time they are proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures. The FODSP General Plan identified guidelines to address potential biological resources concerns within the Park and to minimize potential impacts to biological resources in connection with the implementation of the General Plan. The FODSP General Plan also contains a number of management guidelines to address potential concerns related to biological resources. Applicable guidelines include: BIO-1, BIO-2, BIO-4, BIO-5, BIO-8, BIO-10, and BIO-17. These policies generally promote identifying, protecting, and ensuring perpetuation of park plant and wildlife species populations.

The FODSP General Plan EIR considered potential impacts associated with the implementation of the FODSP General Plan at a programmatic-level. Where appropriate, the FODSP General EIR identified potential mitigation measures for future projects. The FODSP General Plan EIR determined that potential impacts would be less than significant with the implementation of mitigation measures. Applicable mitigation measures include Mitigation Measure Bio-1 and Mitigation Measure Bio-2, which address potential impacts to native habitats and species, including special-status species. These mitigation measures are in addition to applicable guidelines intended to address biological resources constraints. The Project would be required to comply with all applicable guidelines, as well as mitigation measures contained in the FODSP General Plan EIR to the extent they are applicable. Additional, project-specific mitigation has been identified below.

Fort Ord Habitat Management Plan

The U.S. Army's decision to close and dispose of the Fort Ord military base was considered a major federal action that could affect listed species under the ESA. In 1993, USFWS issued a BO on the disposal and reuse of former Fort Ord requiring that a HMP be developed and implemented to reduce the incidental take of listed species and loss of habitat that supports these species (USFWS, 1993, updated to USFWS, 2017b). The HMP was prepared to assess impacts on vegetation and wildlife resources and provide mitigation for their loss associated with the disposal and reuse of former Fort Ord (ACOE, 1997).

The HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat conservation areas and corridors to compensate for future development in other areas of the former base.

The HMP identifies what type of activities can occur on each parcel at former Fort Ord; parcels are designated as "development with no restrictions," "habitat reserves with management requirements," or "habitat reserves with development restrictions." The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation should be necessary for impacts to species and habitats considered in the HMP. This plan has been approved by USFWS; the HMP, deed restrictions, and Memoranda of Agreement between the Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document, and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and through deed covenants.

However, the HMP does not provide specific authorization for incidental take of federal or state listed species to existing or future non-federal land recipients under the ESA or CESA. In compliance with the ESA and CESA, FORA is currently in the process of obtaining a Section 10(a)(1)(B) Incidental Take Permit from USFWS and Section 2081 Incidental Take Permit from CDFW, which will provide base-wide coverage for the take of federal and state listed wildlife and plant species to all non-federal entities receiving land on the former Fort Ord. This process involves the preparation of a Habitat Conservation Plan (HCP). The Draft Fort Ord HCP (ICF International, Inc., 2017) is currently in draft form and being reviewed by the resource agencies. The base-wide incidental take permits are expected to be issued by USFWS and CDFW by the end of 2019.

The project site is located within designated "development" parcels and "development within reserve areas or development with restrictions" parcels. Parcels designated as "development" have no management restrictions. However, the 2017 Programmatic BO and HMP require the identification of sensitive botanical resources within the development parcels that may be salvaged for use in restoration activities in reserve areas (USFWS, 2017b and ACOE, 1997). Within the "development within reserve areas or development with restrictions" parcels, the HMP requires preservation and restoration of native vegetation and HMP species habitat outside of areas identified for development.

City of Seaside General Plan

Along with the applicable HMP designations, the proposed pump station and pipeline is within the jurisdiction of the City of Seaside General Plans. The proposed new lift station area is designated and zoned Community Commercial (CC). The new pipeline would be within existing roadways.

Habitat Conservation Plans or NCCP

There are no adopted HCPs or Natural Community Conservation Plans (NCCP) associated with the project site. Please refer to the discussion of the Draft HCP currently in progress in the Fort Ord HMP section above.

This page left intentionally blank

4.0 RESULTS

4.1 Vegetation Types

Two vegetation units were mapped within the project site: dune scrub and ruderal/landscaped (**Figure 4**). Additionally, a portion of the project site is developed (paved road and the existing lift station). A brief description of each vegetation type can be found below along with a statement of the presence or potential presence of special-status species within each. In addition, each vegetation type description identifies the vegetation classification from *A Manual of California Vegetation* (Sawyer et al., 2009) and whether the vegetation type is identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2018b).

4.1.3 Dune Scrub

- *A Manual of California Vegetation* classifications: Silver dune lupine-mock heather scrub (*Lupinus chamissonis - Ericameria ericoides* shrubland alliance)
- CDFW's *California Natural Communities List*: sensitive

Dune scrub occurs along the California coast, typically in more exposed settings, such as active dunes. Mock heather (*Ericameria ericoides*) is the dominant shrub species within the project site; however, other shrub and subshrub species present include coastal sagewort (*Artemisia pycnocephala*), seacliff buckwheat (*Eriogonum parvifolium*), and golden yarrow (*Eriophyllum confertiflorum*). Annual species occurring between the shrubs include fiddleneck (*Amsinckia* sp.), common phacelia (*Phacelia distans*), and California poppy (*Escholzia* california), California cudweed (*Pseudognaphalium californicum*). Within the project site, the margins of this vegetation type are disturbed associated with the adjacent roadway/trail and includes annual grass and herbaceous species such as rattail fescue (*Festuca myuros*), ripgut brome (*Bromus diandrus*), sandmat (*Cardionema ramosissimum*), telegraph weed (*Heterotheca grandiflora*), bur clover (*Medicago polymorpha*), and Monterey spineflower. Approximately 0.2 acre of dune scrub is present within the project site.

Dune scrub communities provide cover and food for a number of wildlife species, including songbirds, snakes, lizards, rodents, and other small mammals. Common species that may occur within dune scrub include western scrub jay (*Aphelocoma californica*), California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia melodia*), coast range fence lizard (*Sceloporus occidentalis bocourtii*), San Francisco alligator lizard (*Elgaria coerulea coerulea*), gopher snake (*Pituophis catenifer catenifer*), deer mouse (*Peromyscus maniculatus*), and California ground squirrel (*Otospermophilus beecheyi*).

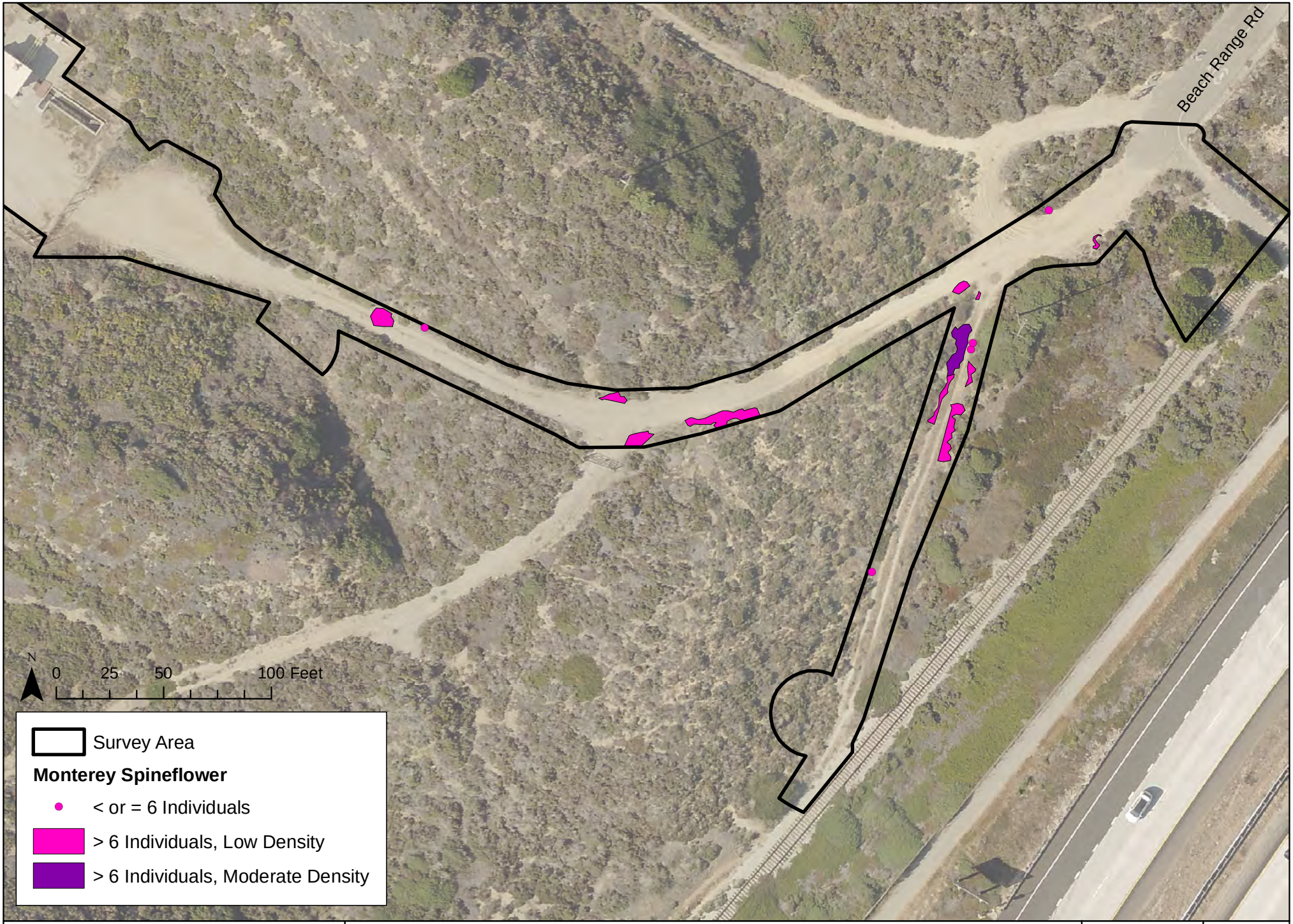
Monterey spineflower was the only special-status plant species identified within this vegetation type during focused botanical surveys in May and June 2019 (**Figure 5**).

Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Vegetation Types Map

Date: 7/18/2019
Scale: 1 in = 944 ft
Figure: 4

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Vegetation Types Map.mxd



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Special-Status Plant Species Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
5

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Special Status Plant Species Map.mxd

No special-status wildlife species were observed within this vegetation type; however, the host plant species for SBB (seacliff buckwheat) was observed (**Figure 6**) and a CNDDB reports and occurrence of this species within this portion of the project site. As such, SBB is assumed present within the dune scrub habitat where its host plant species occurs. In addition, suitable habitat is present for Monterey dusky-footed woodrat, Northern California legless lizard, coast horned lizard, and globose dune beetle. The spotted towhee, wrentit, and Allen's hummingbird may nest within this vegetation type, and the hoary bat and Cooper's hawk may use this vegetation type for foraging and/or cover.

4.1.5 Ruderal/Landscaped

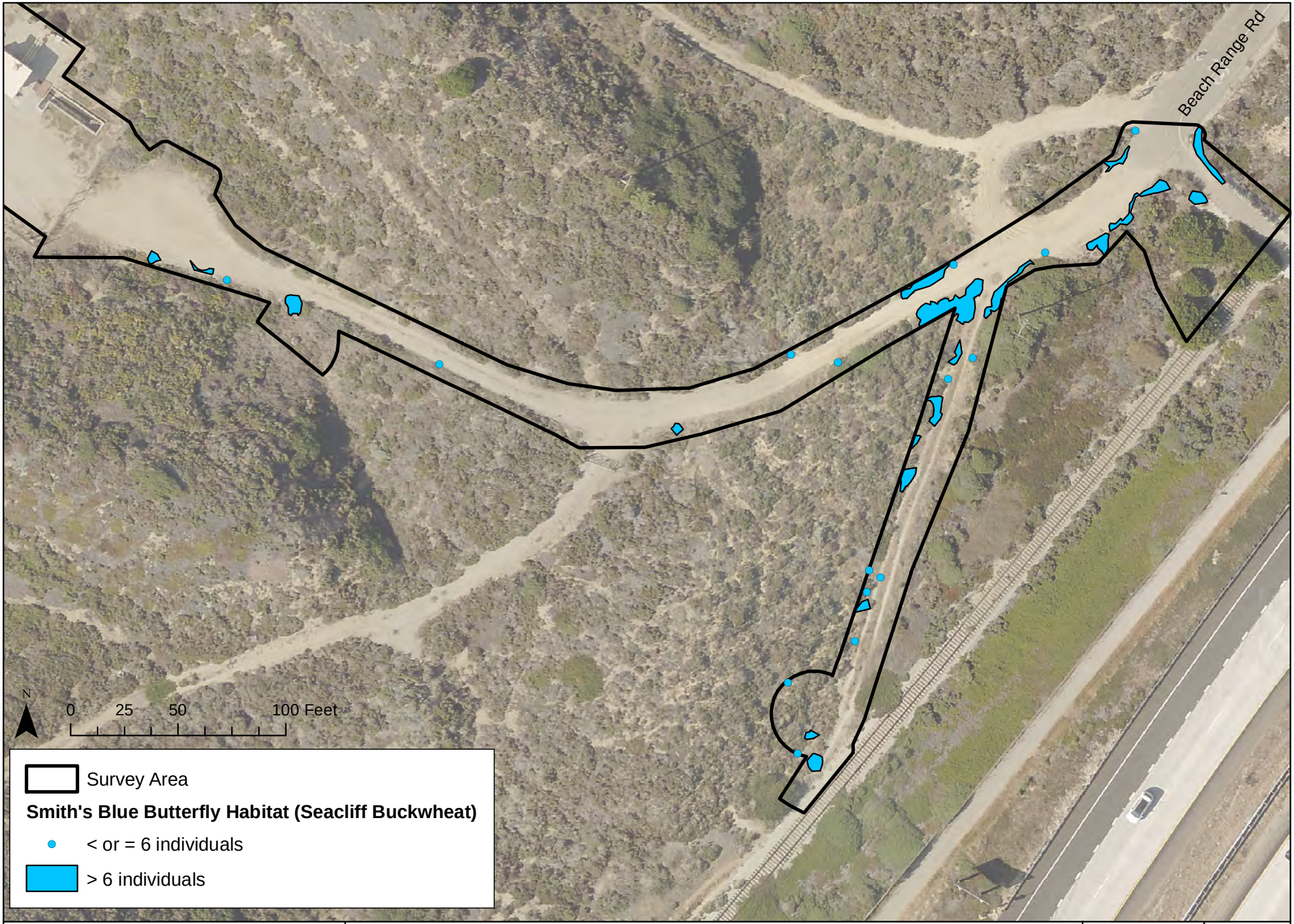
- *A Manual of California Vegetation* classifications: None
- CDFW's *California Natural Communities List*: Not listed

Ruderal areas are those areas which have been disturbed by human activities and are dominated by non-native annual grasses and other "weedy" species. Landscaped areas are also included within this vegetation type (**Figure 4**). Ruderal areas within the project site include vegetation dominated by Monterey cypress (*Cupressus macrocarpa*), hottentot fig (*Carpobrotus* sp.), acacia (*Acacia* sp.), ripgut brome, slender oat (*Aventa barbata*), Bermuda buttercup (*Oxalis pes-capre*), miner's lettuce (*Claytonia* sp.) summer mustard (*Hirschfeldia incana*), yellow sweet clover (*Melilotus officinalis*), and telegraphweed. Approximately 6.5 acres of ruderal/landscaped areas are present within the project site.

This vegetation type is considered to have low biological value as it is generally dominated by non-native plant species and consists of relatively low-quality habitat from a wildlife perspective. However, common wildlife species which do well in urbanized and disturbed areas, such as the American crow (*Corvus brachyrhynchos*), California ground squirrel, raccoon, striped skunk (*Mephitis mephitis*), western scrub jay, European starling (*Sturnus vulgaris*), coast range fence lizard, and rock pigeon (*Columba livia*), may forage within this vegetation type.

Monterey spineflower was the only special-status plant species identified within this vegetation type during focused botanical surveys in May and June 2019 (**Figure 5**).

Although ruderal areas represent relatively low-quality wildlife habitat, some special-status wildlife species may occur: Northern California legless lizard may occur where loose, sandy soils are present; Monterey dusky-footed woodrat may build stick nests under shrubs and trees; hoary bat may forage and use trees for night roosts; and the Cooper's hawk, spotted towhee, wrentit, oak titmouse, and Allen's hummingbird may forage or nest within this vegetation type. Additionally, the host plant species for SBB (seacliff buckwheat) was observed (**Figure 6**) and a CNDDB reports and occurrence of this species within this portion of the project site. As such, SBB is assumed present within the ruderal areas where its host plant species occurs.



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Smith's Blue Butterfly Habitat Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
6

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\SBB Habitat Map Map.mxd

4.1.6 Developed

- *A Manual of California Vegetation* classifications: None
- CDFW's *California Natural Communities List*: Not listed

Approximately 4.7 acres of the project site is developed. Developed areas within the project site include paved roads and the existing lift station (**Figure 4**). No vegetation is present within these areas and they are considered to have little biological value. However, some common wildlife species that do well in urbanized areas, including American crow, California ground squirrel, raccoon, striped skunk, western scrub jay, European starling, and rock pigeon, may be found foraging within developed areas.

No special-status plant or wildlife species were observed within developed areas during biological surveys of the project site in May and June 2019 and none are expected to occur based on lack of suitable habitat.

4.2 Special-Status Species

Published occurrence data within the project area and surrounding USGS quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the project site (see "Methods" and **Appendix A**). Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the project site (**Appendix A**). The special-status species that are known to or have been determined to have a moderate or high potential to occur within or immediately adjacent the project site are discussed below. All other species are assumed unlikely to occur or have a low potential to occur based on the species-specific reasons presented in **Appendix A**, are therefore unlikely to be impacted by the project, and are not discussed further.

4.2.1 Special-Status Wildlife Species

Hoary Bat

The hoary bat is included on CDFW's "Special Animals" list. This species has the broadest range of any North American bat, occurring from Northern Canada to South America, and may be found anywhere in California. This species winters in California and Mexico and often migrates towards summer quarters in the north and east during the spring (Cryan, 2003). Spring migration is typically February to May, while fall migration typically occurs September through November. Hoary bats are a solitary species except during migration when larger groups are often formed or when mothers are rearing their young (Tuttle, 1995); however, unlike other bat species, hoary bats do not form maternity colonies. Hoary bats mate in fall or winter and sperm is stored over winter. Fertilization occurs in early spring and gestation is 80 to 90 days. One to four young are born in late May to late June. As such, parturition occurs at summer quarters and there is little evidence that females give birth and raise young in California (Cryan, 2003; Findley and Jones, 1964). Unlike many other bat species that often roost in buildings, hoary bats are seldom found in urban settings (Tuttle, 1995). The hoary bat typically roosts 10-15 feet above ground in the branches/foliage of medium to large deciduous and coniferous trees. Individuals wintering in cold climates hibernate, but may be active on warm winter days. This species is nocturnal, emerging late in the evening with peak activity varying with season and location, but usually three to five hours after sunset. The hoary bat hunts above canopy level, in clearings, and over water. This species has also been known to set up foraging territories at bright lights where insects congregate.

The CNDDB reports two occurrences of hoary bat within the seven quadrangles reviewed, the nearest of which is reported approximately five miles from the project site. Suitable foraging habitat is present within all undeveloped areas of the project site and day and night roost habitat is present within ruderal areas where trees are present; however, the project site is outside the known breeding range of this species.

Monterey Dusky-Footed Woodrat

The Monterey dusky-footed woodrat is a CDFW species of special concern. This is a subspecies of the dusky-footed woodrat *(Neotoma macrotis)*, which is common to oak woodlands and other forest types throughout California. Dusky-footed woodrats are frequently found in forest habitats with moderate canopy cover and a moderate to dense understory, including riparian forests; however, they may also be found in chaparral communities. Relatively large nests are constructed of grass, leaves, sticks, and feathers and are built in protected spots, such as rocky outcrops or dense brambles of blackberry and/or poison oak. Typical food sources for this species include leaves, flowers, nuts, berries, and truffles. Dusky-footed woodrats may be a significant food source for small- to medium-sized predators. Populations of this species may be limited by the availability of nest material. Within suitable habitat, nests are often found in close proximity to each other.

The CNDDB does not report any occurrences of Monterey dusky-footed woodrat within the seven quadrangles reviewed. However, this species is known to occur throughout the former Fort Ord and suitable habitat is present within the dune scrub and ruderal vegetation types.

Northern California Legless Lizard

The Northern California legless lizard is a CDFW species of special concern, as well as an HMP species.[5] This fossorial (burrowing) species typically inhabits sandy or loose (friable) soils. Habitats known to support Northern California legless lizard include (but are not limited to) coastal dunes, valley and foothill grasslands, chaparral, and coastal scrub at elevations from near sea level to approximately 1800 meters (6000 feet). The Northern California legless lizard forages on invertebrates beneath the leaf litter or duff layer at the base of bushes and trees or under wood, rocks, and slash in appropriate habitats. The diet of this species likely overlaps to some extent with that of juvenile alligator lizards and perhaps some other salamanders. This species may be preyed upon by alligator lizards, snakes, birds, and small mammals. Little is known about the specific habitat requirements for courtship and breeding; however, the mating season for this species is believed to begin late spring or early summer, with one to four live young born between September and November.

The CNDDB reports 56 occurrences of Northern California legless lizard within the seven quadrangles reviewed, including an occurrence that overlaps with a portion of the project site, and this species is known

[5] The HMP identifies this species as black-legless lizard (*Anniella pulchra* ssp. *nigra*) in order to differentiate it from the previously identified silvery-legless lizard (*A. p.* ssp. *pulchra*). These subspecies are based primarily on phenotypic differences (black-legless lizard being much darker, having fewer scales on the back, and a relatively shorter tail) and very limited genetic work. Further, the range of the black-legless lizard has historically been classified as "restricted to coastal and interior dune sand other areas of sandy soils in the vicinity of Monterey Bay and the Monterey Peninsula" (USFWS, 1998b), while the range of silvery-legless lizard has been classified as widespread throughout central California (Parham and Papenfuss, 2008). However, recent genetic studies have revealed five lineages of this species that correspond with different geographic areas of California (Parham and Papenfuss, 2008). These studies do not, however, identify the legless lizards occurring on the coast of Monterey Bay (i.e. the currently designated black-legless lizard) as a separate lineage. Currently, CDFW identifies both subspecies as the Northern California legless lizard and this document, therefore, follows the current regulatory identification.

to occur in several areas of Fort Ord. Suitable habitat for Northern California legless lizard is present throughout all undeveloped areas of the project site where appropriate soil conditions occur. Therefore, there is a high potential for the Northern California legless lizard to occur within the project site.

Coast Horned Lizard

The coast horned lizard is a CDFW species of special concern. Horned lizards occur in valley-foothill hardwood, conifer, and riparian habitats, as well as in pine-cypress, juniper, chaparral, and annual grass habitats. This species generally inhabits open country, especially sandy areas, washes, flood plains, and wind-blown deposits in a wide variety of habitats. Coast horned lizards rely on camouflage for protection and will often lay motionless when approached. Horned lizards often bask in the early morning on the ground or on elevated objects such as low boulders or rocks. Predators and extreme heat are avoided by burrowing into loose soil. Periods of inactivity and winter hibernation are spent burrowed into the soil or under surface objects. Little is known about the habitat requirements for breeding and egg-laying of this species. Prey species include ants, beetles, wasps, grasshoppers, flies, and caterpillars.

The CNDDB reports five occurrences of the coast horned lizard within the seven quadrangles reviewed, the nearest of which is approximately 2.8 miles northeast of the project site. Additionally, this species has been observed throughout Fort Ord by DD&A biologists. Suitable habitat for this species is present within the project site within the dune scrub vegetation type.

Smith's Blue Butterfly

The SBB was listed as a federally Endangered species on June 1, 1976 (41 FR 22041 22044). SBB is also an HMP species. This species historically ranged along the California coast from Monterey Bay south through Big Sur to near Point Gorda, occurring in scattered populations in association with coastal dune, coastal scrub, chaparral, and grassland habitats. The primary limiting factor for SBB populations is the occurrence of their host plants, seacliff buckwheat and coast buckwheat (*Eriogonum latifolium*), in which they are associated with for their entire life span. There is also a potential for SBB to use naked buckwheat (E. nudum) within a range of the obligate host species (pers. comm. Dave Dixon, California State Parks). The presence of the host plant, however, is not always an indication of the occurrence of the butterfly, as the host plant distribution is much more extensive than that of the butterfly.

Individual adult males and females live approximately one week. Adult emergence and seasonal activity is synchronized with the blooming period of the particular buckwheat used at a given site. Dispersal data from capture-recapture studies (Arnold, 1983) indicate that most adults are quite sedentary, with home ranges no more than a few acres. SBB has only one generation per year. Females lay single eggs into buckwheat flower heads, which hatch in approximately one week. Caterpillars mature over a span of approximately three to four weeks, feeding on petals and seeds of the buckwheat plant. Chrysalis formation then takes place in the buckwheat flower head and the chrysalis eventually falls into the leaf litter and topsoil beneath the plant where it remains for approximately 47 weeks until the cycle begins again (Dixon, 1999).

The CNDDB reports 14 occurrences of the SBB within the seven quadrangles reviewed, including an occurrence that overlaps with a portion of the project site. Approximately 0.03 acre and nine individuals of seacliff buckwheat was identified within the dune scrub vegetation west of Highway 1 during botanical surveys in May 2019 (**Figure 6**). As such, this species is assumed present where its host plant occurs.

Globose Dune Beetle

The globose dune beetle is included on CDFW's "Special Animals" list. The globose dune beetle inhabits of California's coastal dune system. The species is widely distributed throughout California, in spite of the fact that the adults lack functional wings, and has also colonized the California Channel Islands. Though in some areas this beetle is still relatively abundant, it has been proposed for listing in order to call attention to the fact that its habitat, coastal dune is itself disappearing. Globose dune beetles are primarily subterranean, tunneling through sand underneath dune vegetation. These beetles feed on below-ground plant structures and detritus, and are also known to emerge from the sand to feed on the plants above ground at night. They feed preferentially on native plants, avoiding invasive exotics such as hottentot fig.

The CNDDB reports five occurrences of the globose dune beetle within the seven quadrangles reviewed, the nearest of which is approximately 0.5 mile from the project site. Suitable habitat for this species is present within the project site within dune scrub vegetation type.

Nesting Raptors and Other Protected Avian Species

Raptors, their nests, and other nesting birds are protected under California Fish and Game Code. While the life histories of these species vary, overlapping nesting (approximately February through August) and foraging similarities allow for their concurrent discussion. Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest habitats, as well as open grasslands, are used most frequently for nesting. Breeding occurs February through August, with peak activity May through July. Prey for these species includes small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Various species of raptors, such as red-tailed hawk, red-shouldered hawk, great horned owl, American kestrel, and turkey vulture, have a potential to nest within any of the large trees present within the project site. In addition, suitable nesting and foraging habitat is present for the Cooper's hawk, oak titmouse, wrentit, Allen's hummingbird, and spotted towhee.

4.2.2 Special-Status Plant Species

Monterey Spineflower

Monterey spineflower and is a federally threatened, CNPS CRPR 1B, and HMP species. It is a small, prostrate annual herb in the Polygonaceae family that blooms from April to June. Monterey spineflower typically occurs on open sandy or gravelly soils on relic dunes in coastal dune, coastal scrub, and maritime chaparral habitats, though it can also be associated with cismontane woodlands and valley and foothill grasslands, within a range of 3-450 meters in elevation.

The CNDDB reports an occurrence of this species that includes most of the project site. Approximately 0.02 acre and nine individuals of Monterey spineflower was identified within the project site west of Highway 1 during botanical surveys in May and June 2019 (**Figure 5**).

4.3 Sensitive Habitats

The project site was evaluated for the presence of sensitive habitats. Two sensitive habitats, dune scrub and Monterey spineflower critical habitat, were identified (**Figure 7**). These areas may also be considered ESHA by the CCC.

4.3.1 Dune Scrub

Dune scrub vegetation, as discussed above, is identified as a sensitive habitat on the CDFW's *California Natural Communities List* (CDFW, 2018b), in the HMP, and may also be considered ESHA by the CCC. Approximately 0.2 acre of dune scrub occurs within the project site west of Highway 1 (**Figure 7**).

4.3.2 Monterey Spineflower Critical Habitat

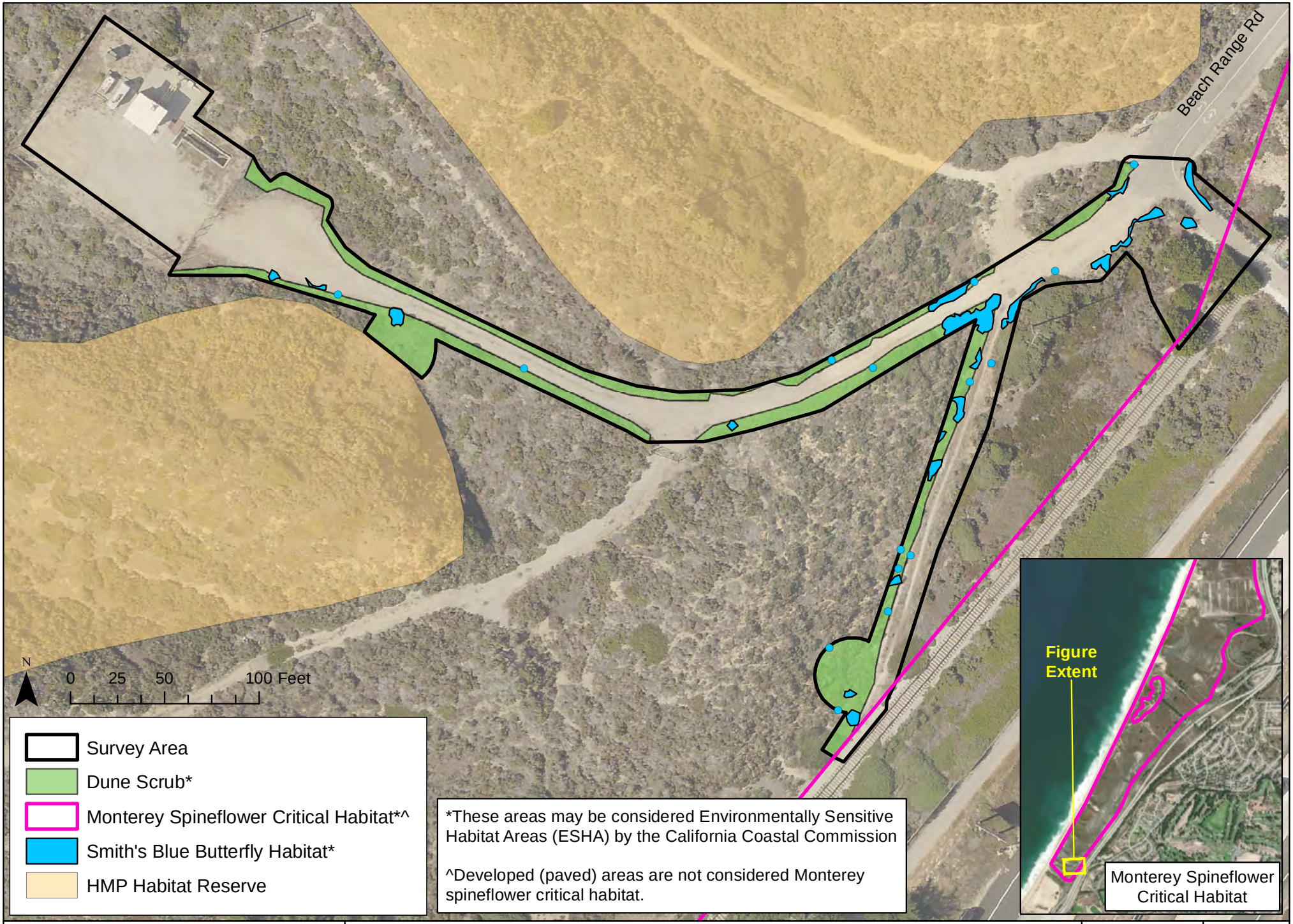
Approximately 0.7 acre of the project site, located west of Highway 1, is within designated critical habitat for Monterey spineflower. This area may also be considered ESHA by the CCC (**Figure 7**). This area contains the primary constituent elements for Monterey spineflower:

- Sandy soils associated with active coastal dunes, coastal bluffs with a deposition of windblown sand, inland sites with sandy soils, and interior floodplain dunes;
- Plant communities that support associated species, including coastal dune, coastal scrub, grassland, maritime chaparral, oak woodland, and interior floodplain dune communities, and have a structure with openings between the dominant elements (e.g., scrub, shrub, oak trees, clumps of herbaceous vegetation);
- No or little cover by non-native species which compete for resources available for growth and reproduction of Monterey spineflower; and
- Physical processes, such as occasional soil disturbance, that support natural dune dynamics along coastal areas.

The majority of the Monterey spineflower critical habitat area that occurs within the project site is currently degraded as a result of ongoing use and maintenance within the existing lift station fence and the access road. However, areas of dune scrub, as described above, represent more intact Monterey spineflower critical habitat.

4.3.2 HMP Habitat Reserve

The project site is not located within an approved HCP or NCCP area. However, it is located within the Fort Ord HMP boundaries and the plan area associated with the Draft HCP. The project site is designated for development (with no restrictions) in the HMP for Fort Ord and is located within a designated development area in the Draft HCP. However, a portion of the project site is located immediately adjacent to a parcel designated as "habitat reserve" in the HMP (**Figure 7**).



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Sensitive Habitats Map

Date: 9/4/2019
Scale: 1 in = 65 ft
Figure: 7

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Sensitive Habitats Map.mxd

This page left intentionally blank

5.0 IMPACTS AND MITIGATION MEASURES

5.1 Thresholds of Significance

For the purposes of this analysis, an impact is considered to be significant and require mitigation if it would result in any of the following:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;
c. Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means;
d. 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 nursery sites;
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2 Approach to Analysis

The following impact analysis addresses direct and indirect impacts that may result from the construction and operation of the proposed project. Direct impacts are those effects of a project that occur at the same time and place of project implementation, such as removal of habitat from ground disturbance. Indirect impacts are those effects of a project that occur either later in time or at a distance from the project location but are reasonably foreseeable, such as loss of aquatic species from upstream effects on water quality. Direct and indirect impacts can also vary in duration and result in temporary, short-term, and long-term effects on biological resources. A temporary effect would occur only during the activity. A short-term effect would last from the time an activity ceases to some intermediate period of approximately one to five years (i.e., repopulation of habitat following restoration). A long-term or permanent effect would last longer than five years after an activity ceases. Long-term effects may include the ongoing maintenance and operation of a project, or may result in a permanent change in the condition of a resource, in which case it could be considered a permanent impact.

The project site is located within parcels designated as "development" and "development within reserve areas or development with restrictions." Through implementation of the HMP, impacts to HMP species and habitats occurring within the designated development parcels were anticipated and mitigated through the establishment of habitat reserves and corridors and the implementation of habitat management requirements within habitat reserve parcels on former Fort Ord. As described above, parcels designated as "development" have no management restrictions. However, the 2017 Programmatic BO and HMP require the identification of sensitive botanical resources within these parcels that may be salvaged for use in restoration activities in reserve areas (USFWS, 2017b and ACOE, 1997). Additional management restrictions are identified parcels

designated as "development within reserve areas or development with restrictions" are also included in the HMP.

The HMP identifies two zones and four parcels on the west side of SR 1 as the responsibility of State Parks: the Coastal Dune Zone (CDZ) (parcel S3.1.2), the Disturbed Habitat Zone (DHZ) (parcels S3.1.1 and S3.1.3) and one development parcel (S3.1.4). The Project is located within one of the DHZ parcels (S3.1.1), which is designated for development with reserve areas and restrictions to accommodate State Parks future plans and also includes access for minor improvements to existing utilities and infrastructure. The HMP identifies management requirements and development restrictions within the DHZ parcel. The remainder of the project site is located within parcels designated as Development (L13.2, L29, L30, F2.2, and E15.2).

As described above, parcels designated as "development" have no management restrictions. However, the 2017 Programmatic BO requires the identification of sensitive botanical resources within these parcels that may be salvaged for use in restoration activities in reserve areas. Within the DHZ parcel, the HMP requires preservation and restoration of native vegetation and HMP species habitat outside of areas identified for development.

As a result of implementing the HMP, impacts to HMP species and habitats occurring within these parcels were anticipated and mitigated through the establishment of habitat reserves and corridors and the implementation of habitat management requirements within habitat reserve parcels on the former Fort Ord, including the 468-acre CDZ habitat reserve parcel within FODSP directly adjacent to the Project Site. The HMP species that are known or have a moderate to high potential to occur within the proposed project site include Monterey spineflower, Northern California legless lizard, and SBB. With the designated habitat reserves and corridors and habitat management requirements of the HMP in place, the loss of these species is not expected to jeopardize the long-term viability of these species and their populations on the former Fort Ord (USFWS, 1993). This is such because the recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and deed covenants. In addition to the HMP species identified, impacts to sensitive dune scrub habitat are also addressed in the HMP and, therefore, impacts to this habitat are also considered mitigated through the implementation of the HMP based on the same conclusions. The proposed project is:

1. Located within designated "development" or "development with reserve areas or restrictions" parcels;
2. Required to comply with the habitat management restrictions identified in the HMP; and
3. Would not result in any additional impacts to HMP species and habitats beyond those anticipated in the HMP.

Therefore, no additional mitigation measures for these HMP species or dune scrub habitat are required. Impacts to these special-status species and dune scrub are considered less than significant. The HMP and 2017 Programmatic BO require the identification of sensitive botanical resources within development parcels that may be avoided or salvaged for use in restoration activities in habitat reserve areas. The MCWD is required to implement HMP requirements in accordance with the deed covenants, which apply to parcels within the project site. Therefore, this analysis assumes that HMP species will be avoided to the greatest extent feasible and, if not feasible, salvage of HMP species will be conducted in accordance with this requirement.

However, as described above, the HMP does not exempt existing or future land recipients from the federal and state requirements of ESA and CESA. Of the three HMP species known or with a potential to occur within the project site, one federally listed wildlife species, SBB, has a moderate potential to be impacted by the project and may require take authorization from USFWS. Additionally, Monterey spineflower, a federally listed plant species, is present within the project site west of Highway 1. As described in Section 3.5 "Regulatory Setting," if there is the potential for incidental take of a federally listed fish or wildlife species, take of the listed species can be authorized through either the Section 7 consultation process for federal actions, or a Section 10 incidental take permit process for non-federal actions. This analysis assumes that the project would be required to comply with Section 10 of the ESA. The ESA does not prohibit incidental take of federally listed plant species.

It is also important to note that SBB is covered species in the Draft Fort Ord HCP. When the HCP is approved and the ESA incidental take permit is issued, the incidental take of this species resulting in covered activities (including but not limited to development in designated development areas) would be authorized base-wide, and project-specific permits would not be required. It is anticipated that these base-wide federal and state permits will be issued in early 2020. In the event that base-wide permits are not issued, impacts resulting in incidental take of SBB would need to be authorized by the USFWS through Section 10 consultation with the USFWS to avoid violation of the ESA.

Where suitable habitat exists within the project site, the proposed project has the potential to impact special-status species that were not addressed in the HMP. The non-HMP species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, coast horned lizard, globose dune beetle, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird).

5.3 Areas of No Impact

Criterion "c" is not evaluated for construction or operational impacts to State or Federally protected wetlands as there are none present within or adjacent the project site, and thus, would not be impacted by the proposed project.

5.4 Impacts and Mitigation Measures

Impact BIO-1: *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.*

HMP Special-Status Species

Implementation of the project could result in impacts to the following HMP species: SBB, Northern California legless lizard, and Monterey spineflower. As described in the **Approach to Analysis**, impacts within development parcels to special-status plant and wildlife species addressed in the HMP are considered less than significant. However, Monterey spineflower and habitat for SBB occur in the DHZ on parcels designated as "development with reserve areas or restrictions." As described in the HMP, the DHZ is intended for the preservation of restored coastal dunes habitats and for visitor service facilities but also includes access for minor improvements to existing utilities and infrastructure.

The HMP and the 2017 Programmatic BO require an analysis to determine if seed and topsoil salvage is feasible to support reseeding and restoration efforts on- or off-site. Monterey spineflower occurs along the margin of the access routes to the manholes and existing lift station areas of the project site. Monterey spineflower individuals may be temporarily impacted by construction traffic; however, no ground disturbance will occur. As such, seed and topsoil salvage in these areas is unnecessary as the seedbank will remain intact. However, while not required to reduce a significant impact, **Mitigation Measure BIO-8** will be implemented to further reduce impacts to Monterey spineflower by avoiding areas known to support this species to the greatest extent feasible.

While not required to reduce a significant impact, **Mitigation Measure BIO-1** will be implemented to further reduce impacts to SBB. This measure would require that SBB habitat be avoided and if avoidance is not feasible, that compliance with the ESA and/or CESA occurs in advance of construction. In the absence of an approved based-wide incidental take permit, impacts to species listed as threatened or endangered by CDFW and/or the USFWS may also require agency consultation and/or incidental take permits. Therefore, although SBB is an HMP species, **Mitigation Measure BIO-1** acknowledges that the take of this species is prohibited under the ESA and may require Section 10 consultation or other authorization. Impacts resulting in take of SBB would need to be authorized by the USFWS through the issuance of an incidental take permit from USFWS to avoid violation of ESA.

Mitigation Measures BIO-2, BIO-3, and **BIO-4** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat; however, HMP special-status species and habitats would also benefit from the implementation of these measures. These measures would reduce construction-related impacts through a combination of protective measures during construction, education, monitoring, and invasive species controls. Please see the **Non-HMP Special-Status Species** discussion below for details regarding these measures.

Therefore, potential impacts to HMP special-status species and habitat resulting from implementation of the project are less than significant. Implementation of **Mitigation Measures BIO-1** through **BIO-4** would further reduce impacts to these species.

Non-HMP Special-Status Wildlife Species

Suitable habitat for several non-HMP special-status wildlife species is present within the project site. The non-HMP wildlife species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, globose dune beetle, coast horned lizard, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird). **Mitigation Measures BIO-2, BIO-4,** and **BIO-5** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat. These measures would reduce construction-related impacts through a combination of protective measures during all phases of construction, education, monitoring, and invasive species controls.

The project site contains suitable habitat for the coast horned lizard and globose dune beetle (i.e., within dune scrub). Project implementation could result in direct impacts to individuals and loss of habitat. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4**, which avoid and minimize impacts through implementing construction best management practices, monitoring,

and invasive species controls, would reduce potentially significant impacts to the coast horned lizard and globose dune beetle to a less-than-significant level.

The project site contains trees that may provide roosting habitat for hoary bat. Trimming of trees, construction noise, dust, and vibration adjacent to large trees could cause direct and indirect impacts to hoary bats, including roost abandonment and death of young. It is unlikely that hoary bats birth and rear young in California. As a result, this species will not be breeding within the vicinity of the project site. However, impacts to individuals and roosting habitat would be a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-5** will reduce potentially significant impacts to hoary bats to a less-than-significant level through a combination of implementing protective measures during construction; education; monitoring; avoidance, preservation, and protection of hoary bat, as identified during pre-construction surveys for potential roost sites, if feasible; and replacement of roost sites if avoidance is not feasible.

The project site contains suitable habitat for the Monterey dusky-footed woodrat (i.e., dune scrub and portions of the ruderal areas) and project implementation could result in direct impacts to individuals and loss of habitat. Construction noise, dust, and vibration adjacent to large trees could cause indirect impacts to Monterey dusky-footed woodrat such as nest abandonment and death of young. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-6** will reduce potentially significant impacts to Monterey dusky-footed woodrat to a less-than-significant level through a combination of implementing protective measures during construction; education; monitoring; and avoidance, preservation, and protection of active nests, as identified during pre-construction woodrat nest surveys.

Large trees within the project site provide suitable nesting habitat for tree-nesting raptors, including the special-status Cooper's hawk, and other nesting birds. In addition, other protected avian species may nest or forage within the site, including oak titmouse (trees within ruderal areas), wrentit (dune scrub), and spotted towhee and Allen's hummingbird (all undeveloped areas of the site). Construction-related activities (e.g., trimming and removal of vegetation, and equipment noise, vibration) that result in harm, injury, or death of individuals, or abandonment of an active nest would be a significant impact. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual birds constitute a violation of California law and would be a significant impact under CEQA. This is a potentially significant impact that would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-7**, which includes surveys to identify the presence of active nests prior to construction and measures to avoid active nests if found.

Therefore, potentially significant impacts to non-HMP special-status wildlife species would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-7**.

Special-Status Species Habitat

Implementation of the 2015 Master Plan would result in impacts to approximately 6.7 acres of potential habitat for special-status species. As discussed in the "Regulatory Setting" section, the Fort Ord HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat

conservation areas and wildlife corridors to compensate for future development in other areas of the former base. The HMP identifies what type of activities can occur on each parcel at former Fort Ord and parcels are designated as "development with no restrictions," "development with reserve area or restrictions," or "habitat reserve." The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation should be necessary for impacts to species and habitats considered in the HMP. This plan has been approved by USFWS; the HMP, deed restrictions, and Memoranda of Agreement between the Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document, and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and through deed covenants. Approximately 18,500 acres of the former Fort Ord will be preserved in permanent open space through implementation of the HMP.

The project is proposed within designated development and development with reserve areas or restrictions parcels. Therefore, implementation of the project would not have a significant impact on special-status species habitat, particularly when taken into context with the over 18,500 acres of preserved habitat for special-status species within the former Fort Ord. This is a less than significant impact. No mitigation is required.

Mitigation Measure BIO-1 Smith's Blue Butterfly

SBB habitat (i.e. seacliff buckwheat) shall be avoided to the greatest extent feasible. SBB habitat that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

If all SBB habitat is avoided, no additional mitigation is necessary. If the project will impact SBB habitat, compliance with the ESA shall occur in advance of construction:

<u>With Approved Base-Wide HCP:</u>
As described above, impacts to SBB and its habitat would be authorized under the base-wide incidental take permit issued by USFWS. The MCWD shall comply with the avoidance and minimization measures and mitigation measures in the approved HCP. No additional mitigation is required.

<u>Without Approved Base-Wide HCP</u>:
The MCWD will comply with the ESA and obtain necessary authorizations prior to construction due to the assumed presence of the Federally listed SBB. The MCWD shall be required to initiate a Section 10 consultation with the USFWS to receive take authorization. Take authorization would

be granted through the issuance of an individual, project-specific incidental take permit, which requires preparation and implementation of an HCP. Mitigation for take likely would require restoration at a 3:1 ratio of impacted habitat. Buckwheat plants and/or seed salvage may also be required prior to ground disturbing activities.

Mitigation Measure BIO-2: Construction Best Management Practices

The following best management practices will be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:

- A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the project site.
- Trees and vegetation not planned for removal or trimming will be protected prior to and during construction to the maximum possible through the use of exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.
- Following construction, disturbed areas will be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist. Any revegetation on State Park property shall be conducted in coordination with State Parks.
- Grading, excavating, and other activities that involve substantial soil disturbance will be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).
- No firearms will be allowed on the project site at any time.
- All food-related and other trash will be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel will not feed or otherwise attract wildlife to the area.

Mitigation Measure BIO-3: Construction-Phase Monitoring

The MCWD will retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species will be determined in coordination with CDFW prior to any ground disturbing activities, and will be conducted by a qualified biologist with appropriate scientific collection permit. After ground disturbing project activities are complete, the qualified biologist will train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor will be the contact for any special-status wildlife species encounters, will conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and will ensure that all installed fencing stays in place throughout the construction period. The qualified biologist will then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. Both the qualified biologist and the construction biological monitor have the ability cease construction contractor work and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project. The log will also include any special-status wildlife species observed and relocated.

Mitigation Measure BIO-4: Non-Native, Invasive Species Controls

The following measures will be implemented to reduce the introduction and spread of non-native, invasive species:

- Any landscaping or replanting required for the project will not use species listed as noxious by the California Department of Food and Agriculture (CDFA) or invasive by the California Invasive Plant Council (Cal-IPC).
- Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the project site. Species to be seeded or planted within State Parks property shall be approved by State Parks prior to planting.
- Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.
- All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

Mitigation Measure BIO-5: Pre-Construction Surveys for Hoary Bat

To avoid and reduce impacts to hoary bat, the MCWD will retain a qualified bat specialist or wildlife biologist to conduct site surveys during the reproductive season (May 1 through September 15) to characterize bat utilization of the site and potential species present (techniques utilized to be determined by the biologist) prior to any tree removal or trimming. Based on the results of these initial surveys, one or more of the following will occur:

- If it is determined that hoary bats are not present at the site, no additional mitigation is required.
- If it is determined that hoary bats are utilizing the site and may be impacted by the proposed project, pre-construction surveys will be conducted within 100 feet of construction limits no more than 30 days prior to any tree removal. If, according to the bat specialist, no hoary bats or bat signs are observed in the course of the pre-construction surveys, tree removal may proceed. If hoary bats and/or bat signs are observed during the pre-construction surveys, the biologist will determine if disturbance will jeopardize the roost (i.e., maternity, foraging, day, or night).
- If a single bat and/or only adult bats are roosting, removal or trimming of trees may proceed after the bats have been safely excluded from the roost. Exclusion techniques will be determined by the biologist and depend on the roost type; the biologist will prepare a mitigation plan for provision of alternative habitat to be approved by CDFW.

Mitigation Measure BIO-6: Pre-Construction Surveys for Monterey Dusky-Footed Woodrat

Not more than thirty (30) days prior to the start of construction (including vegetation removal), a qualified biologist shall conduct a survey of the project site to locate existing Monterey dusky-footed woodrat nests. All Monterey dusky-footed woodrat nests shall be mapped and flagged for avoidance. Graphics depicting all Monterey dusky-footed woodrat nests shall be provided to the construction contractor. Any Monterey dusky-footed woodrat nests that cannot be avoided shall be relocated according to the following procedures:

Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere. After the nests have been disturbed, the nest sticks shall be removed from the impact areas and placed outside of areas planned for impacts. Nests shall be dismantled during the non-breeding season (between October 1 and December 31), if possible. If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for 2-3 weeks, after this time the nest will be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling.

Mitigation Measure BIO-7: Pre-Construction Surveys for Protected Avian Species

Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species will be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist will be retained by the project applicant to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys will be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing

of these continued surveys will be determined by the qualified biologist based on review of the final construction plans and in coordination with the CDFW, as needed.

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist will notify the project applicant and an appropriate no-disturbance buffer will be imposed within which no construction activities or disturbance should take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

Mitigation Measure BIO-8: Special-Status Plant Species Avoidance

Monterey spineflower shall be avoided to the greatest extent feasible. Areas of Monterey spineflower that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

Impact BIO-2: *Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.*

Habitats occurring within the project site that are listed as sensitive on the CDFW's *California Natural Communities List* include dune scrub. Approximately 0.2 acre of dune scrub occurs within the project site and may be impacted by the project. Dune scrub adjacent to, but outside of the project site may be impacted if work occur outside of the project boundaries.

As stated in the "Approach to Analysis," the implementation of the HMP mitigates for the loss of dune scrub by preserving this habitat within the habitat reserve areas on the former Fort Ord. The HMP requires an analysis to determine if seed and topsoil salvage is feasible to support reseeding and restoration efforts on- or off-site. Dune scrub vegetation occurs around two of the manholes that will be abandoned and along the margins of the access routes to the existing lift station and manhole locations. The vegetation may be removed around the manholes during construction; however, this would be a temporary impact and no ground disturbance will occur. As such, seed and topsoil salvage in these areas is unnecessary.

However, dune scrub vegetation may be considered ESHA by the CCC. As such, impacts to dune scrub would be a potentially significant impact. Therefore, **Mitigation Measure BIO-9** will be implemented to reduce impacts to dune scrub vegetation. This measure would require that dune scrub be avoided to the greatest extent feasible and that any dune scrub vegetation removed be replanted at a 2:1 ratio.

Approximately 0.7 acre of Monterey spineflower critical habitat is present within the project site west of Highway 1. Monterey spineflower critical habitat may also be considered ESHA by the CCC. The majority of the Monterey spineflower critical habitat area that occurs within the project site is currently degraded as a result of ongoing use and maintenance within the existing lift station fence and the access road. However, areas of dune scrub within the project site represent more intact Monterey spineflower critical habitat. Temporary impacts may include vegetation removal for access to manholes, construction traffic, and

ground disturbance during demolition of the existing lift station. However, no new structures will be constructed within Monterey spineflower critical habitat and no permanent loss of Monterey spineflower critical habitat will occur. Conversely, demolition of the existing lift station is likely to increase the available area of critical habitat for Monterey spineflower. This would be considered a beneficial impact and no mitigation is necessary.

Mitigation Measure BIO-9: Dune Scrub

Dune scrub vegetation shall be avoided to the greatest extent feasible. Dune scrub vegetation not planned for removal shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

Dune scrub that cannot be avoided shall be quantified prior to construction and replanted at a 2:1 ratio for the area removed. A restoration plan shall be prepared by a qualified biologist and shall be implemented by the MCWD or a contracted entity. The restoration plan shall be prepared in coordination and compliance with State Parks restoration guidelines and shall include:

- A planting palette of only locally-occurring native species collected from the Project vicinity or acquired from approved local suppliers.
- Procedures to control non-native species invasion.
- Provisions to ensure compliance with the requirements of the plan.
- A detailed description of seeding and planting specifications.
- A description of a monitoring program, including specific methods of vegetation monitoring, data collection and analysis, goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

Impact BIO-3: 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 nursery sites.

Wildlife movement corridors are pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or man-made factors, such as urbanization. The fragmentation of natural habitat creates isolated "islands" of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, and, therefore, adversely affect both genetic and species diversity. Corridors often partially or largely mitigate the adverse effects of fragmentation by 1) allowing animals to move between remaining habitats to replenish depleted populations and increase the gene pool available; 2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (e.g., fire and disease) will result in population or species extinction; and 3) serving as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The 2010 Monterey County General Plan EIR identified a number of significant wildlife movement corridors and linkages within the vicinity of the former Fort Ord, including Linkage 308: Fort Ord – Ventana; Linkage 322: Highway 68 Western Crossing; Linkage 350: Sierra de Salinas – Toro Peak; Linkage 339: Salinas Valley Floor; and Linkage 378: Salinas River – Pinnacles National Monument (County of Monterey, 2010). Of particular importance for wildlife movement from the former Fort Ord lands to outlying areas are Linkages 308 and 322. Specifically, Linkage 322 runs along El Toro Creek in the southeastern portion of former Fort Ord and through a large, bridge undercrossing Highway 68. This corridor has been identified as a significant wildlife corridor for mammals, amphibians, and reptiles moving between former Fort Ord lands and connecting to the Sierra de Salinas and Santa Lucia Ranges.

The HMP considered conservation area connectivity as an essential component of the design of the conservation areas and corridors within the former Fort Ord. The HMP created conservation areas and corridors with the purpose of linking the plant and animal populations in the northern portion of the former base at the Marina Municipal Airport to the populations in the south to the Fort Ord National Monument and the El Toro Creek undercrossing of Highway 68. The implementation of the HMP preserves over 18,500 acres of a variety of habitats supporting a variety of common and special-status plant species, and maintains a north-south wildlife corridor across the former Fort Ord lands to connect with the primary, significant wildlife linkages.

The project site is located in the western portion of the former Fort Ord. East of Highway 1, the project is adjacent to existing developed areas. West of Highway 1, the project site is surrounded by open space associated with the FODSP and, further west, the Monterey Bay. As discussed in the "Results" section, the project site is partially in undeveloped land that is comprised of two vegetation units (dune and ruderal/disturbed/landscaped); however, portions of the site are also developed area (paved roads and structures). The implementation of the proposed project would involve impacts to these habitat types; however, the project site also supports wildlife movement, as there are various vegetative communities, vegetative cover, and the adjacency of open space areas with high quality wildlife habitat.

Chain-link fencing is currently in place surrounding the existing lift station and along the Highway 1 boundary. Following construction, the fencing surrounding the existing lift station will be removed, which would improve wildlife movement and use of the area. Fencing would be installed around the electrical equipment associated with the new pump station; however, the fencing is not considered a significant structure that would impede wildlife movement as the enclosed area is not very large and the habitat value in the area is low. In addition, the site is surrounded by some undeveloped lands, which can be utilized by wildlife. Therefore, habitat within the project site supports species movement on-site and would not substantially interfere with wildlife movement across the site. The proposed project would impact only a small percentage of wildlife habitat within the former Fort Ord. The HMP preserves approximately 18,500 acres of large, contiguous areas of wildlife habitat that will remain on the former Fort Ord and will be preserved in perpetuity. As a result, the development of the project, would not disconnect, fragment, or otherwise impeded wildlife movement in the primary, significant wildlife movement corridors between the former Fort Ord lands and other lands. This is a less than significant impact. No mitigation is required.

Impact BIO-4: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The Project would be required to comply with all applicable guidelines in the FODSP General Plan and Seaside General Plan, as well as mitigation measures contained in the FODSP General Plan EIR and Seaside General Plan EIR to the extent they are applicable. Applicable guidelines in the FODSP General Plan include: BIO-1, BIO-2, BIO-4, BIO-5, BIO-8, BIO-10, and BIO-17. These policies generally promote identifying, protecting, and ensuring perpetuation of park plant and wildlife species populations. Applicable mitigation measures in the FODSP General Plan EIR include: Mitigation Measure Bio-1 and Mitigation Measure Bio-2. These measures address potential impacts to native habitats and species, including special-status species. Implementation Plan COS-4.1.1 of the Seaside General Plan is applicable to the project, which requires the use of proper land use planning and environmental review to minimize the impacts of urban development of sensitive ecological and biological resources. There are no biological measures in the Seaside General Plan EIR applicable to the project. Therefore, the Project will not conflict with any local policies or ordinances protecting biological resources. No impact will occur and no mitigation is required.

Impact BIO-5: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The project site is not located within an approved HCP or NCCP area. However, it is located within the Fort Ord HMP boundaries and the plan area associated with the Draft HCP. The project site is designated for development (with no restrictions) in the HMP for Fort Ord and is located within a designated development area in the Draft HCP. As described in the "Approach to Analysis," the proposed project is consistent with the approved HMP. This is a less than significant impact. No mitigation is required.

A portion of the project site is located adjacent to a parcel designated as "habitat reserve" in the HMP. Impacts to the habitat reserve parcel would be considered a significant impact if work were to be conducted outside of the project boundaries. Therefore, **Mitigation Measure BIO-10** will be implemented to avoid impacts to habitat reserve areas and reduce the impact to less than significant.

> ***Mitigation Measure BIO-10: Habitat Reserve***
>
> No work shall occur within areas designated as habitat reserve by the Fort Ord HMP. Habitat reserve areas shall be protected prior to and during construction through the use of exclusionary fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

This page left intentionally blank

6.0 REFERENCES

Baldwin, B. G, et. al. 2012. The Jepson Manual – Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded. University of California Press. Berkeley, CA. 1600 pp.

California Department of Fish and Wildlife (CDFW). 2018a. California Natural Diversity Database Special Animals List. Available online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406

CDFW. 2018b. California Natural Communities List. Available online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609

CDFW. 2018c. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.

CDFW. 2019. California Natural Diversity Database Rare Find Report. Accessed April 2019.

California Invasive Plant Council (Cal-IPC). 2019. The Cal-IPC Inventory. Available online at https://www.cal-ipc.org/

California Native Plant Society (CNPS). 2001. Botanical Survey Guidelines.

CNPS. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available online at http://www.rareplants.cnps.org

County of Monterey. 2010. Fort Ord Master Plan Greater Monterey Peninsula Area Plan. Available online at: http://www.co.monterey.ca.us/Home/ShowDocument?id=47150

Cryan, P. 2003. Seasonal Distribution of Migratory Tree Bats (*Lasiurus* and *Lasionycteris*) in North America. Journal of Mammalogy, Vol. 84(2). Pp. 579–593.

Findley, J.S. and C. Jones. 1964. Seasonal Distribution of the Hoary Bat. Journal of Mammology. 45(3): 461-470.

Howitt, B.F. and J.T. Howell. 1964. The vascular plants of Monterey County, California.

Howitt, B.F. and J.T. Howell. 1973. Supplement to the vascular plants of Monterey County, California. Pacific Grove Museum of Natural History Association, Pacific Grove, CA. 60 pp.

ICF International, Inc. 2017. Administrative Draft Fort Ord Habitat Conservation Plan. August. San Francisco, CA. Prepared for the Fort Ord Reuse Authority, Marina, CA. Unpublished.

Jepson Flora Project. 2019. Jepson Online Interchange for California floristics. Available online at http://ucjeps.berkeley.edu/interchange.html

Matthews, M.A. and M. Mitchell. 2015. The Plants of Monterey County, an Illustrated Field Key; Second Edition. California Native Plant Society Press, Sacramento, California. 446 pp.

Munz, P. A. and D. D. Keck.1973. A California flora and supplement. University of California Press, Berkeley, CA. 1681 pp., + 224 pp. supplement.

Parham, J.F. and T.J. Papenfuss. 2008. High genetic diversity among fossorial lizard populations (*Anniella pulchra*) in a rapidly developing landscape (Central California). Conservation Genetics, Vol 10. Pp. 169-176.

Remsen, J.V. Jr. 1978. Bird species of special concern in California. California Dept. of Fish and Wildlife, Nongame Wildlife Investigations, Wildlife Management Branch Administrative Report No. 78-1.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A manual of California vegetation 2nd Edition. California Native Plant Society, Sacramento, CA. 1300 pp.

Stebbins, R.C. 1972. California Amphibians and Reptiles. University of California Press, Berkeley, CA. 152 pp.

Stebbins, R.C. 1985. Western reptiles and amphibians. Houghton Mifflin Company, Boston, MA. 336 pp

Stebbins, R.C. 2003.Western reptiles and amphibians, 3rd edition. Houghton Mifflin Company, New York, NY. 533 pp.

Thelander, C. (ed.). 1994. Life on the edge: A guide to California's endangered natural resources: wildlife. BioSystems Books, Santa Cruz, CA.

Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press, Oakland, CA. Co-published with the California Department of Fish and Wildlife. 390 pp.

Tuttle, Merlin D. 1995. The Little Known World of Hoary Bats. Bats. Vol. 13 (4). Pp. 3-6.

U.S. Army Corps of Engineers (ACOE), Sacramento District. 1992. Flora and Fauna Baseline Study of Fort Ord, California. With technical assistance from Jones and Stokes Associates, Inc. Sacramento, California.

ACOE, Sacramento District. 1997. Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California. April 1997. Sacramento, CA.

U.S. Fish and Wildlife Service (USFWS). 1993. Biological Opinion for the Disposal and Reuse of Fort Ord, Monterey County, California (1-8-93-F-14).

USFWS. 1998a. Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan. Available online at: https://ecos.fws.gov/ecp/

USFWS. 1998b. Endangered and threatened wildlife and plants; Withdrawal of Proposed Rule to List the Black Legless Lizard, Proposed rule. Federal Register, Vol. 69(149). Pp. 47211-47248.

USFWS. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants.

USFWS. 2004. Recovery Plan for Five Plants from Monterey County, California. Available online at: https://ecos.fws.gov/ecp/

USFWS. 2008. Designation of Critical Habitat for the Monterey spineflower (*Chorizanthe pungens* var. *pungens*). Federal Register 73(6) Pp. 1525-1554.

USFWS. 2013. Birds Protected by the Migratory Bird Treaty Act. Available online at: http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtintro.html

USFWS. 2017. *Reinitiation of Formal Consultation for Cleanup and Property Transfer Actions Conducted at the Former Fort Ord, Monterey County, California (Original Consultation 8-8-09-F-74, 81440-2009-F-0334).* June.

USFWS. 2019. Information for Planning and Consultation (IPaC) Resources List for the Ord Village Force Main Replacement Project.

Williams, D. 1986. Mammalian species of special concern in California. California Department of Fish and Wildlife Report 86-1. 112 pp.

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White (eds.). 1988. California's wildlife, Volume I: Amphibians and reptiles. California Department of Fish and Wildlife, Sacramento, California.272 pp.

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White (eds.). 1990. California's Wildlife, Volume II: Birds. California Department of Fish and Wildlife, Sacramento, California.731 pp.

This page left intentionally blank

APPENDIX A

Special-Status Species Table

This page left intentionally blank

Special-Status Species Table

Marina, Monterey, Moss Landing, Prunedale, Salinas, Seaside, and Spreckels Quadrangles

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
MAMMALS			
Corynorhinus townsendii Townsend's big-eared bat	-- / CSC / --	Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees.	**Low** Poor quality foraging and night roost habitat present the evaluation area. No maternity roosting habitat present within the evaluation area. The nearest occurrence is approximately 5 miles east of the project site.
Lasiurus cinereus Hoary bat	-- / CNDDB / --	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or edge for feeding. Generally roost in dense foliage of trees; does not use buildings for roosting. Winters in California and Mexico and often migrates towards summer quarters in the north and east during the spring. Young are born and reared in summer grounds, which is unlikely to occur in California.	**Moderate** Suitable foraging and night roost habitat present the evaluation area. Not known to breed in California. The nearest occurrence is approximately 3 miles southwest of the project site.
Neotoma macrotis luciana Monterey dusky-footed woodrat	-- / CSC / --	Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	**Moderate** Suitable habitat is present within the project site; however, no nests were observed within the project site during the May 2019 survey.
Reithrodontomys megalotis distichlis Salinas harvest mouse	-- / CNDDB / --	Known only to occur from the Monterey Bay region. Occurs in fresh and brackish water wetlands and probably in the adjacent uplands around the mouth of the Salinas River.	**Unlikely** No suitable habitat is present within project site. Project site is out of the currently known range for this species.
Sorex ornatus salarius **Monterey ornate shrew**	-- / CSC / --	Mostly moist or riparian woodland habitats and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs.	**Unlikely** No suitable habitat is present within project site.
Taxidea taxus American badger	-- / CSC / --	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	**Unlikely** No suitable habitat is present within project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
BIRDS			
Agelaius tricolor Tricolored blackbird (nesting colony)	-- / SC&CSC / --	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	**Unlikely** No suitable habitat is present within project site.
Asio flammeus Short-eared owl (nesting)	-- / CSC / --	Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, meadows, dunes, irrigated lands, and saline and freshwater emergent marshes. Dense vegetation is required for roosting and nesting cover. This includes tall grasses, brush, ditches, and wetlands. Open, treeless areas containing elevated sites for perching, such as fence posts or small mounds, are also needed. Some individuals breed in northern California.	**Unlikely** No suitable habitat is present within project site.
Athene cunicularia Burrowing owl (burrow sites & some wintering sites)	-- / CSC / --	Year-round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.	**Unlikely** No suitable habitat is present within project site.
Brachyramphus marmoratus Marbled murrelet	FT / SE / --	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	**Unlikely** No suitable habitat is present within project site.
Buteo regalis Ferruginous hawk (wintering)	-- / WL / --	An uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges and a fairly common winter resident of grassland and agricultural areas in southwestern California. Frequent open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Does not breed in California.	**Unlikely** No suitable habitat is present within project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Charadrius alexandrinus nivosus Western snowy plover	FT / CSC / --	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	**Unlikely** No suitable habitat within the project site. This species is known to nest on the nearby sandy beach at Fort Ord Dunes State Park, but is unlikely to occur within the project site.
Coturnicops noveboracensis Yellow rail	-- / CSC / --	Wet meadows and coastal tidal marshes. Occurs year round in California, but in two primary seasonal roles: as a very local breeder in the northeastern interior and as a winter visitor (early Oct to mid-Apr) on the coast and in the Suisun Marsh region	**Unlikely** No suitable habitat is present within project site.
Cypseloides niger Black swift	-- / CSC / --	Regularly nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats.	**Unlikely** No suitable habitat is present within project site.
Elanus leucurus White-tailed kite (nesting)	-- / CFP / --	Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.	**Low** Poor quality nesting and foraging habitat is present within the project site. The nearest CNDDB occurrence is approximately 13 miles north of the project site; however, this species has been observed at Armstrong Ranch, located approximately 4 miles north of the project site.
Empidonax traillii extimus Southwestern willow flycatcher	FE / SE / --	Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds, and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (*Salix sp*.), tamarisk (*Tamarix ramosissima*), or both.	**Unlikely** No suitable habitat is present within project site.
Eremophila alpestris actia California horned lark	-- / WL / --	Variety of open habitats, usually where large trees and/or shrubs are absent. Found from grasslands along the coast to deserts at sea-level and alpine dwarf-shrub habitats are higher elevations. Builds open cup-like nests on the ground.	**Low** Low quality nesting and foraging habitat is present within the open ruderal area of the project site. The nearest CNDDB occurrence is approximately 4 miles north the project site.
Falco mexicanus Prairie falcon (nesting)	-- / WL / --	Associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Uses open terrain for foraging; nests in open terrain with canyons, cliffs, escarpments, and rock outcrops.	**Unlikely** No suitable habitat is present within project site.
Falco peregrinus anatum American peregrine falcon (nesting)	-- / CFP / --	Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs.	**Unlikely** No suitable habitat is present within project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Gymnogyps californianus California condor	FE / SE /--	Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19 mile commute one way). Nest sites in cliffs, crevices, potholes.	**Unlikely** No suitable habitat is present within project site.
Laterallus jamaicensis coturniculus California black rail	-- / ST&CFP / --	Inhabits freshwater marshes, wet meadows & shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year & dense vegetation for nesting habitat.	**Unlikely** No suitable habitat is present within project site.
Pelecanus occidentalis californicus California brown pelican	-- / CFP / --	Found in estuarine, marine subtidal, and marine pelagic waters along the California coast. Usually rests on water or inaccessible rocks, but also uses mudflats, sandy beaches, wharfs, and jetties.	**Unlikely** No suitable habitat is present within project site.
Rallus obsoletus obsoletus California Ridgway's rail	FE / SE&CFP / --	Salt and brackish marshes.	**Unlikely** No suitable habitat is present within project site.
Riparia riparia Bank swallow (nesting)	-- / ST / --	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	**Unlikely** No suitable habitat is present within project site.
Sterna antillarum browni California least tern	FE / SE / --	Prefers undisturbed nest sites on open, sandy/gravelly shores near shallow-water feeding areas in estuaries. Sea beaches, bays, large rivers, bars.	**Unlikely** No suitable habitat is present within project site.
Vireo bellii pusillus Least Bell's Vireo	FE / SE / --	Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	**Unlikely** No suitable habitat is present within project site.
REPTILES AND AMPHIBIANS			
Ambystoma californiense **California tiger salamander**	FT / ST /--	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	**Unlikely** No suitable breeding or upland habitat is present within the project site. The project site is outside of the known dispersal range of any known or potential breeding resources.
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	FE / SE&CFP /--	Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir and wet meadows. Occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation.	**Unlikely** No suitable habitat is present within project site. Project site is south of the currently known range of this species.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Anniella pulchra **Northern California legless lizard** (includes *A. p. nigra* as recognized by the HMP)	-- / CSC / --	Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas.	**Assumed Present** This species is assumed present based on the presence of suitable habitat and a CNDDB occurrence within the project site.
Emys marmorata Western pond turtle	-- / CSC / --	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	**Unlikely** No suitable habitat is present within project site.
Phrynosoma blainvillii **Coast horned lizard**	-- / CSC / --	Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.	**High** Suitable habitat is present within the project site and this species is known to occur throughout the former Fort Ord. The nearest CNDDB occurrence is located approximately 2.8 miles northeast of the project site.
Rana boylii Foothill yellow-legged frog	-- / SC&CSC / --	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.	**Unlikely** No suitable habitat is present within project site.
Rana draytonii **California red-legged frog**	FT / CSC / --	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	**Unlikely** No suitable breeding or upland habitat is present within the project site. The project site is outside of the known dispersal range of any known or potential breeding resources.
Taricha torosa Coast range newt (Monterey County south only)	-- / CSC / --	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoirs.	**Unlikely** No suitable habitat is present within project site.
Thamnophis hammondii Two-striped garter snake	-- / CSC / --	Associated with permanent or semi-permanent bodies of water bordered by dense vegetation in a variety of habitats from sea level to 2400m elevation.	**Unlikely** No suitable habitat is present within project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
FISH			
Eucyclogobius newberryi Tidewater goby	FE / CSC / --	Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County.	**Not Present** No suitable habitat is present within project site.
Oncorhynchus mykiss irideus Steelhead (south-central California coast DPS)	FT / -- / --	Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams.	**Not Present** No suitable habitat is present within project site.
Spirinchus thaleichthys Longfin smelt	FC / ST&CSC / --	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 PPT, but can be found in completely freshwater to almost pure seawater.	**Not Present** No suitable habitat is present within project site.
INVERTEBRATES			
Bombus caliginosus Obscure bumble bee	-- / CNDDB / --	Native to the West Coast of the United States. Occurs primarily along the coast in grassy prairies and meadows within the Coast Range. This species can nest both under and above ground. When nesting above ground the species may utilize abandoned bird nests. Found in areas that are relatively humid including areas that are frequently foggy.	**Low** Poor quality habitat is present within the project site. The nearest CNDDB occurrence is a historic non-specific occurrence (from the 1940s) located approximately 4 miles from the project site.
Bombus occidentalis Western bumble bee	-- / CNDDB / --	Occurs in open grassy areas, urban parks, urban gardens, chaparral, and meadows. This species generally nest underground.	**Low** Poor quality habitat is present within the project site. The nearest CNDDB occurrence is a historic non-specific occurrence (from the 1930s) located approximately 3 miles from the project site.
Branchinecta lynchi Vernal pool fairy shrimp	FT / -- / --	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	**Not Present** No suitable habitat is present within project site.
Coelus globosus Globose dune beetle	-- / CNDDB / --	Coastal dunes. These beetles are primarily subterranean, tunneling through sand underneath dune vegetation.	**High** Suitable habitat within the project site. The nearest CNDDB occurrence is approximately 0.5 mile from the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Danaus plexippus Monarch butterfly	-- / CNDDB / --	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	**Unlikely** No suitable habitat is present within the project site. Populations of this species have not been observed overwintering within the project site.
Euphilotes enoptes smithi **Smith's blue butterfly**	FE / -- / --	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Eriogonum latifolium* and *E. parvifolium*.	**Assumed Present** This species is assumed present within the project site west of Highway 1 based on the presence of *E. parvifolium* populations and a CNDDB occurrence within the project site.
Linderiella occidentalis **California linderiella (fairy shrimp)**	-- / CNDDB / --	Ephemeral ponds with no flow. Generally associated with hardpans.	**Not Present** No suitable habitat within the project site.
Tryonia imitator mimic tryonia (California brackishwater snail)	-- / CNDDB / --	Inhabits coastal lagoons, estuaries and salt marshes. Found only in permanently submerged areas in a variety of sediment types. Tolerant of a wide range of salinities.	**Not Present** No suitable habitat within the project site.
PLANTS			
Agrostis lacuna-vernalis Vernal pool bent grass	-- / -- / 1B	Vernal pool Mima mounds at elevations of 115-145 meters. Annual herb in the Poaceae family; blooms April-May. Known only from Butterfly Valley and Machine Gun Flats of Ft. Ord National Monument.	**Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019.
Allium hickmanii Hickman's onion	-- / -- / 1B	Closed-cone coniferous forests, maritime chaparral, coastal prairie, coastal scrub, and valley and foothill grasslands at elevations of 5-200 meters. Bulbiferous perennial herb in the Alliaceae family; blooms March-May.	**Not present** Not observed during the focused botanical survey in May 2019.
Arctostaphylos hookeri* ssp. *hookeri **Hooker's manzanita**	-- / -- / 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June.	**Not present** Not observed during the focused botanical survey in May 2019.
Arctostaphylos montereyensis **Toro manzanita**	-- / -- / 1B	Maritime chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 30-730 meters. Evergreen shrub in the Ericaceae family; blooms February-March.	**Not present** Not observed during the focused botanical survey in May 2019.
Arctostaphylos pajaroensis Pajaro manzanita	-- / -- / 1B	Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March.	**Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019.
Arctostaphylos pumila **Sandmat manzanita**	-- / -- / 1B	Openings of closed-cone coniferous forests, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 3-205 meters. Evergreen shrub in the Ericaceae family; blooms February-May.	**Not present** Not observed during the focused botanical survey in May 2019.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Arenaria paludicola Marsh sandwort	FE / SE / 1B	Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August.	**Not Present** No suitable habitat within the project site. The project site is outside of the currently known range for this species. Not observed during the focused botanical survey in May 2019.
Astragalus tener var. *tener* Alkali milk-vetch	-- / -- / 1B	Playas, valley and foothill grassland on adobe clay, and vernal pools on alkaline soils at elevations of 1-60 meters. Annual herb in the Fabaceae family; blooms March-June.	**Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019.
Astragalus tener var. *titi* Coastal dunes milk-vetch	FE / SE / 1B	Sandy soils in coastal bluff scrub, coastal dunes, coastal prairie (mesic); elevation 3-164 feet. Annual herb in the Fabaceae family; blooms March-May.	**Not present** Not observed during the focused botanical survey in May 2019.
Bryoria spiralifera Twisted horsehair lichen	-- / -- / 1B	California North Coast coniferous forest at elevations of 0–30 meters. Often found on conifers, including *Picea sitchensis*, *Pinus contorta* var. *contorta*, *Pseudotsuga menziesii*, *Abies grandis*, and *Tsuga heterophylla*. Fruticose lichen in the Parmeliaceae family.	**Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019.
Castilleja ambigua var. insalutata Pink Johnny-nip	-- / -- / 1B	Coastal prairie and coastal scrub at elevations of 0-100 meters. Annual herb in the Orobanchaceae family; blooms May-August.	**Not present** Not observed during the focused botanical survey in May 2019.
Ceanothus cuneatus* ssp. *rigidus **Monterey ceanothus**	-- / -- / List 4	Closed cone coniferous forest, chaparral, and coastal scrub on sandy soils at elevations of 3-550 meters. Evergreen shrub in the Rhamnaceae family, blooms February-June.	**Not present** Not observed during the focused botanical survey in May 2019.
Centromadia parryi ssp. *congdonii* Congdon's tarplant	-- / -- / 1B	Valley and foothill grassland on heavy clay, saline, or alkaline soils at elevations of 0-230 meters. Annual herb in the Asteraceae family; blooms May-November.	**Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019.
Chorizanthe minutiflora Fort Ord spineflower	-- / -- / 1B	Sandy openings of maritime chaparral and coastal scrub at elevations of 55-150 meters. Only known occurrences on Fort Ord National Monument. Annual herb in the Polygonaceae family; blooms April-July.	**Not present** Not observed during the focused botanical survey in May 2019.
Chorizanthe pungens* var. *pungens **Monterey spineflower**	FT / -- / 1B	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-July.	**Present** This species was observed within the project site west of Highway 1 during the focused botanical survey in May 2019.
Chorizanthe robusta* var. *robusta **Robust spineflower**	FE / -- / 1B	Openings in cismontane woodland, coastal dunes, maritime chaparral, and coastal scrub on sandy or gravelly soils at elevations of 3-300 meters. Annual herb in the Polygonaceae family; blooms April-September.	**Not present** Not observed during the focused botanical survey in May 2019.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Clarkia jolonensis Jolon clarkia	-- / -- / 1B	Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June.	**Not present** Not observed during the focused botanical survey in May 2019.
Collinsia multicolor San Francisco collinsia	-- / -- / 1B	Closed-cone coniferous forest and coastal scrub, sometimes on serpentinite soils, at elevations of 30-250 meters. Annual herb in the Plantaginaceae family; blooms March-May.	**Not present** Not observed during the focused botanical survey in May 2019.
Cordylanthus rigidus* ssp. *littoralis **Seaside bird's-beak**	-- / SE / 1B	Closed-cone coniferous forests, maritime chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Annual hemi-parasitic herb in the Orobanchaceae family; blooms April-October.	**Not present** Not observed within the project site during the focused botanical survey in June 2019.
Delphinium californicum ssp. *interius* Hospital Canyon larkspur	-- / -- / 1B	Openings in chaparral, coastal scrub, and mesic areas of cismontane woodland at elevations of 230-1095 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	**Not present** Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019.
Delphinium hutchinsoniae Hutchinson's larkspur	-- / -- / 1B	Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June.	**Not present** Not observed during the focused botanical survey in May 2019.
Delphinium umbraculorum Umbrella larkspur	-- / -- / 1B	Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	**Not present** No suitable habitat within the project site. Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019.
Ericameria fasciculata **Eastwood's goldenbush**	-- / -- / 1B	Openings in closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October.	**Not present** Not observed during the focused botanical survey in May 2019.
Eriogonum nortonii Pinnacles buckwheat	-- / -- / 1B	Chaparral and valley and foothill grassland on sandy soils, often on recent burns, at elevations of 300-975 meters. Annual herb in the Polygonaceae family; blooms May-September.	**Not present** No suitable habitat within the project site. Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019.
Erysimum ammophilum **Sand-loving wallflower**	-- / -- / 1B	Openings in maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Erysimum menziesii Menzies' wallflower	FE / SE / 1B	Coastal dunes at elevations of 0-35 meters. Perennial herb in the Brassicaceae family; blooms March-September.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Fritillaria liliacea Fragrant fritillary	-- / -- / 1B	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April.	**Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019.
Gilia tenuiflora* ssp. *arenaria **Monterey gilia**	FE / ST / 1B	Openings in maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Hesperocyparis goveniana Gowen cypress	FT / -- / 1B	Closed-cone coniferous forest and maritime chaparral at elevations of 30-300 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Point Lobos near Gibson Creek and the Huckleberry Hill Nature Preserve near Highway 68.	**Not Present** No suitable habitat within the project site. Project site is outside of the currently known range for this species. Not identified during the focused botanical survey in May 2019.
Hesperocyparis macrocarpa Monterey cypress	-- / -- / 1B	Closed-cone coniferous forest at elevations of 10-30 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Cypress Point in Pebble Beach and Point Lobos State Park; widely planted and naturalized elsewhere.	**Not Present** Several Monterey cypress trees are present within the project site; however, the project site is outside of the currently known native range of this species. Individuals are from planted stock are therefore not considered special-status species.
Holocarpha macradenia Santa Cruz tarplant	FT / SE / 1B	Coastal prairies and valley foothill grasslands, often clay or sandy soils, at elevations of 10-220 meters. Annual herb in the Asteraceae family; blooms June-October.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the focused botanical survey in June 2019.
Horkelia cuneata ssp. *sericea* Kellogg's horkelia	-- / -- / 1B	Openings of closed-cone coniferous forests, maritime chaparral, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Horkelia marinensis Point Reyes horkelia	-- / -- / 1B	Coastal dunes, coastal prairie, and coastal scrub on sandy soils at elevations of 5-350 meters. Perennial herb in the Rosaceae family; blooms May-September.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Lasthenia conjugens Contra Costa goldfields	FE / -- / 1B	Mesic areas of valley and foothill grassland, alkaline playas, cismontane woodland, and vernal pools at elevations of 0-470 meters. Annual herb in the Asteraceae family; blooms March-June.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Layia carnosa Beach layia	FE / SE / 1B	Coastal dunes and coastal scrub on sandy soils at elevations of 0-60 meters. Annual herb in the Asteraceae family; blooms March-July.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Legenere limosa Legenere	-- / -- / 1B	Vernal pools and wetlands at elevations of 1-880 meters. Annual herb in the Campanulaceae family; blooms April- June.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Lupinus tidestromii Tidestrom's lupine	FE / SE / 1B	Coastal dunes at elevations of 0-100 meters. Perennial rhizomatous herb in the Fabaceae family; blooms April-June.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Malacothamnus palmeri var. *involucratus* Carmel Valley bush-mallow	-- / -- / 1B	Chaparral, cismontane woodland, and coastal scrub at elevations of 30-1100 meters. Perennial deciduous shrub in the Malvaceae family; blooms May-October.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Malacothrix saxatilis var. *arachnoidea* Carmel Valley malacothrix	-- / -- / 1B	Chaparral and coastal scrub on rocky soils at elevations of 25-1036 meters. Perennial rhizomatous herb in the Asteraceae family; blooms June-December.	**Not present** No suitable habitat within the project site. Not observed within the project site during the focused botanical survey in June 2019.
Meconella oregana Oregon meconella	-- / -- / 1B	Coastal prairie and coastal scrub at elevations of 250-620 meters. Annual herb in the Papaveraceae Family; blooms March-April.	**Not present** Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019.
Microseris paludosa Marsh microseris	-- / -- / 1B	Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland at elevations of 5-300 meters. Perennial herb in the Asteraceae family; blooms April-July.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Monardella sinuata ssp. *nigrescens* Northern curly-leaved monardella	-- / -- / 1B	Chaparral, coastal dunes, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills) on sandy soils at elevations of 0-300 meters. Annual herb in the Lamiaceae family; blooms April-September.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Monolopia gracilens Woodland wollythreads	-- / -- / 1B	Openings of broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland on serpentinite soils at elevations of 100-1200 meters. Annual herb in the Asteraceae family; blooms February-July.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Pinus radiata Monterey pine	-- / -- / 1B	Closed-cone coniferous forest and cismontane woodland at elevations of 25-185 meters. Evergreen tree in the Pinaceae family. Only three native stands in CA at Ano Nuevo, Cambria, and the Monterey Peninsula; introduced in many areas.	**Not present** Not observed within the project site during the focused botanical survey in May or June 2019.
Piperia yadonii **Yadon's rein orchid**	FE / -- / 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms February-August.	**Not present** Not observed within the project site during the focused botanical survey in May or June 2019.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcorn-flower	-- / -- / 1B	Mesic areas of chaparral, coastal prairie, and coastal scrub at elevations of 15-160 meters. Annual herb in the Boraginaceae family; blooms March-June.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Potentilla hickmanii Hickman's cinquefoil	FE / SE / 1B	Coastal bluff scrub, closed-cone coniferous forests, vernally mesic meadows and seeps, and freshwater marshes and swamps at elevations of 10-149 meters. Perennial herb in the Rosaceae family; blooms April-August.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Ramalina thrausta Angel's hair lichen	-- / -- / 2B	North coast coniferous forest on dead twigs and other lichens. Epiphytic fructose lichen in the Ramalinaceae family. In northern CA it is usually found on dead twigs, and has been found on *Alnus rubra*, *Calocedrus decurrens*, *Pseudotsuga menziesii*, *Quercus garryana*, and *Rubus spectabilis*. In Sonoma County it grows on and among dangling mats of *R. menziesii* and *Usnea* spp.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Rosa pinetorum Pine rose	-- / -- / 1B	Closed-cone coniferous forest at elevations of 2-300 meters. Perennial shrub in the Rosaceae family; blooms May-July. Possible hybrid of *R. spithamea*, *R. gymnocarpa*, or others; further study needed.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Stebbinsoseris decipiens Santa Cruz microseris	-- / -- / 1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and openings in valley and foothill grassland, sometimes on serpentinite, at elevations of 10-500 meters. Annual herb in the Asteraceae family; blooms April-May.	**Not present** Not observed within the project site during the focused botanical survey in May 2019.
Trifolium buckwestiorum Santa Cruz clover	-- / -- / 1B	Gravelly margins of broadleaved upland forest, cismontane woodland, and coastal prairie at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Trifolium hydrophilum Saline clover	-- / -- / 1B	Marshes and swamps, mesic and alkaline valley and foothill grassland, and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Trifolium polyodon Pacific Grove clover	-- / SR / 1B	Mesic areas of closed-cone coniferous forest, coastal prairie, meadows and seeps, and valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-July.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.
Trifolium trichocalyx Monterey clover	FE / SE / 1B	Sandy openings and burned areas of closed-cone coniferous forest at elevations of 30-240 meters. Annual herb in the Fabaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019.

STATUS DEFINITIONS

Federal

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
FC = Candidate for listing under the federal Endangered Species Act
-- = no listing

State

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SC = Candidate for listing under California Endangered Species Act
SR = listed as Rare under the California Endangered Species Act
CFP = California Fully Protected Species
CSC = CDFW Species of Concern
WL = CDFW Watch List
CNDDB = This designation is being assigned to animal species that are not assigned any of the other status designations defined in this table. These animal species are included in CDFW's CNDDB "Special Animals" list (2010), which includes all taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special-status species." The CDFW considers the taxa on this list to be those of greatest conservation need.
-- = no listing

California Native Plant Society

1B = California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
2B = California Rare Plant Rank 2B species; plants rare, threatened, or endangered in California, but more common elsewhere
4 = California Rare Plant Rank 4 species; plants of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly
-- = no listing

Bold font indicates Fort Ord HMP Species

POTENTIAL TO OCCUR

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys
High = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of suitable habitat conditions
Moderate = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of marginal habitat conditions within the site
Low = species known to occur in the vicinity from the CNDDB or other documentation; lack of suitable habitat or poor quality
Unlikely = species not known to occur in the vicinity from the CNDDB or other documentation, no suitable habitat is present within the site
Not Present = species was not observed during surveys

This page left intentionally blank

APPENDIX B

CNDDB Rare Plant Report
(Marina, Monterey, Moss Landing, Prunedale, Salinas, Seaside, and Spreckels Quadrangles)

This page left intentionally blank

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Marina (3612167) OR Monterey (3612158) OR Moss Landing (3612177) OR Prunedale (3612176) OR Salinas (3612166) OR Seaside (3612157) OR Spreckels (3612156))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Agrostis lacuna-vernalis vernal pool bent grass	PMPOA041N0	None	None	G1	S1	1B.1
Allium hickmanii Hickman's onion	PMLIL02140	None	None	G2	S2	1B.2
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	AAAAA01082	Endangered	Endangered	G5T1T2	S1S2	FP
Anniella pulchra northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
Arctostaphylos hookeri ssp. hookeri Hooker's manzanita	PDERI040J1	None	None	G3T2	S2	1B.2
Arctostaphylos montereyensis Toro manzanita	PDERI040R0	None	None	G2?	S2?	1B.2
Arctostaphylos pajaroensis Pajaro manzanita	PDERI04100	None	None	G1	S1	1B.1
Arctostaphylos pumila sandmat manzanita	PDERI04180	None	None	G1	S1	1B.2
Asio flammeus short-eared owl	ABNSB13040	None	None	G5	S3	SSC
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Astragalus tener var. titi coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Bryoria spiralifera twisted horsehair lichen	NLTEST5460	None	None	G3	S1S2	1B.1
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Castilleja ambigua var. insalutata pink Johnny-nip	PDSCR0D403	None	None	G4T2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Central Dune Scrub	CTT21320CA	None	None	G2	S2.2	
Central Dune Scrub						
Central Maritime Chaparral	CTT37C20CA	None	None	G2	S2.2	
Central Maritime Chaparral						
Centromadia parryi ssp. congdonii	PDAST4R0P1	None	None	G3T1T2	S1S2	1B.1
Congdon's tarplant						
Charadrius alexandrinus nivosus	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
western snowy plover						
Chorizanthe minutiflora	PDPGN04100	None	None	G1	S1	1B.2
Fort Ord spineflower						
Chorizanthe pungens var. pungens	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
Monterey spineflower						
Chorizanthe robusta var. robusta	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
robust spineflower						
Clarkia jolonensis	PDONA050L0	None	None	G2	S2	1B.2
Jolon clarkia						
Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coastal and Valley Freshwater Marsh						
Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
Coastal Brackish Marsh						
Coelus globosus	IICOL4A010	None	None	G1G2	S1S2	
globose dune beetle						
Collinsia multicolor	PDSCR0H0B0	None	None	G2	S2	1B.2
San Francisco collinsia						
Cordylanthus rigidus ssp. littoralis	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
seaside bird's-beak						
Corynorhinus townsendii	AMACC08010	None	None	G3G4	S2	SSC
Townsend's big-eared bat						
Coturnicops noveboracensis	ABNME01010	None	None	G4	S1S2	SSC
yellow rail						
Cypseloides niger	ABNUA01010	None	None	G4	S2	SSC
black swift						
Danaus plexippus pop. 1	IILEPP2012	None	None	G4T2T3	S2S3	
monarch - California overwintering population						
Delphinium californicum ssp. interius	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Hospital Canyon larkspur						
Delphinium hutchinsoniae	PDRAN0B0V0	None	None	G2	S2	1B.2
Hutchinson's larkspur						
Delphinium umbraculorum	PDRAN0B1W0	None	None	G3	S3	1B.3
umbrella larkspur						
Elanus leucurus	ABNKC06010	None	None	G5	S3S4	FP
white-tailed kite						

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Ericameria fasciculata Eastwood's goldenbush	PDAST3L080	None	None	G2	S2	1B.1
Eriogonum nortonii Pinnacles buckwheat	PDPGN08470	None	None	G2	S2	1B.3
Erysimum ammophilum sand-loving wallflower	PDBRA16010	None	None	G2	S2	1B.2
Erysimum menziesii Menzies' wallflower	PDBRA160R0	Endangered	Endangered	G1	S1	1B.1
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC
Euphilotes enoptes smithi Smith's blue butterfly	IILEPG2026	Endangered	None	G5T1T2	S1S2	
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Gilia tenuiflora ssp. arenaria Monterey gilia	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
Hesperocyparis goveniana Gowen cypress	PGCUP04031	Threatened	None	G1	S1	1B.2
Hesperocyparis macrocarpa Monterey cypress	PGCUP04060	None	None	G1	S1	1B.2
Holocarpha macradenia Santa Cruz tarplant	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Horkelia marinensis Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Layia carnosa beach layia	PDAST5N010	Endangered	Endangered	G2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lupinus tidestromii Tidestrom's lupine	PDFAB2B3Y0	Endangered	Endangered	G1	S1	1B.1
Malacothamnus palmeri var. involucratus Carmel Valley bush-mallow	PDMAL0Q0B1	None	None	G3T2Q	S2	1B.2
Malacothrix saxatilis var. arachnoidea Carmel Valley malacothrix	PDAST660C2	None	None	G5T2	S2	1B.2
Meconella oregana Oregon meconella	PDPAP0G030	None	None	G2G3	S2	1B.1
Microseris paludosa marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	PDLAM18162	None	None	G3T2	S2	1B.2
Monolopia gracilens woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2
Monterey Cypress Forest Monterey Cypress Forest	CTT83150CA	None	None	G1	S1.2	
Monterey Pine Forest Monterey Pine Forest	CTT83130CA	None	None	G1	S1.1	
Monterey Pygmy Cypress Forest Monterey Pygmy Cypress Forest	CTT83162CA	None	None	G1	S1.1	
Northern Bishop Pine Forest Northern Bishop Pine Forest	CTT83121CA	None	None	G2	S2.2	
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	G5T2Q	S2	
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Pinus radiata Monterey pine	PGPIN040V0	None	None	G1	S1	1B.1
Piperia yadonii Yadon's rein orchid	PMORC1X070	Endangered	None	G1	S1	1B.1
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Potentilla hickmanii Hickman's cinquefoil	PDROS1B0U0	Endangered	Endangered	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G5T1	S1	FP
Ramalina thrausta angel's hair lichen	NLLEC3S340	None	None	G5	S2?	2B.1
Rana boylii foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Reithrodontomys megalotis distichlis Salinas harvest mouse	AMAFF02032	None	None	G5T1	S1	
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Rosa pinetorum pine rose	PDROS1J0W0	None	None	G2	S2	1B.2
Sidalcea malachroides maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	SSC
Stebbinsoseris decipiens Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
Taricha torosa Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Trifolium buckwestiorum Santa Cruz clover	PDFAB402W0	None	None	G2	S2	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Trifolium polyodon Pacific Grove clover	PDFAB402H0	None	Rare	G1	S1	1B.1
Trifolium trichocalyx Monterey clover	PDFAB402J0	Endangered	Endangered	G1	S1	1B.1
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Valley Needlegrass Grassland Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	

Record Count: 101

This page left intentionally blank

APPENDIX C

IPaC Resource List

This page left intentionally blank

IPaC **U.S. Fish & Wildlife Service**

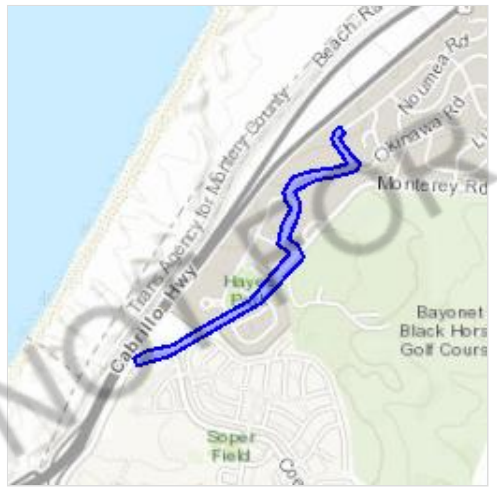
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Monterey County, California



Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958

2493 Portola Road, Suite B
Ventura, CA 93003-7726

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

California Condor Gymnogyps californianus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8193

California Least Tern Sterna antillarum browni — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8104

Least Bell's Vireo Vireo bellii pusillus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/5945

Marbled Murrelet Brachyramphus marmoratus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4467

Southwestern Willow Flycatcher Empidonax traillii extimus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6749

Western Snowy Plover Charadrius nivosus nivosus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8035

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2891

California Tiger Salamander Ambystoma californiense — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Santa Cruz Long-toed Salamander Ambystoma macrodactylum croceum — Endangered
There is **proposed** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/7405

Fishes

NAME	STATUS
Tidewater Goby Eucyclogobius newberryi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Smith's Blue Butterfly Euphilotes enoptes smithi There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/4418	Endangered

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Contra Costa Goldfields Lasthenia conjugens There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7058	Endangered
Marsh Sandwort Arenaria paludicola No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2229	Endangered
Menzies' Wallflower Erysimum menziesii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2935	Endangered
Monterey Gilia Gilia tenuiflora ssp. arenaria No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/856	Endangered

Monterey Spineflower Chorizanthe pungens var. pungens — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/396

Yadon's Piperia Piperia yadonii — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4205

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip:

enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Black Oystercatcher Haematopus bachmani This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Dec 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Whimbrel Numenius phaeopus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9483	Breeds elsewhere
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that

week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

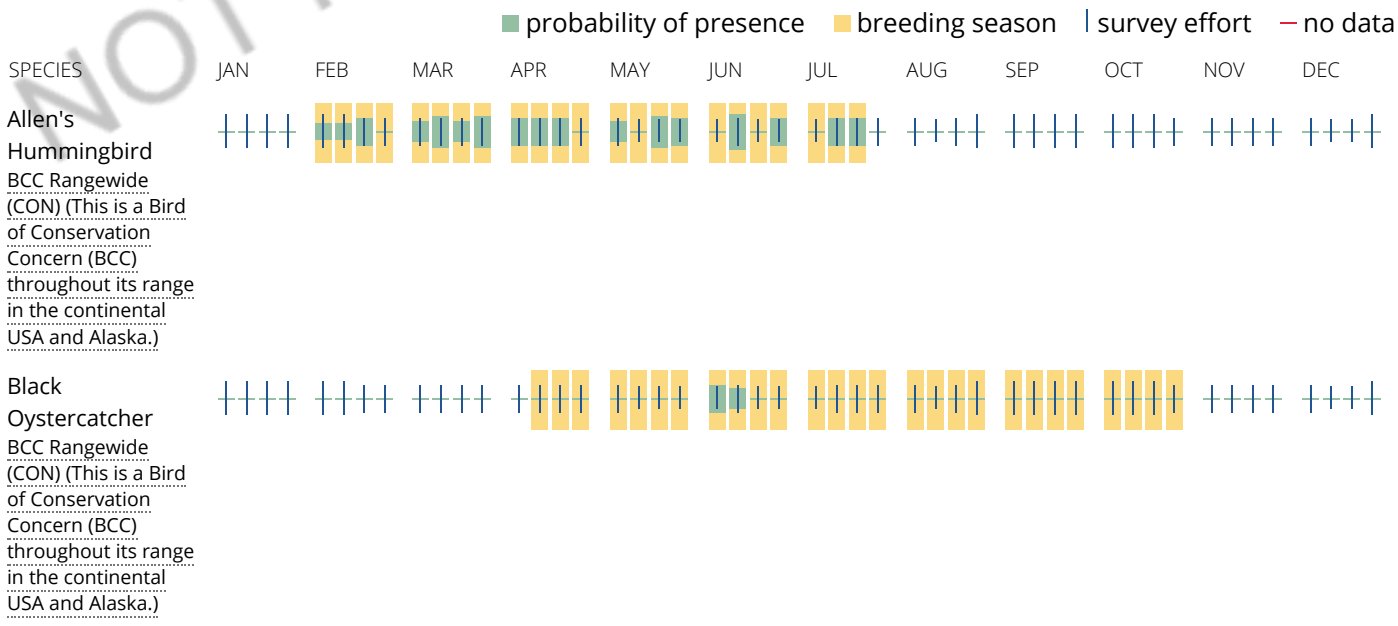
Breeding Season (▬)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

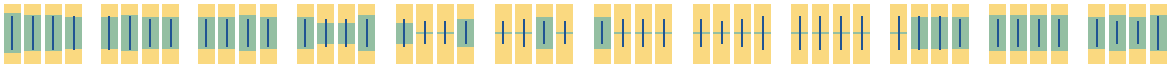
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

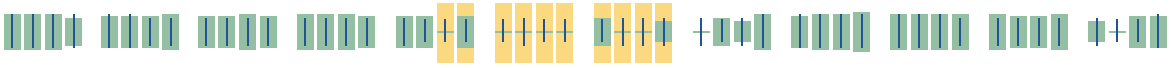
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



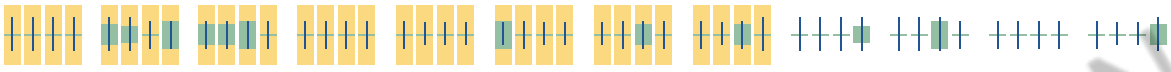
Clark's Grebe
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



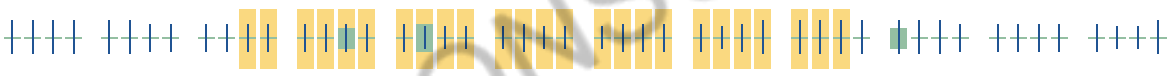
Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Lawrence's Goldfinch
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

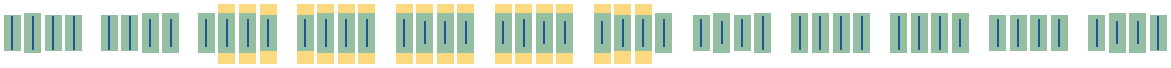


Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Yellow-billed Magpie
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look

carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This page left intentionally blank