

EIR TECHNICAL APPENDICES

HABITAT CONSERVATION PLAN FOR THE OCEANO DUNES DISTRICT



February 2020

**California Department of Parks and Recreation
Oceano Dunes District
Habitat Conservation Plan**

**Draft EIR
Technical Appendices**

SCH No. 2018011012

February 2020



Prepared for:
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INTRODUCTION

This document is the Technical Appendices volume of the Draft Environmental Impact Report (EIR) for the Oceano Dunes District Habitat Conservation Plan.

This volume presents the following appendices:

Appendix A. Scoping Report

Appendix B. HCP Avoidance and Minimization Measures

Appendix C. Special-Status Species in HCP Area

Appendix D. Biological Effects of Existing Covered Activities

Appendix E. Native American Communications

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Oceano Dunes District
Habitat Conservation Plan EIR

Appendix A: Scoping Report

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Oceano Dunes District Habitat Conservation Plan EIR

Scoping Report

August 2018



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Oceano Dunes District Habitat Conservation Plan EIR Scoping Report

INTRODUCTION

This scoping report summarizes the public scoping meeting and comments received for the environmental document being prepared in connection with California Department of Parks and Recreation's (CDPR) application for an incidental take permit, for Pismo State Beach and Oceano Dunes State Vehicular Recreation Area (SVRA), (ITP) authorized under Sections 10(a)(1)(A) and 10(a)(1)(B) of the federal Endangered Species Act (FESA). The environmental document will consider potential impacts of implementing CDPR's Habitat Conservation Plan (HCP) and issuance of an incidental take permit by the U.S. Fish and Wildlife Service (USFWS). The report is organized in the following sections:

- Introduction
- Background
- Action and Environmental Document
- Scoping Process
- Comments Received
- Summary of Scoping Comments
- Attachment 1: Notices and Meeting Advertisements
 - Notice of Preparation and Public Scoping Meeting
 - USFWS News Release seeking public input on HCP
 - Notice of Intent
- Attachment 2: Scoping Meeting Presentation
- Attachment 3: Scoping Meeting Attendance Record
- Attachment 4: Scoping Meeting Oral Comments and Questions
- Attachment 5: Scoping Letters
 - Hardcopy Letters
 - Emails
 - Form emails

BACKGROUND

CDPR is in the process of developing a conservation strategy for various species located at Pismo State Beach and Oceano Dunes State Vehicular Recreation Area (SVRA), for which the California Department of Parks and Recreation (CDPR) has responsibility and authority. Management and operation of the two areas may negatively affect western snowy plover (*Charadrius nivosus nivosus*), California least tern (*Sternula antillarum browni*), California red-legged frog (*Rana draytonii*), and tidewater goby (*Eucyclogobius newberryi*), as well as six listed plant species. Therefore, CDPR has prepared a Habitat Conservation Plan (HCP) as part of its application for an incidental take permit (ITP) authorized under Sections 10(a)(1)(A) and 10(a)(1)(B) of the federal Endangered Species Act (FESA). The HCP to be prepared by CDPR in support of the permit applications will describe the impacts of take on proposed covered species, and it will propose a conservation strategy to minimize and mitigate those impacts on each covered species to the maximum extent practicable.

ACTION AND THE ENVIRONMENTAL DOCUMENT

CDPR has prepared a Draft Environmental Impact Report (EIR) for the Oceano Dunes District HCP pursuant to the California Environmental Quality Act (CEQA). USFWS is preparing an environmental review of the Draft HCP pursuant to the National Environmental Policy Act (NEPA) in a separate document. Both the Draft EIR and the USFWS NEPA document will have distinct public review periods and opportunities to provide comment on the respective environmental review document and the Draft HCP.

SCOPING PROCESS

CDPR published a Notice of Preparation (NOP) for the EIR on January 11, 2018 to invite comment on the scope and content of the environmental review of the Oceano Dunes District HCP; the comment period closed on March 12, 2018. Simultaneously, the USFWS published a Notice of Intent in the Federal Register and a News Release to announce preparation of a NEPA environmental review of the HCP and to invite public comment. Both notices announced a joint public scoping meeting on February 7, 2018 for the purpose of inviting public comments on the project.

Public notice of the scoping period and public meeting was distributed to state agencies through the State Clearinghouse, County Clerk offices of adjacent counties, local community agencies, adjacent property residents, homeowner and neighborhood associations, and interested organizations and individuals who have requested notices from CDPR (Attachment 1). Notice was also published in a newspaper of local circulation. The objective of the scoping meeting was to solicit comments to assist the preparation of the environmental document and scope of the Habitat Conservation Plan. Commentors were asked to identify important issues and alternatives related to the proposed action to ensure the full range of issues related to the permit requests is identified.

Members of the public were greeted on arrival and asked to sign the attendance record form listing their name, address, and affiliation. The meeting was held with an open house format beginning with introductions, followed by a slide show presentation by Ronnie Glick, Senior Environmental Scientist, California State Parks (Attachment 2) and was followed by a general question and answer period. The public was then invited to submit verbal comments. Comment cards and mailing information were also provided for written comments. The notice and presentation stated that written comments would be accepted through March 12, 2018.

Representatives from the Oceano Dunes District of CDPR, USFWS, and MIG consultants attended and conducted the scoping meeting. Twenty members of the public signed the attendance list (Attachment 3) for the meeting.

COMMENTS RECEIVED

A total of 20 oral comments were received at the scoping meeting (Attachment 4). Twelve distinct comment letters, emails or comment cards were received in response to the NOP and NOI and one form letter email was submitted by 2,053 individuals. Some of the form letters contained additional unique comments as recorded with the form letter. Scoping comments were submitted by private individuals, public agencies, and private conservation groups (Attachment 5).

SUMMARY OF SCOPING COMMENTS

Some of the comments related to the HCP rather than the environmental document, and some comments expressed support or opposition to certain aspects of the proposed HCP. Some comments pertained only to the federal agency environmental review under NEPA. Only those comments relating to the scope of the environmental analysis are presented below. The comments focused on air quality, biological resources, cultural resources, water quality/hydrology, recreation opportunity, the alternatives analysis, and cumulative impacts.

- **Document Type & Review Process.** Specify whether EIR will be used as programmatic “tiering” document or provide project-level review, prepare a full EIS not an EA, and that a NCCP is needed for CLTE since it is a Fully Protected Species.
- **General Comments Applying to Entire Document.** Base environmental review on best available science and survey data following established protocols. (see methodology section for each impact analysis chapter)
- **Project Description- Proposed Action.** Identify purpose and need and rationale for proposed action. HCP and CEQA/NEPA documents must clearly identify enforcement provisions.
- **Air Quality.** Address general impacts of motorized recreation on air quality, dust, and particulates. For air quality analysis, quantify emissions, identify emissions sources, and include construction emissions mitigation including fugitive dust source controls, stationary equipment source controls, and administrative controls. Demonstrate project emissions of air basin pollutants in nonattainment or maintenance status are accounted for in the State Implementation Plan.
- **Greenhouse Gas (GHG).** Address general impacts of motorized recreation on GHG emissions.
- **Biological Resources.** Address general impacts of motorized recreation on loss of surface soils and vegetation and trash. Include direct, indirect, and cumulative impacts to all wildlife and habitat, and measures to avoid impacts. Discuss HCP’s consistency with other HCPs or recovery plans in the area. Address invasive species impacts and impacts to steelhead and leatherback sea turtle. Address other protected species not covered in the HCP. Take into account the impacts of climate change and dogs off leash on covered species. Incorporate findings of USFWS 2017 report to improve protections for SNPL and CLTE. Address impacts from dust control mitigation on increased vegetation that attracts predators, threatening endangered species. Address sand density in preferred nesting habitat assessment. Take into account injured birds in take totals. Apply a correction factor for detection of juvenile and adult SNPL mortality caused by vehicle strikes. Express losses to take of SNPL eggs, chicks, and juveniles as adult equivalents to better identify cumulative impacts. Address nighttime vehicle threat to juvenile and adult SNPL. Consider rates of sea level rise in impact analysis for SNPL habitat. Address impacts of fertilizer used for revegetation projects.
- **Cultural Resources.** Describe tribal consultation process, address Indian sacred sites that exist in the project area, consult with California Native American tribes affiliated with the

geographic area per SB 18 and AB 52, particularly in regard to dust mitigation projects and planning.

- **Hydrology and Water Quality.** Address general impacts of motorized recreation from oil and gas spills. Describe the drainage patterns in the area, including the 50- and 100-year flood plains. Address water quality and flow rates of Oso Flaco Lake and Arroyo Grande Creek.
- **Land Use and Planning.** Discuss project consistency with objectives of federal, state, tribal, or local land use plans, policies, and controls in the plan area.
- **Environmental Justice.** The environmental document should include an evaluation of environmental justice populations within the geographic scope of the plan area.
- **Recreation.** Consider a range of recreation opportunity including no loss in recreation opportunity and more restriction to vehicle use. Evaluate night riding impacts.
- **Alternatives.** Evaluate all reasonable alternatives that fulfill project's purpose and need in detail and protect imperiled wildlife and health of nearby communities. Include a clear discussion of reasons for elimination of any alternatives not discussed in detail. Include alternatives with expanded SNPL and CLTE exclosures and permanent exclosures. Consider an alternative area for permanent fences, alternative access during wet season, alternative areas for off-highway vehicle (OHV) use in non-sensitive areas, riding closure during breeding season, staggering use of OHV days and hours, and off-site mitigation for CLTE/SNPL as alternatives. Establish visitor capacity limits and consider as an alternative. Address return of the seasonal exclosure boundary to post marker (Post) 7 in compliance with 2003 Settlement Agreement. NEPA analysis must provide a co-equal evaluation of alternatives with the proposed action.
- **Cumulative Impacts.** Evaluate the effects of other past, present, and reasonably foreseeable actions and consider those impacts on a cumulative level. Discuss future changes that may affect covered species and their habitats. Evaluate all potential Oceano Dunes SVRA operations and configurations and consider future uncertainties due to temporary Coastal Development Permit and Public Works Plan being developed.

ATTACHMENT 1: NOTICES AND MEETING ADVERTISEMENTS

- Notice of Completion and Environmental Document Transmittal
- Notice of Preparation and Public Scoping Meeting

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

2018011012

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Oceano Dunes District Habitat Conservation Plan EA/EIR or EIS/EIR

Lead Agency: C DPR, OHMVR Division, Oceano Dunes District Contact Person: Ronnie Glick
Mailing Address: 340 James Way, Ste. 270 Phone: 805-773-7170
City: Pismo Beach Zip: 93449 County: San Luis Obispo

Project Location: County: San Luis Obispo City/Nearest Community: Oceano, Grover Beach, Pismo Beach
Cross Streets: Grand Ave, Pier Ave, Oso Flaco Road Zip Code: 93445
Longitude/Latitude (degrees, minutes and seconds): 35 ° 03 ' 21 " N / 120 ° 37 ' 3 " W Total Acres: Approx. 5,005
Assessor's Parcel No.: Project covers many parcels Section: Twp.: Range: Base:
Within 2 Miles: State Hwy #: SR 1; US Highway 101 Waterways: Pismo/Meadow/Oso Flaco/Arroyo Grande Creeks
Airports: Oceano County Airport Railways: Amtrak Schools: various

Document Type:

CEQA: [X] NOP [] Draft EIR NEPA: [] NOI Other: [X] Joint Document
[] Early Cons [] Supplement/Subsequent EIR [] EA [] Final Document
[] Neg Dec (Prior SCH No.) [] Draft EIS [] Other:
[] Mit Neg Dec Other:

Local Action Type:

[] General Plan Update [] Specific Plan [] Rezone [] Annexation
[] General Plan Amendment [] Master Plan [] Prezone JAN 09 2018 [] Redevelopment
[] General Plan Element [] Planned Unit Development [] Use Permit [] Coastal Permit
[] Community Plan [] Site Plan [] Land Division, Subdivision, etc. [] Other: Habitat Conservation
STATE CLEARINGHOUSE

Development Type:

[] Residential: Units Acres
[] Office: Sq.ft. Acres Employees
[] Commercial: Sq.ft. Acres Employees
[] Industrial: Sq.ft. Acres Employees
[] Transportation: Type
[] Mining: Mineral
[] Educational: Type MW
[] Power: Type MGD
[] Recreational: Type
[] Waste Treatment: Type MGD
[] Water Facilities: Type MGD [X] Other: Resource Management
[] Hazardous Waste: Type

Project Issues Discussed in Document:

[] Aesthetic/Visual [] Fiscal [X] Recreation/Parks [X] Vegetation
[] Agricultural Land [] Flood Plain/Flooding [] Schools/Universities [X] Water Quality
[X] Air Quality [] Forest Land/Fire Hazard [] Septic Systems [X] Water Supply/Groundwater
[X] Archeological/Historical [X] Geologic/Seismic [] Sewer Capacity [X] Wetland/Riparian
[X] Biological Resources [] Minerals [] Soil Erosion/Compaction/Grading [] Growth Inducement
[X] Coastal Zone [] Noise [] Solid Waste [] Land Use
[] Drainage/Absorption [] Population/Housing Balance [] Toxic/Hazardous [] Cumulative Effects
[] Economic/Jobs [] Public Services/Facilities [] Traffic/Circulation [] Other:

Present Land Use/Zoning/General Plan Designation:

Various including Agriculture, Recreation, and Open Space/Resource Conservation

Project Description: (please use a separate page if necessary)

The California Department of Parks and Recreation (CDPR) proposes to prepare an HCP to support its application for a 25-year incidental take permit (ITP) under the federal Endangered Species Act for park units managed by the Oceano Dunes District. The HCP area covers 5,005 acres of largely undeveloped public lands. The ITP would cover all lawful activities for which CDPR has responsibility within the HCP area that could result in take of covered species, including public use, recreation management, natural and cultural resources management, and park/beach management. The HCP addresses the following: species: western snowy plover, California least tern, California red-legged frog, tidewater goby, marsh sandwort, La Graciosa thistle, Nipomo Mesa lupine, Gambel's watercress, surf thistle, and beach spectaclepod.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".
If you have already sent your document to the agency please denote that with an "S".

- | | |
|---|--|
| <input checked="" type="checkbox"/> Air Resources Board | <input type="checkbox"/> Office of Historic Preservation |
| <input type="checkbox"/> Boating & Waterways, Department of | <input type="checkbox"/> Office of Public School Construction |
| <input type="checkbox"/> California Emergency Management Agency | <input type="checkbox"/> Parks & Recreation, Department of |
| <input type="checkbox"/> California Highway Patrol | <input type="checkbox"/> Pesticide Regulation, Department of |
| <input checked="" type="checkbox"/> Caltrans District # <u>5</u> | <input type="checkbox"/> Public Utilities Commission |
| <input type="checkbox"/> Caltrans Division of Aeronautics | <input checked="" type="checkbox"/> Regional WQCB # <u>3</u> |
| <input type="checkbox"/> Caltrans Planning | <input type="checkbox"/> Resources Agency |
| <input type="checkbox"/> Central Valley Flood Protection Board | <input type="checkbox"/> Resources Recycling and Recovery, Department of |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy | <input type="checkbox"/> S.F. Bay Conservation & Development Comm. |
| <input checked="" type="checkbox"/> Coastal Commission | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Colorado River Board | <input type="checkbox"/> San Joaquin River Conservancy |
| <input type="checkbox"/> Conservation, Department of | <input type="checkbox"/> Santa Monica Mtns. Conservancy |
| <input type="checkbox"/> Corrections, Department of | <input checked="" type="checkbox"/> State Lands Commission |
| <input type="checkbox"/> Delta Protection Commission | <input type="checkbox"/> SWRCB: Clean Water Grants |
| <input type="checkbox"/> Education, Department of | <input checked="" type="checkbox"/> SWRCB: Water Quality |
| <input type="checkbox"/> Energy Commission | <input type="checkbox"/> SWRCB: Water Rights |
| <input checked="" type="checkbox"/> Fish & Game Region # <u>4</u> | <input type="checkbox"/> Tahoe Regional Planning Agency |
| <input type="checkbox"/> Food & Agriculture, Department of | <input type="checkbox"/> Toxic Substances Control, Department of |
| <input type="checkbox"/> Forestry and Fire Protection, Department of | <input type="checkbox"/> Water Resources, Department of |
| <input type="checkbox"/> General Services, Department of | |
| <input type="checkbox"/> Health Services, Department of | <input type="checkbox"/> Other: <u>U.S. Fish and Wildlife Service</u> |
| <input type="checkbox"/> Housing & Community Development | <input type="checkbox"/> Other: _____ |
| <input checked="" type="checkbox"/> Native American Heritage Commission | |

Local Public Review Period (to be filled in by lead agency)

Starting Date January 11, 2018 Ending Date March 12, 2018

Lead Agency (Complete if applicable):

Consulting Firm: <u>MIG TRA Environmental Sciences</u>	Applicant: <u>OHMVR Division, Oceano Dunes District</u>
Address: <u>545 Middlefield Road, Suite 200</u>	Address: <u>340 James Way, Ste. 270</u>
City/State/Zip: <u>Menlo Park, CA 94025</u>	City/State/Zip: <u>Pismo Beach, CA 93449</u>
Contact: <u>Kate Werner</u>	Phone: <u>805-773-7170</u>
Phone: <u>831-601-4700</u>	

Signature of Lead Agency Representative:  Date: 1-9-2018

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

NOTICE OF PREPARATION AND PUBLIC SCOPING MEETING

Date: January 9, 2018

To: California State Clearinghouse, state Responsible and Trustee Agencies, federal agencies, County Clerks, local jurisdictions, and interested individuals and organizations

Subject: **Notice of Preparation and Public Scoping Meeting for the California Department of Parks and Recreation, Oceano Dunes District Habitat Conservation Plan Joint EA/EIR or Joint EIS/EIR**

Lead Agency: U.S. Fish and Wildlife Service (Service) is Lead Agency under the National Environmental Policy Act (NEPA) for the EA or EIS; California Department of Parks and Recreation (CDPR) is Lead Agency under the California Environmental Quality Act (CEQA) for the EIR.

Applicant: CDPR, Oceano Dunes District, 340 James Way, Ste. 270, Pismo Beach, CA 93449

Project Location: Pismo State Beach, Oceano Dunes State Vehicular Recreation Area, and Pismo Lake in San Luis Obispo County, California

Project Description: CDPR proposes to prepare a Habitat Conservation Plan and submit an application for an incidental take permit under the federal Endangered Species Act. A brief description of the project, including its location and probable environmental effects, is attached. An Initial Study was not prepared for the project because CDPR has determined that an EIR will be prepared for the project.

The purpose of this Notice of Preparation (NOP) and Public Scoping Meeting is to 1) describe the proposed project (the Project) and possible alternatives; 2) advise other federal and State agencies and the public of CDPR's and the Service's intent to prepare a joint EA/EIR or EIS/EIR; 3) announce the initiation of a 60-day public scoping period; and 4) obtain suggestions and information on the scope of issues and alternatives to be included in the EA/EIR or EIS/EIR. Comment is requested from state Responsible and Trustee Agencies, federal agencies, and any other local agency, person, or organization concerned with the environmental effects of the project.


Corresponding with the NOP, a Notice of Intent (NOI) is being issued by the Service for publication in the Federal Register in compliance with Section 1501.7 of NEPA. As provided for under CEQA Guideline 15170, "a lead agency may work with a federal agency to prepare a joint environmental document." The NOI and NOP are being released simultaneously for a 60-day public review period, which commences on January 11, 2018 and ends on March 12, 2018. The NOI and NOP provide parallel opportunities for early agency and public input and comment.

Page 2

Responses may be to one Notice or the other, but need not be to both. All information and comments received in response to the NOP and NOI must be considered in preparation of the EIS/EA or EIS/EIR as a whole.

Please send your written response by the earliest possible date, but no later than 5 PM on March 12, 2018 to Mr. Ronnie Glick, Senior Environmental Scientist, California Department of Parks and Recreation, Oceano Dunes District, 340 James Way, Ste. 270, Pismo Beach, CA 93449 or to Ronnie.Glick@parks.ca.gov (enter "Oceano Dunes District HCP NOP" in the 'Subject' line). Agency responses should include the name of a contact person at the agency. The Service and CDPR encourage all interested agency representatives, organizations, and individuals to attend the public scoping meeting for the Project's Draft EA/EIR or EIS/EIR:

**Wednesday, February 7, 2018
Ramona Garden Park Center
993 Ramona Avenue
Grover Beach, CA 93433
6 PM – 8 PM**

Signature:  _____ Date: January 9, 2018

Title: Environmental Compliance Manager

*Oceano Dunes District Habitat Conservation Plan NOP and Public Scoping Meeting
California Department of Parks and Recreation – January 9, 2018*

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
OCEANO DUNES DISTRICT HABITAT CONSERVATION PLAN (HCP)

PROJECT DESCRIPTION

The California Department of Parks and Recreation (CDPR), Oceano Dunes District manages Pismo State Beach, Pismo Lake, and Oceano Dunes State Vehicular Recreation Area (SVRA). These state park units provide coastal recreation to an estimated two million visitors annually. The parklands are home to multiple wildlife and plant species, some of which are protected under the federal Endangered Species Act (FESA). CDPR implements an ongoing conservation program to manage these special-status species and their habitats. CDPR is preparing an HCP, which is required under the federal Endangered Species Act (ESA) for issuance of an incidental take permit (ITP).

Project Location and Site Description

The Oceano Dunes District HCP area includes Pismo State Beach, Oceano Dunes SVRA, and Pismo Lake located in San Luis Obispo County, California (Map 1, HCP Area). The HCP area comprises 5,005 acres bounded by the City of Pismo Beach to the north, the Guadalupe-Nipomo Dunes National Wildlife Refuge to the south, urban and agricultural land to the east, and the Pacific Ocean to the west. Primary access to the area is via U.S. Highway 101 and State Route 1.

Pismo State Beach and Oceano Dunes SVRA comprise approximately 25 percent of the 18-mile linear shoreline of the Guadalupe-Nipomo Dunes complex, which extends from Pismo Beach south to Point Sal in Santa Barbara County. The Guadalupe-Nipomo Dunes complex is a relatively intact coastal dune and dune scrub ecosystem varying in width from two to five miles.

Visitors come to enjoy wide-ranging pursuits including off-highway vehicle (OHV) (e.g., 4x4, all-terrain vehicle [ATV], motorcycle, and sandrail) recreation, camping, pedestrian activities, dog-walking, horseback riding, bicycling, golfing, fishing, boating/surfing, and aerial/wind driven activity. To support this high level and diversity of visitation, the Oceano Dunes District has an extensive operational program (Map 2, Land Use Facilities).

Proposed Project

CDPR management and operation of Pismo State Beach, Pismo Lake, and Oceano Dunes SVRA may negatively affect the federally-threatened western snowy plover (*Charadrius nivosus nivosus*) and California red-legged frog (*Rana draytonii*), and the federally-endangered California least tern (*Sternula antillarum browni*), tidewater goby (*Eucyclogobius newberryi*), marsh sandwort (*Arenaria paludicola*), La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*), Nipomo Mesa lupine (*Lupinus nipomensis*), and Gambel's watercress (*Nasturtium [Rorippa gambelii]*), as well as two plant species solely listed under the California Endangered Species Act (surf thistle [*Cirsium rhotophilum*] and beach spectaclepod [*Dithyrea maritima*]).

CDPR proposes the Oceano Dunes District HCP to support its application for a 25-year federal ITP under FESA Section 10(a)(1)(B). Covered activities under this HCP include all lawful activities for which CDPR has responsibility within the covered lands that could result in take of covered species. These activities include, but are not limited to, public use/recreation management,

natural resources management, and park/beach management. The HCP is designed to accommodate recreational use within the covered parks while protecting and benefiting numerous populations of threatened and endangered species occurring within those parks.

CDPR would manage the HCP area for covered species largely in the same manner it has been for over a decade. The management actions include utilizing protective fencing, monitoring, habitat restoration, invasive plant and animal control, habitat monitoring, and water quality monitoring and improvements. The proposed conservation program includes conservation measures (i.e., actions taken to avoid or minimize take, compensate for loss of habitat, or provide for the conservation of covered species) to achieve the biological goals and objectives set forth in the HCP. The measures include avoidance and minimization measures (AMMs), habitat enhancement, habitat restoration, habitat creation, and population enhancement.

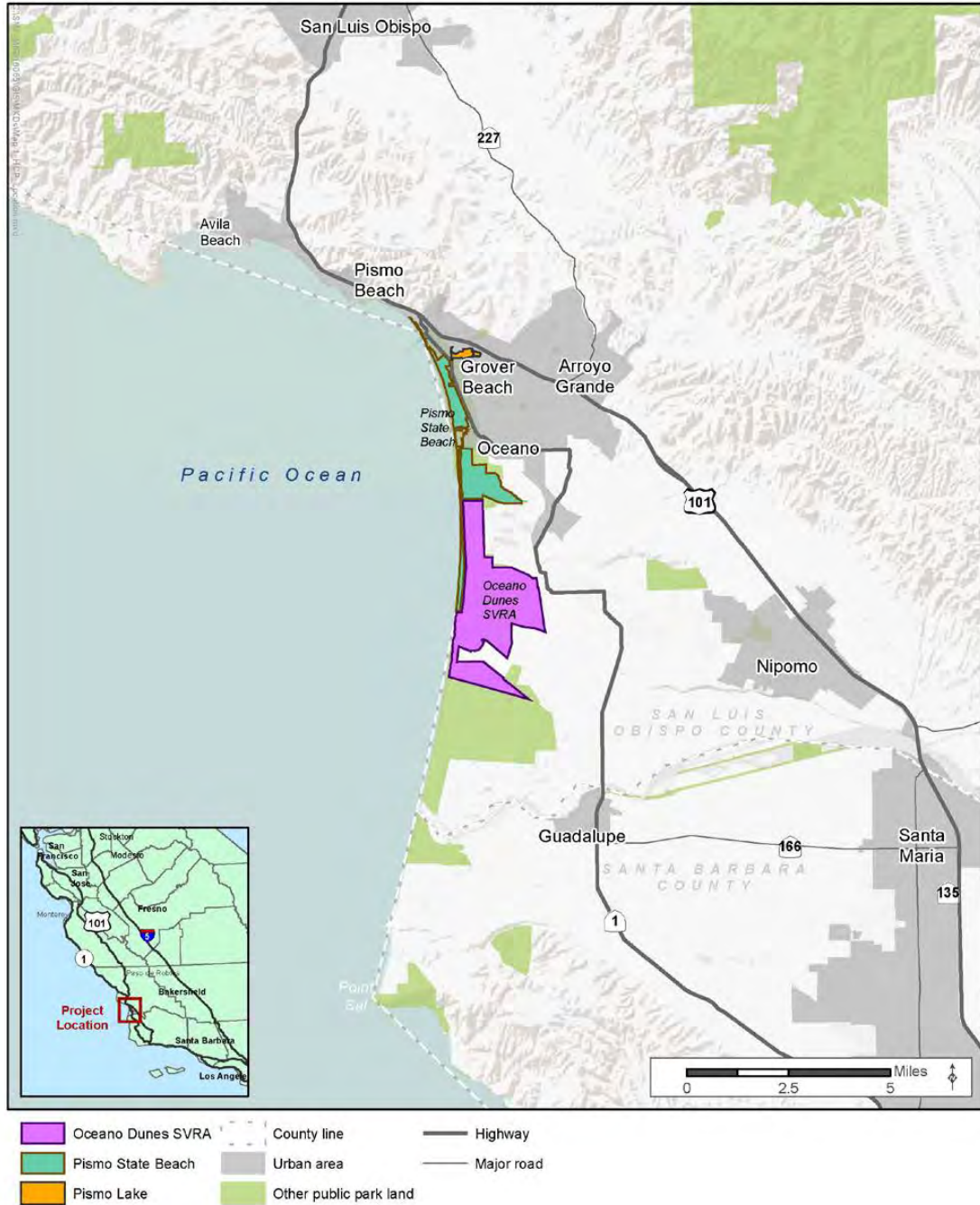
Alternatives

The EA/EIS or EIS/EIR will examine a reasonable range of alternatives to the proposed project. The alternatives will be defined based on the EA/EIR or EIS/EIR analysis, public scoping meeting, and comments received on the NOP and NOI. A detailed description of the impacts of the proposed action and each alternative will be included in the EA/EIR or EIS/EIR. Several alternatives will be considered and analyzed, representing varying levels of conservation and impacts. A No Action alternative will be included in the analysis of the alternatives considered.

Probable Environmental Effects

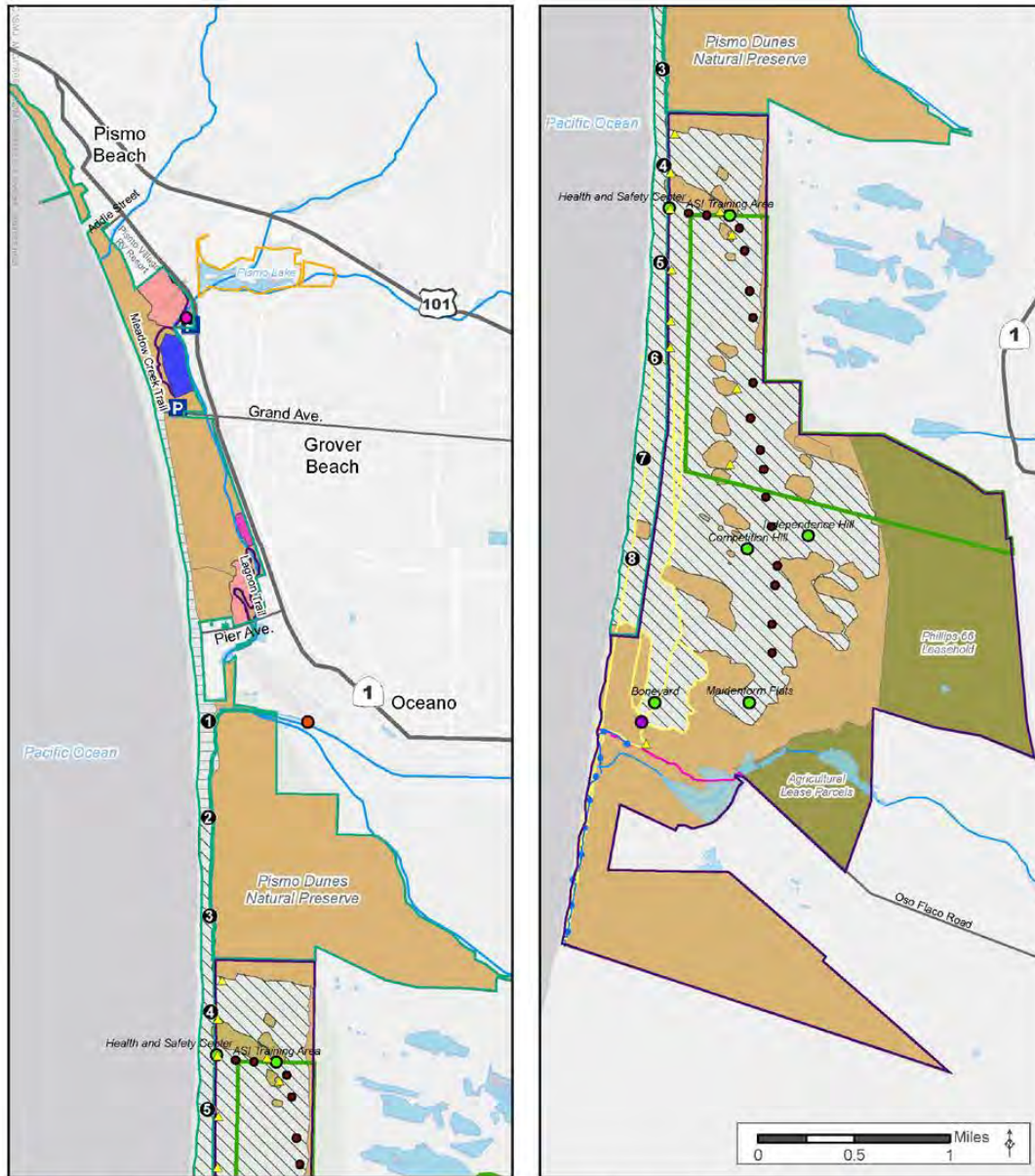
The proposed HCP is intended to benefit covered species in the HCP area by protecting and, where appropriate, enhancing their populations. There is potential for the HCP covered activities to result in unintentional take (e.g., harm, harassment, injury, or death, etc.) of covered species, which would be a significant impact. Park management under the HCP may modify the seasonal enclosure fencing to expand recreational access to beach areas currently closed during the western snowy plover and California least tern breeding season. The HCP does not propose changes to daily limits on the number of street legal and OHV vehicles at Pismo State Beach and Oceano Dunes SVRA as established by an existing Coastal Development Permit.

The proposed HCP may have indirect impacts on air quality, greenhouse gas emissions, cultural and tribal resources, and hydrology/water quality. Several areas of potential concern are likely to be found less than significant given the non-developmental nature of the proposed project and minimal change in visitor use and park operations from baseline operations (e.g., aesthetics, hazards, public services, recreation, traffic, and utilities). Other environmental issues may not apply due to the absence of a resource or the nature of the project site (e.g., agricultural/ forestry, mineral resources, and population/housing). The final scope of impact analyses conducted for the EA/EIR or EIS/EIR will be dependent upon the outcomes of the NOP public review process.



Map 1 HCP Area and Vicinity
Oceano Dunes District Habitat Conservation Plan





- | | | | |
|---------------------------|------------------------------|-----------------------------------|---------------------|
| Oceano Dunes SVRA | Ranger station and yard | 2017 enclosure fence | OHV landmarks |
| Pismo State Beach | Street legal vehicles only | Symbolic fence in South Oso Flaco | Boneyard gate |
| Pismo Lake | Open to riding and camping | Sand highway markers | Guiton crossing |
| Dust control program area | Closed to motorized vehicles | Marker post | Oso Flaco boardwalk |
| Campground | Closed to all public use | Restrooms | Trail |
| Golf course | Waterbody | Monarch butterfly grove | |

Map 2 Oceano Dunes District Land Use and Facilities
Oceano Dunes District Habitat Conservation Plan

ATTACHMENT 2: SCOPING MEETING PRESENTATION

Oceano Dunes District
Habitat Conservation Plan NEPA/CEQA
Public Scoping and Open House

Welcome!

February 7, 2018


California State Parks
U.S. Fish and Wildlife Service



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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Meeting Agenda

- Welcome and Introductions
- Purpose of Meeting
- Proposed Project
- NEPA/CEQA Process
- Questions
- Public Comment



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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Introductions

California State Parks – Oceano Dunes District


- Kevin Pearce, District Superintendent
- Ronnie Glick, Senior Environmental Scientist
- Dena Bellman, Assoc. Park and Recreation Specialist

U.S. Fish and Wildlife Service – Ventura

- Lena Chang, Acting Assistant Field Supervisor
- Robyn Gerstenslager, Public Affairs Specialist

Consultants – MIG|TRA


- Paula Hartman, Principal
- Kate Werner, Senior Project Manager



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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Purpose of Meeting



- Provide an overview of the proposed Habitat Conservation Plan (HCP)
- Provide an overview of the environmental review process
- Invite public input on environmental analysis of the HCP



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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What is an HCP?

- An HCP is a plan that ensures species are conserved, ultimately contributing toward the recovery of impacted species.
- An HCP is required as part of an application for an “incidental” take permit, i.e., a permit allowing take caused by otherwise lawful activities. (Federal Endangered Species Act, Section 10(a))
- “Take” includes actions that harass, harm, pursue, wound, kill, etc. listed species. (Federal Endangered Species Act, Section 3)






Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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What is an HCP (cont.)?

An HCP:

- Describes how project activities will “take” listed species
- Sets forth a comprehensive plan to avoid, minimize, and mitigate for take and monitor outcomes
- Ensures adequate funding for the duration of the permit


Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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What is *this* HCP?

A collaborative and comprehensive strategy to balance recreational opportunities with conservation of rare wildlife, plants, and their habitats in the Oceano Dunes District, which includes:

- Pismo State Beach
- Pismo Lake
- Ocean Dunes SVRA

Permit term is 25 years

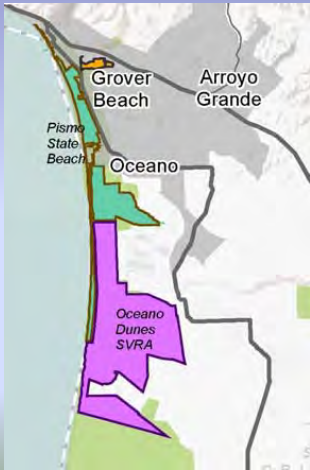



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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HCP Covered Park Units


Total area covered 5,005 acres

- Pismo State Beach
 - 1,445 acres natural and developed
 - Pismo Dunes Natural Preserve 694-acre sub-unit
- Oceano Dunes SVRA
 - 3,490 acres
- Pismo Lake
 - 70 acres non-classified





Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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HCP Covered Species




Western snowy plover (FT)




California least tern (FE, SE, SP)



California red-legged frog (FT)




Tidewater goby (FE)




Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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HCP Covered Species (cont.)




John Gaine 2014
Beach spectaclepod
(ST)




CNPS San Luis Chapter 2011
Marsh sandwort
(FE, SE)




Chris Winchell 2011
La Graciosa thistle
(FE, ST)




CNPS 1984
Surf thistle (ST)



Dieter Wilton 2005
Nipomo Mesa lupine
(FE, SE)




Chris Winchell 2010
Gambel's watercress
(FE, ST)



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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The HCP describes how State Parks will...


- Comply with the federal Endangered Species Act
- Manage park units consistent with State Park’s mission and unit designations
- Provide long-term management of natural resources, incl. funding



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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HCP Goals


- Ensure habitat-level protection and management
- Minimize human-related impacts to covered species
- Enhance survival and recovery of the covered species
- Meet resource management objectives



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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HCP Covered Activities

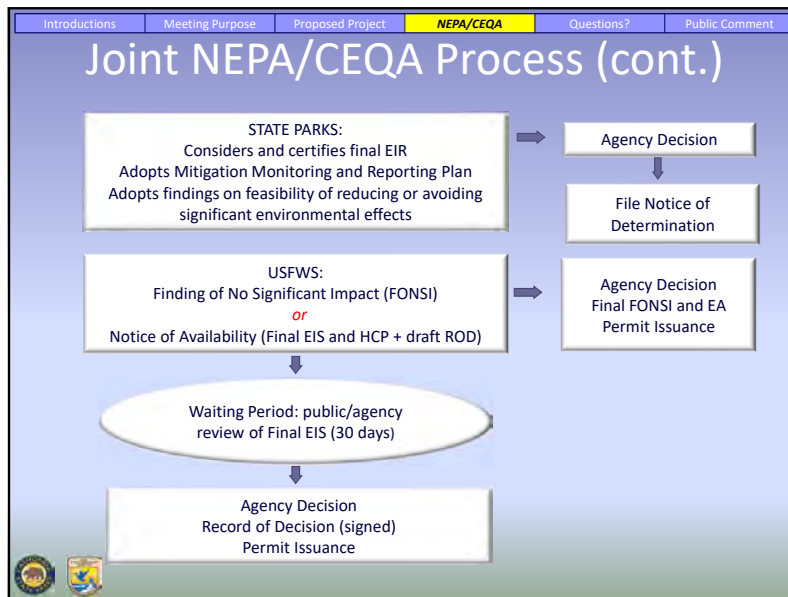
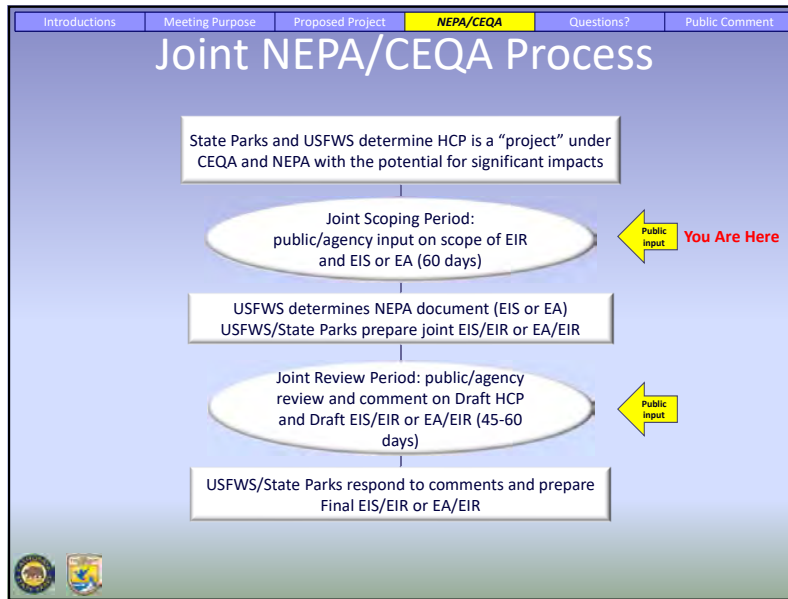
- Visitor activities
- Resource management
- Maintenance
- Visitor services
- Other activities, e.g., creek crossings, enclosure adjustments, dust control, and special projects



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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HCP Area Land Uses and Facilities






Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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Type of Comments to Provide

- Environmental impacts to be addressed, incl. covered species
- Mitigation
- Range of alternatives



Introductions	Meeting Purpose	Proposed Project	NEPA/CEQA	Questions?	Public Comment
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How to Comment


- 1) Submit comments in person.
- 2) Submit Comment Cards.
- 3) Mail written comments to:

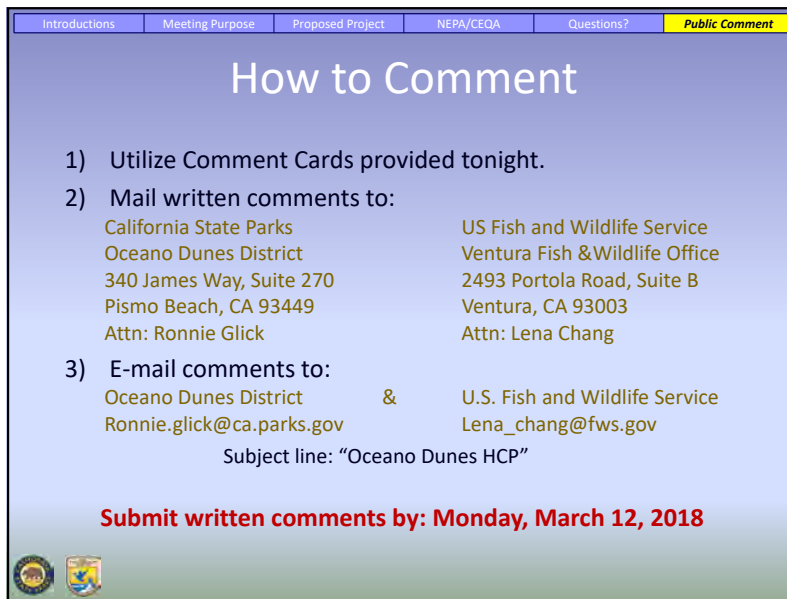
California State Parks Oceano Dunes District & 340 James Way, Suite 270 Pismo Beach, CA 93449 Attn: Ronnie Glick	U.S. Fish and Wildlife Service Ventura Fish & Wildlife Office 2493 Portola Road, Suite B Ventura, CA 93003 Attn: Lena Chang
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- 4) E-mail comments to:

Oceano Dunes District & Ronnie.glick@parks.ca.gov	U.S. Fish and Wildlife Service Lena_chang@fws.gov
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Subject line: "Oceano Dunes HCP"

Submit written comments by: Monday, March 12, 2018





ATTACHMENT 3: SCOPING MEETING ATTENDANCE RECORD

2/7/18 OD HCP Scoping Meeting



NAME	ADDRESS	PHONE	EMAIL
Amber Clark	435 Coach Rd AG	805-710-4414	alclark81@gmail.com
NANCY LA GRILLE			b52LaGrille@gmail.com
Ron Raybore	P.O. Box 1242 Pismo Beach		DREAMNOT@gmail.com
DEBORAH FIALKOWSKI	1364 TRAIL VIEW PL NIPONCO, CA 93444	805 343-1545	dafesg@aol.com
Stacy Norrini	539 Stadas Lane Ag Ca 93420	235-1562	
Zette Harbour	785 Quintana #126 Morro Bay 93442	805/441-6688	zetteharbour@gmail.com
Greg Haas	1411 Marsh St, Ste 205 SLO 93401	805 546-8348	greg haas@mail.house.gov
Nick Calanne	1329 Atlantic City Ave Plover Beach CA	559 786 8886	PismoDuneRiders@gmail.com

2/7/18 OD HCP Scoping Meeting



NAME	ADDRESS	PHONE	EMAIL
Rachelle Toti			
Fred Collis			fcollis

2/7/18 OD HCP Scoping Meeting



NAME	ADDRESS	PHONE	EMAIL
Ginger Schenk	1302 Poplar St Arroyo Grande CA 93420	805 489 3805	gingerschenk@sbcglobal.net
Jerry Stanley	580 Pinecone Way AG 93420	805 489 9924	jerry_stanley@sbcglobal.net
Tamar Carmona + Rocko O Rienecke	1340 21st St Oceano, CA 93445	818 667 0989	Tamar.carmona@gmail.com
DOUG GEORGE		831-332-3757	dgeorge77@gmail.com
TRAVIS JOHNSON	1815 MILLER DR. OCEANO, CA. 93445	831-332-3757	
Aruha Prasad	1212 Broadway, Suite 812 Oceano, CA 93445		arubha@biologicalresources.org
Dorothy Borvia	PO Box 64 Arroyo Grande, CA 93421	(805) 488-3585	arubha488@gmail.com
Kimberly Perez	1710 Del Norte Way San Luis Obispo, CA 93405	(805) 918-7125	president@PacificWildfire.org

2/7/18 OD HCP Scoping Meeting



NAME	ADDRESS	PHONE	EMAIL
Lyndi Love-Haning			lovehaning@yahoo.com
Sean Hayos			SeanHayos7Hans@ yahoo.com

ATTACHMENT 4: SCOPING MEETING ORAL COMMENTS AND QUESTIONS

**California State Parks OHMVR Division and U.S. Fish and Wildlife Service
Oceano Dunes HCP Joint NEPA/CEQA Scoping Meeting
February 7, 2018
6:00 - 8:00 PM**

Meeting opened with a powerpoint presentation by Ronnie Glick, Senior Environmental Scientist, California State Park and was followed by a general question and answer period. The following are questions and comments made by those in attendance.

Q: What is the reason for take if trying to save species? Is there a way to couple education with this process?

Response: Education is a component of existing park operations. Oceano Dunes has a successful program for managing species. HCP sets in stone the conservation effort and mitigation.

Comment #1: Need to increase education effort. Consistent distribution of brochures.

Q: Is this the same process for steelhead? Should steelhead be included in HCP?

Response: NOAA did not feel it necessary Oceano Dunes HCP to cover steelhead due to the low likelihood for take.

Q: Are there other species that need to be addressed?

Response: The HCP is addressing the federal species only. State species will be addressed in a separate process.

Comment #2: Need updated education kiosks. Can't read information.

Q: What recommendations has USFWS made to reduce impacts of take?

Response: fencing, monitoring, speed limits, etc.

Q: What about nighttime riding?

Comment #3: Need restrictions on nighttime riding

Response: At nighttime birds stay on nests within enclosure. Nighttime impact is primarily from predation not from riding.

Q: Is predation a take?

Response: No. Take impact is defined as a human activity. Man's actions can increase predator presence such as gulls attracted to trash. Park does implement a predator control program.

Comment #4: South Oso Flaco has bare sand and no OHV use. Birds like OHV better for nesting for lack of predators. No grass area for predators to hide. Vegetation established for dust control creates area for predators to hide and can increase number of predators in area.

Response: If predators increased the park management measures would cover it.

Q: Would [injury from] a dog be considered a take?

Response: Yes, because it is associated with human use.

Comment #5: Dogs off leash is a concern. Oso Flaco docent noted dogs running off leash stating it's a problem.

Q: Does HCP cover activities of County [County land?] OHV vendors.

Response: Yes. Activities of OHV vendors would be covered by HCP.

Q: For vegetation to grow, is chemical fertilizer used? Could chemicals leach into the water?

Response: Sterile straw is used. Chemicals not used at the scale that would leach into water. Not high enough quantity used.

Comment #6: Concern about amount of fertilizer used for revegetation projects.

Q: Could money be better spent in other areas where species are thriving for off-site mitigation?

Response: That is a question that can be considered.

Comment #7: Snowy plover and least tern thriving from Lompoc and Santa Barbara coastline. Species management effort could be put into locations where species are thriving.

Q: This [USFWS Incidental Take Permit] is a federal process. Will there be a future state [Natural Community Conservation Plan] process?

Response: Yes. The hope was to do the state process at the same time. The state process is coming behind the federal process and will be subject to CEQA. The state process isn't as far along as the federal process and there is a desire not to hold up the federal process since it was well advanced.

Q: Is study done on carcasses of snowy plover or other birds?

Response: when birds are found the nature of death is recorded. Circumstances often indicate nature of death such as blunt trauma from a vehicle strike or predation. Further study is not done.

Comment #8: Dust control activity is in area of tribal resources. AB52 government to government consultation is requested because of fertilizer for dust program in cultural resource area.

Comment #9: Would like no vehicles on the beach. Consider on and off days for vehicles. Staggered days hours for vehicles. Can't walk on beach if dodging cars.

Comment #10: Have alternative areas for OHV use not in sensitive areas.

Comment #11: Seasonal enclosure for snowy plover is successful. Make enclosure permanent. Open up new areas for OHV offsetting area closed.

Q: With less than 10 snowy plover take last year, could that be enough information for USFWS to determine whether to use an EA versus an EIS?

Response: Good question. USFWS will have to consider it. USFWS have to consider the numbers range-wide not just local. Depends on species and what the numbers are. One take in area where there is only one bird is obviously significant. Is 10 take in an area of 1,000 birds significant? It has to be looked at in context over the entire range.

Q: Does the 10 take include snowy plover that went to Pacific Wildlife Care?

Response. No. Raises the question of how do we handle birds sent to captive rearing.

Comment #12: CDFW keeps statistics on birds going to Pacific Wildlife Care and has aggregate totals after birds brought in and what happens to them. Need to account for injured birds in take totals.

Q: Isn't wound a take?

Response: It depends on how injury happens. Not all injuries are human caused. Not all injury is from a covered activity. Otherwise take is underestimated. Also, not all take is seen. May have found 3 take but some not seen. What is the trigger [take limit] used to re-evaluate impacts? USFWS recognizes that a take of 10 represents more. Take numbers in permit represents a higher unseen number of take.

Q: How are dead animals found?

Response: Park staff find during daily monitoring. In some cases public brings them to staff.

Q: Recovery unit is long. Lompoc - Vandenburg numbers are good due to limited access. Are numbers tracked for recovery?

Response: USFWS has recovery program for species. State Parks is in Recovery Unit 5, which goes across multiple counties. Our site is one big site. Multiple sites are within the Recovery Unit. USFWS is keeping track of what's going on up and down the coast.

Comment #13: Oso Flaco is a transfer point of water between lakes. Water comes up over the top of the causeway. Road needs upgrading.

Comment #14: Dual [alternative] access needed through the dunes through Oso Flaco to take impact off Arroyo Grande Creek [vehicles crossing through creek].

Comment #15: Consider months on, months off [vehicle riding closure] alternative and closure during plover nesting period.

Q: How does drought years affect species?

Response: Arroyo Creek is an estuary and species are impacted [extirpated] when creek dries out. State Parks monitors but has not control over water flow entering creek. State Parks is at end of creek flow.

Comment #16: Tribal community injecting water into ground which could have a beneficial impact to creek flows.

Q: What is the body of water on the beach? It is sewer?

Response: Pismo Creek and Carpenter Creek have a shared outfall. It is not sewer.

Comment #17: Educational signage should be in Spanish and English. By having signage in English only you are losing a large percentage of the population.

Response: State Parks recognizes bilingual signage is needed.

Comment #18: See large pictures at entrance to beach. Have educational signage on mile markers where people are hanging out. People learn by pictures.

Q: Has sand density of preferred nesting habitat been evaluated?

Response: Sand density is only one factor. Contouring and vegetation are also factors.

Comment #19: Consider evaluating sand density to assess preferred nesting habitat.

Comment #20: Need to look at all animals in park.

Response: CEQA side has to look at how HCP covers all other species. State Parks has active program for all plants and animals not just state and federal species. State Parks now sharing information on common species. New legislation requires public process for these common species.

ATTACHMENT 5: SCOPING LETTERS

- List of Hardcopy Letters and Individual Emails
- Letters and Individual Emails
- List of Form Letter Emails
- Form Email with Unique Comments

The list of individuals or organizations providing unique written letters and individuals submitting the form letter or variations of the form letter is presented below:

- U.S. Environmental Protection Agency
- California Coastal Commission
- Native American Heritage Commission
- CAL 4-Wheel Drive Association
- Center for Biological Diversity
- Law Offices of Babak Naficy for Sierra Club
- Law Offices of Thomas D. Roth for Friends of Oceano Dunes
- June Skadden
- Point Blue Conservation Science
- Zette Harbour
- Rachelle Toti
- June Gill



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

February 13, 2018

Mr. Stephen P. Henry
Field Supervisor
Ventura Fish and Wildlife Office
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, California 93003

Subject: Scoping Comments for the Draft Habitat Conservation Plan for the California Department of Parks and Recreation Oceano Dunes District, San Luis Obispo County, California

Dear Mr. Henry:

The U.S. Environmental Protection Agency (EPA) has reviewed the Notice of Intent (NOI) to prepare a draft environmental analysis for the proposed habitat conservation plan for the California Department of Parks and Recreation Oceano Dunes District. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

We recommend the Service consider a number of issues when preparing the DEIS, including: the range of alternatives to be evaluated; the regulatory framework surrounding the proposed action; biological resources; air quality; and consultation with tribal governments. These and other issues are discussed further in the attached detailed comments.

We appreciate the opportunity to review this scoping notice and are available to discuss the recommendations provided. When the DEIS prepared for this proposed action is released for public review, please send one hard copy and one CD to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 947-4221 or gerdes.jason@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Jason Gerdes".

Jason Gerdes
Environmental Review Section

Enclosure: EPA's Detailed Scoping Comments

U.S. EPA DETAILED SCOPING COMMENTS FOR THE CALIFORNIA DEPARTMENT OF PARKS AND RECREATION OCEANO DUNES DISTRICT HABITAT CONSERVATION PLAN, CALIFORNIA – FEBRUARY 13, 2018

Purpose and Need and Alternatives Analysis

EPA recommends that the Draft Environmental Impact Statement (DEIS) prepared for the California Department of Parks and Recreation Oceano Dunes District Habitat Conservation Plan (HCP) clearly identify the purpose and need to which the U.S. Fish and Wildlife Service (Service) is responding in proposing the alternatives (40 CFR 1502.13), as well as the rationale for the proposed action. EPA further recommends that all reasonable alternatives that fulfill the proposed action's purpose and need be evaluated in detail, including alternatives outside the legal jurisdiction of the Service (40 CFR 1502.14(c)). Describe specific actions that would be taken to protect critical wildlife habitats from potential adverse effects of the proposed alternatives and options for avoiding significant environmental impacts. We suggest that habitat conservation measures include provisions to safeguard high-value habitats and create or maintain habitat corridors.

EPA recommends that the DEIS provide a complete description and evaluation of the available data used to inform the HCP alternatives to be analyzed. Quantify the potential direct, indirect, and cumulative environmental impacts of each alternative to the greatest extent possible (e.g., acres of critical habitat impacted, changes in population size) and present the benefits and adverse impacts in comparative form to assist the decision-maker and public in understanding how the alternatives differ (40 CFR 1502.14). We suggest including a clear discussion of the reasons for the elimination of any alternatives which are not evaluated in detail, as well as any available and relevant impact analyses conducted to satisfy environmental review procedures for the covered activities, in the DEIS. To promote long term success with the proposed conservation goals, we suggest that the Service consider developing, if not already in place, a scientific advisory committee to help design a scientifically robust HCP.

Scope of Analysis and Integration with Permitting and Other Projects

Clearly explain whether the EIS is intended to serve as a programmatic "tiering" document for subsequent project-specific NEPA analysis or whether it will be directly relied upon for project-level decision-making. If it is intended as a programmatic document, identify the factors that will be used to determine when a subsequent EIS will be required, and explain which covered activities and conservation measures will be evaluated under separate environmental review. EPA also recommends providing a description of any permits and/or modifications to those permits that the covered activities would require (e.g., National Pollution Discharge Elimination System permits for discharges to waters of the United States) and a description of how the permitting efforts can be synchronized.

Biological Resources, Habitat, and Wildlife

Provide a clear description of direct, indirect, and cumulative impacts to wildlife and habitat, as well as measures to avoid and reduce impacts to affected species. Emphasis should be placed on the protection and recovery of the covered species due to their status under the Endangered Species Act (ESA). EPA recommends that this impact analysis include:

- Baseline conditions for habitats and populations of the covered species sufficient for estimates of take.

- A clear description of how avoidance, mitigation, and conservation measures would protect and aid in the recovery of the covered species and their habitats in the protected area.
- The projected impacts of proposed avoidance, mitigation, and conservation measures.

We recommend that the DEIS include monitoring, reporting, and adaptive management efforts to ensure compliance with the HCP and measure its effectiveness. Additionally, we suggest including a description of the HCP's consistency, or disclosure of any potential inconsistency, with other habitat conservation plans and species recovery plans in the surrounding area.

Invasive Species

Executive Order 13112 "Invasive Species" (February 3, 1999) mandates that federal agencies take actions to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. Executive Order 13112 also calls for the restoration of native plants and tree species. In the DEIS, include an invasive plant management plan to monitor and control detrimental vegetation. If the proposed project would entail new landscaping, describe how the project would meet requirements of Executive Order 13112.

Water Resources

Provide a description of the natural drainage patterns within the plan area, including the 50-or 100-year floodplain. Characterize the general functions of the main aquatic features within the plan area and examine the ways in which these resources could be affected by the proposed alternatives.

Clean Water Act Section 404

The proposed HCP covers species that utilize habitat that may also be regulated under Clean Water Act (CWA) Sections 404 and 401. To integrate the goal of conserving species and protecting the nation's waters, we recommend that the Service engage with the U.S. Army Corps of Engineers (Corps), EPA, and the state or tribal governments that may have water quality certification responsibilities under CWA Section 401 in the planning and development of this HCP. Cooperation among the ESA and CWA agencies under an HCP can result in better resource protection and enhanced services to the regulated public.

Given that activities authorized for take under the HCP may be required to obtain CWA permits, it is important to seek alignment or integration between the conservation strategy and avoidance, minimization, and compensatory mitigation under the CWA, including monitoring strategies that work for both the HCP and CWA purposes. To minimize conflicts and promote coordination among agencies, EPA recommends including CWA agencies early in the HCP development process.

The 2008 EPA/Corps Compensatory Mitigation Rule sets forth requirements for mitigation and monitoring required for CWA Section 404 permits (33 CFR 325; 33 CFR 332; 40 CFR 230). It also establishes procedures for creating and implementing in-lieu fee (ILF) programs, which some HCP permittees may seek to use for meeting their CWA mitigation obligations. If the HCP sponsor wishes to set up an ILF program, EPA recommends close coordination with our agency and the Corps regarding any take authorized under the HCP.

Air Quality

Provide a detailed discussion of ambient air conditions, National Ambient Air Quality Standards (NAAQS), criteria pollutant nonattainment zones in the plan area, and potential air quality impacts of the covered activities, including indirect and cumulative impacts. Such an evaluation is helpful in demonstrating compliance with state and federal air quality regulations, and disclosing the potential impacts from temporary or cumulative degradation of air quality.

EPA recommends an evaluation of the following measures to reduce emissions of criteria air pollutants and hazardous air pollutants:

- *Quantify Emissions* – Estimate emissions of criteria pollutants from the covered activities and discuss the timeframe for release of these emissions over the lifespan of the HCP. Describe and estimate emissions from potential construction activities, as well as proposed mitigation measures to minimize these emissions.
- *Specify Emissions Sources* – Specify the emission sources by pollutant from mobile sources, stationary sources, and ground disturbance. Use this source-specific information to identify appropriate mitigation measures and areas in need of the greatest attention.
- *Construction Emissions Mitigation Plan* – EPA recommends including commitments to aggressive air quality mitigation measures during future project-specific construction activities. In addition to measures necessary to meet all applicable local, state, and federal requirements, EPA recommends that the following measures be included:

Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour. Limit speed of earth-moving equipment to 10 miles per hour.

Mobile and Stationary Source Controls

- Minimize use, trips, and unnecessary idling of heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Limit unnecessary idling and ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.

Administrative Controls

- Specify how impacts to sensitive receptors, such as children, the elderly, and the ill would be avoided. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emissions controls for each piece of equipment before groundbreaking.
 - Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.

General Conformity

EPA's General Conformity Rule, established under Section 176(c)(4) of the Clean Air Act, provides a specific process for ensuring federal actions will conform with State Implementation Plans (SIPs) to achieve NAAQS. Describe how the Service will ensure that the proposed alternatives will comply with federal conformity requirements. The DEIS should demonstrate conformity for all pollutants for which relevant air basins are in nonattainment or maintenance status, and whose construction or operational emissions would exceed the applicable *de minimis* levels. Conformity may be demonstrated by showing that the total direct and indirect emissions from the action are specifically identified and accounted for in the SIP.

Adaptive Management

The proposed period of incidental take coverage will likely be a time of considerable change in the plan area. We recommend that the description of the affected environment in the DEIS include a discussion of projected future changes that may affect the covered species and the habitats on which they depend. Issues to consider include the projected change's impact on the status of covered species, distribution of species throughout the plan area, the success of restoration efforts, and a potential need for new or expanded conservation lands.

EPA recommends that the DEIS consider reasonable alternatives that include adaptive management objectives to account for future projected changes. In line with the principles of adaptive management, we recommend that the Service clearly define the following in the HCP evaluation: monitoring objectives; the level of impact that would trigger action (including mitigation measures that would be implemented should a threshold be exceeded); how long-term mitigation and monitoring for the life of the permit will be funded; and the mechanisms for public disclosure of the monitoring results and the adaptive management decisions.

Cumulative Impacts

The cumulative impacts section of the DEIS should evaluate the effects of other past, present, and reasonably foreseeable actions and consider those impacts on a cumulative level (CEQ's *Forty Questions*, #18). This analysis will help provide a context for understanding the magnitude of the effects of the proposed alternatives. In this section, clearly identify the resources that may be cumulatively impacted, the time over which the impacts would occur, and the geographic area(s) that would be affected by the proposed action. Identify which resources were analyzed, which resources were excluded from analysis, and describe the rationale used to guide this selection process.

Additionally, we suggest that the cumulative impacts analysis:

- Describe the current condition of the resource as a measure of past impacts (e.g., the percentage of species habitat lost to date).

- Identify trends in the condition of the resource as a measure of present impacts (e.g., whether the condition of the resource is improving, declining, or in stasis).
- Identify all on-going, planned, and reasonably foreseeable projects in the study area that may contribute to cumulative impacts.
- Describe the future condition of the resource based on an analysis of impacts from reasonably foreseeable projects or actions added to existing conditions and current trends.
- Assess the contribution of the proposed alternatives to the long-term health of the resource, and provide a specific measure for the projected impact from the proposed alternatives.
- Disclose the parties that would be responsible for avoiding, minimizing, and mitigating those adverse impacts.
- Identify opportunities to avoid and minimize impacts, including working with other entities.

Consultation with Tribal Governments

Executive Order 13175 “Consultation and Coordination with Indian Tribal Governments” (November 6, 2000) was issued to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Indian Tribes.

In the DEIS, describe the process and outcome of government-to-government consultation between the Service and each of the tribal governments within the plan area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative. As a general resource, EPA recommends the document *Tribal Consultation: Best Practices in Historic Preservation*, published by the National Association of Tribal Historic Preservation Officers.¹

National Historic Preservation Act and Executive Order 13007

Consultation for tribal cultural resources is required under Section 103 of the National Historic Preservation Act (NHPA). Historic properties under the NHPA are properties that are included in the National Register of Historic Places (NRHP) or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Office/Tribal Historic Preservation Office (SHPO/THPO). Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed. Section 106 of the NHPA requires that Federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.

Executive Order 13007 “Indian Sacred Sites” (May 24, 1996) requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the National Register criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside of the plan area may also have religiously significant ties to lands within the plan area and should, therefore, be included in the consultation process.

¹ See http://www.nathpo.org/PDF/Tribal_Consultation.pdf

EPA recommends that the DEIS address the existence of Indian sacred sites in the project areas. Explain how the proposed action would address Executive Order 13007, distinguish it from Section 106 of the NHPA, and discuss how the Service would ensure that the proposed action would avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. Provide a summary of all coordination with Tribes and with the SHPO/THPO, including identification of NRHP eligible sites and development of a Cultural Resource Management Plan.

Environmental Justice

Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (February 11, 1994) and the “Memorandum of Understanding on Environmental Justice and Executive Order 12898,” released on August 4, 2011, direct federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. CEQ guidance² clarifies the terms low-income and minority population, which includes Native Americans, and describes the factors to consider when evaluating disproportionately high and adverse human health effects.

EPA recommends that the DEIS include an evaluation of environmental justice populations within the geographic scope of the plan area. If such populations exist, describe how the proposed action would address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation and coordination with these populations.

Coordination with Land Use Planning Activities

EPA recommends that the DEIS discuss how the proposed action would support or conflict with the objectives of federal, state, tribal, or local land use plans, policies, and controls in the plan area. The term “land use plans” includes all types of formally adopted documents for land use planning, conservation, zoning, and related regulatory requirements, as well as plans not yet developed that have been proposed by the appropriate government body in a written form.³

² See Environmental Justice Guidance under the National Environmental Policy Act, Appendix A (Guidance for Federal Agencies on Key Terms in Executive Order 12898), CEQ, December 10, 1997. <https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf>

³ See “Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations,” #23b. <https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>

CALIFORNIA COASTAL COMMISSION

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**March 12, 2018**

Ronnie Glick, Senior Environmental Scientist
California Department of Parks and Recreation
Oceano Dunes District
340 James Way, Suite 270
Pismo Beach, CA 93449

Lena Chang, Acting Assistant Field Supervisor
United States Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003

Re: United States Fish and Wildlife Service (USFWS) and California Department of Parks and Recreation (State Parks) Proposed Oceano Dunes District Habitat Conservation Plan (HCP) Notice of Preparation (NOP) and Notice of Intent (NOI)

Dear Mr. Glick and Ms. Chang:

Thank you for the opportunity to provide some initial comments and preliminary suggestions regarding the NOP (for purposes of CEQA) and NOI (for purposes of NEPA) for State Parks' proposed HCP covering the Oceano Dunes District (ODD), which is comprised of Pismo State Beach, Pismo Lake, and Oceano Dunes State Vehicular Recreation Area (ODSVRA). HCPs are required under the federal Endangered Species Act (ESA) for USFWS issuance of an Incidental Take Permit (ITP), and the CEQA/NEPA process is being undertaken by State Parks and USFWS, respectively, in support of a potential HCP/ITP for State Parks in relation to the ODD. We have the following comments.

According to the NOP/NOI, the proposed HCP and corresponding ITP will outline a 25-year plan to address ESA issues and requirements in the ODD, including identifying measures designed to avoid, and where unavoidable to minimize and mitigate, the effects of "covered activities" to ensure the conservation, protection, and contributions to the recovery of "covered species" (namely, the federally threatened Western snowy plover (WSP) and California red-legged frog, and the federally endangered California least tern (CLT), tidewater goby, Gambel's watercress, La Graciosa thistle, marsh sandwort, and Nipomo Mesa lupine). As proposed in the NOP/NOI, covered activities would include all lawful activities for which State Parks has responsibility that could result in take of the aforementioned covered species, including public use/recreation management, natural resources management, and park/beach management. On this point the NOP/NOI states that State Parks would manage impacts to these covered species due to covered activities largely in the same manner it currently operates, including by installing protective fencing and by undertaking certain activities associated with habitat protection and restoration, invasive plant and animal control, habitat monitoring, and water quality

improvements. In addition to the “no action” alternative (i.e., where State Parks continues to operate as it has without an HCP/ITP), the NOP/NOI indicates that USFWS and State Parks will also evaluate implementation of a proposed HCP where State Parks modifies its current operation by allowing for the seasonal enclosure fencing for WSP and CLT breeding protection to be modified to expand vehicular access and use. In all cases, the NOP/NOI indicates it would evaluate current lawfully established activities, and it will not evaluate potential changes to current daily limits on the number of street legal and off-highway vehicles (OHV) at ODSVRA.

As a preliminary matter, the NOP/NOI purports to solicit comments for an environmental analysis regarding the implementation of a proposed HCP, but it does not provide the actual proposed HCP that is going to be evaluated in that regard. In that sense, it is difficult to provide detailed comments on what, specifically, the CEQA/NEPA process should address. It may be that USFWS/State Parks is responding to certain uncertainties associated with current ODSVRA operations, or it could be for some other reason, but the lack of a proposed HCP makes it difficult to provide as directive of comments as might be possible if a proposed HCP were also to be provided with the NOP/NOI. As such, we may have more substantive and detailed comments when we see the proposed HCP and/or the draft EIR/EIS documents.

With respect to current operational uncertainties and the Commission’s role, State Parks operates ODSVRA under a coastal development permit (CDP) issued by the Coastal Commission in 1982 (CDP 4-82-300, as amended). That CDP identifies the basic parameters for ODSVRA operation under the Coastal Act, including for Park access locations, OHV riding and camping parameters, overall use limits, and habitat and sensitive species protection requirements. Importantly, many of the key operational parameters, most notably in terms of access into the Park and overall use limits,¹ have never been finalized through the required CDP amendment and Local Coastal Program (LCP) amendment processes, and thus they are currently authorized through the CDP on a temporary basis. In addition, the Commission retains the authority to review State Parks’ operations on a yearly basis and to identify necessary changes, particularly related to addressing potential habitat impacts due to vehicular use. It is not clear from the NOP/NOI how the proposed HCP and/or ITP intends to address the temporary nature of the CDP authorization and the potential for State Parks’ operations to change over time, including in relation to yearly Commission reviews. Critically, in proposing to evaluate State Parks’ current operations, it is not clear how USFWS/State Parks intends to address the issues associated with the need for State Parks to finalize certain critical aspects of its operation that are only temporarily authorized under the CDP, including Park access and overall use limits. These current interim parameters are some of those most clearly tied into potential ESA species issues, and thus the lack of finality

¹ The two interim entrance points into the Park are at West Grand Avenue and Pier Avenue, and the interim staging area is currently located just south of the two-mile post (i.e., only street legal vehicles are allowed to be operated north of the two-mile post, and OHVs (and street legal vehicles) can be operated south of the two-mile post), and thus OHVs must be transferred via trailers to the interim staging area from the interim West Grand and Pier Avenue entrances. Current use limits that are subject to adjustment allow for a maximum of 2,580 street legal vehicles per day, a total of up to 1,720 OHVs at any given time, and up to 1,000 camping units per day.

through the CDP and the LCP processes must somehow be addressed in any proposed HCP and CEQA/NEPA documents, as well as any eventual ITP.

In addition, State Parks is also currently proposing to undertake a more holistic analysis of ODSVRA operations and its potential permanent configuration via a Public Works Plan (PWP),² which effort is currently in the beginning and formative stages now. According to State Parks, the goal of their proposed PWP is to take a fresh look at ODSVRA management and operations, including identifying permanent access and staging areas, identifying where OHV riding and camping are and are not allowed (including to reduce particulate matter emissions on downwind communities in conjunction with efforts of the San Luis Obispo County Air Pollution Control District and the California Air Resources Board), and other resource protection requirements. In other words, the PWP process currently being undertaken by State Parks, which will ultimately be submitted for Coastal Commission review and certification, may materially affect the way in which ODSVRA is used, managed, and operated, including with respect to areas where recreational use and other covered activities are located. In addition, if the PWP is to replace the underlying base operational CDP, then it will need to resolve issues still outstanding there, including in relation to the interim nature of certain key ODSVRA provisions.

Therefore, at a broad level, it is unclear how the proposed HCP will be structured in relation to the fluid nature of ODSVRA at this time, including how the HCP's resource protection requirements will be able to address different Park configurations, operations, and use levels than the current status quo. And it is even less clear to us how the CEQA/NEPA document would evaluate the range of potential outcomes at this time given the uncertainties identified above. It appears that the HCP and any CEQA/NEPA documents based on evaluating it will need to reflect ODSVRA's transitory reality at this juncture, including that the current configuration is interim and potentially subject to significant change. The ultimate location and delineation of the final ODSVRA entrance and staging areas, and its overall use parameters, under the CDP and the LCP would affect covered species differently, and thus the measures needed to protect such species from take would also be different. For example, if ODSVRA access and staging are moved from their current locations to a more southerly point, how would this affect covered species and their protection needs? If OHV riding and camping were located in a different area to account for relocated access and staging locations, or to respond to air quality considerations or otherwise, how would these alternative locations similarly affect covered species? Similarly, while the NOP/NOI states that vehicle and camping use limits are not proposed for amendment, including because they are approved by CDP 4-82-300, as discussed above, those limits too are interim and subject to modification, including through the CDP-required yearly evaluation, based on resource protection and public recreation needs. And State Parks has more recently been

² A PWP is a vehicle for planning and regulation under the Coastal Act that allows certain public agencies to propose a certain set of projects and other types of development that can be identified in a PWP that the Commission certifies as consistent with the Coastal Act. Following such certification, the public agency, in this case State Parks, can then perform the identified PWP development subject to reporting it to the Commission and without a CDP, provided it is PWP consistent. In other words, the PWP can serve to replace the need for case by case CDP evaluation, and can significantly streamline certain public agency activities.

looking at a ‘no net loss’ of riding area concept whereby any reductions in OHV riding areas, for whatever reason, are offset by creating new riding areas, presumably in adjacent dune habitat areas, and this too needs to be evaluated in the HCP/ITP and CEQA/NEPA processes.

In sum, the proposed HCP and its associated CEQA/NEPA reviews need to evaluate all potential ODSVRA configurations and operations, particularly in response to the current interim nature of critical components and the potential for upcoming Park changes, whether through the CDP, LCP, or PWP process or all three. As such, and as much as we recognize and agree that the need for an HCP is especially acute, particularly given past documented episodes of ESA species take at ODSVRA, it is not clear how such a PWP can or will be structured to address all of the above. And given that, it is even less clear to us how the CEQA/NEPA document will evaluate environmental impacts due to proposed HCP implementation, including because it is not clear what proposed HCP would be evaluated. At a minimum, the proposed HCP needs to be provided as part of any CEQA/NEPA scoping. Thus, if the CEQA/NEPA process is to move forward, we would strongly recommend that the proposed HCP be drafted in a manner that reflects the above uncertainties, and that provides for appropriate adaptive changes to occur in response to identified benchmarks, including related to potential changes associated with the CDP, the LCP, and the potential PWP, and to associated finalized access, staging, and use parameters. Once that proposed draft HCP is available for public review, we recommend that the associated environmental documents then evaluate the potential impacts and mitigation measures necessary for a series of different ODSVRA configurations and assumptions coming out of the HCP, which by necessity are likely to be required to be iterative and adaptive in order to account for the range of potential future Park changes at this juncture.

In addition to the above described overarching concerns/suggestions, we have the following specific issues that both the HCP and its EIR/EIS should evaluate.

In terms of alternatives, it is clear given the above discussion that the range of currently proposed alternatives to be evaluated in the CEQA/NEPA documents is simply not adequate to identify the potential environmental impacts and mitigations. In addition, and even bracketing the level of uncertainty, the NOP/NOI identifies only two alternatives to be evaluated: one a ‘no action’ alternative where State Parks would continue to operate as it has without an HCP/ITP, and a second where State Parks modifies its current operation by allowing for the seasonal enclosure fencing for WSP and CLT breeding protection to be modified to allow for expanded vehicular access and use. It appears clear to us that such a limited set of alternatives will not provide decision makers with the appropriate level of information and tools to be able to make informed decisions. In fact, the first alternative is to maintain the status quo, and the second contemplates actually *reducing* ESA species protections. At a minimum, the CEQA/NEPA documents need to evaluate a full range of alternatives with the best chance of meeting project objectives (presumably ESA species protection) with the least amount of coastal resource impacts, both in terms of recreation and habitat. Toward that end, it seems imperative that alternatives be shaped based on data (for example, avoiding use in areas identified as the most acute in terms of species impacts), and that each offer a co-equal evaluation of the costs and benefits environmentally of

each alternative. We do not see how evaluating only ‘do nothing’ and ‘reduce ESA-species protections’ alternatives fulfills those needs, and would strongly suggest additional alternatives be identified, including those based on avoiding use in areas identified as the most problematic in terms of species impacts, including so decision makers are properly equipped with a full understanding of the potential options for addressing ESA species needs in Oceano Dunes. The evaluation of alternatives is a fundamental component of CDP, LCP, and PWP conformance processes, and we would expect that the CEQA/NEPA documents range of alternatives are able to provide a co-equal evaluation of the various ways project objectives can be achieved, and that they provide a full spectrum of possibilities for consideration taking into account Coastal Act requirements and objectives. We are available for consultation on this point as the CEQA/NEPA process progresses, should that prove useful to you.

With respect to Western snowy plover (WSP) in particular, take of the WSP in ODSVRA is well documented, with an increase in take documented in recent years. The HCP should develop specific and enforceable strategies that will eliminate (or at least reduce) the take associated with these and other state and federally listed species. In particular regarding WSP, we believe that there should be an emphasis on policies that address bird deaths during both the breeding season and the overwintering season. Specifically, the policies should address the size, configuration, and seasonal duration of potential WSP exclosures, as well as management practices associated with wrack availability, vegetation density, and predator management. In addition, impacts to WSP associated with recreation, particularly the unique impacts OHV recreation and special events engender, should be addressed, including location restrictions (both permanent and seasonal), appropriate speed limits, signage and other means of public education for OHV riders, as well as appropriate mechanisms of enforcement. Ultimately, the CEQA/NEPA documents must then evaluate these provisions, including providing an assessment of potential impacts and mitigations and the associated evaluation of alternatives discussed above.

Similarly, in terms of California least tern (CLT), take of CLT at ODSVRA is both well documented and has increased, as you are aware, in recent years. Thus, we believe that the HCP process is also an opportune time to update CLT protections at ODSVRA, including ensuring policies are reflective of where birds congregate. Protective policies must be flexible enough to be responsive to any changes in CLT behavior or favored habitat, and large enough to accommodate any population growth should this occur. Moreover, enforced nest buffer distances and fencing configurations and materials must be determined from the most up-to-date scientific information, and empirically verified. The general approach to WSP and CLT management should be focused not just on protection of current populations of these species, but designed to provide optimal conditions for these species over time. All management measures should be deferential to expert recommendations and should be adaptive. And again, the CEQA/NEPA documents must also address these same issues in similar ways as for WSP.

With respect to aquatic resources, the HCP will need to carefully consider recommendations and restrictions necessary to safeguard ODSVRA’s fish and aquatic-affiliated species. Policies concerning the integrity of the ephemeral Arroyo Grande Creek, an area which supports the

federally listed tidewater goby, steelhead, and the California red-legged frog, require particular attention, particularly from vehicular creek crossings. Currently, vehicles are allowed to cross the creek at water depths capable of supporting fish passage when the creek is connected to the ocean, and additional protective measures appear acutely warranted here. In addition, in winter, before natural lagoon breaching occurs, policies need to address OHV use in the vicinity of the lagoon mouth; otherwise, accidental breaching and associated take could also occur. In addition to addressing policies of OHV use in the vicinity of Arroyo Grande Creek, as discussed earlier, the HCP needs to also evaluate the impacts and protective measures associated with alternative Park access and staging areas, particularly those that would bypass Arroyo Grande Creek and lagoon altogether. Finally, we also strongly encourage an analysis of OHV impacts on annual grunion runs, which are known to occur in the ODSVRA. And again, any CEQA/NEPA documents must also address these same issues, including in terms of alternatives evaluation.

Lastly, any proposed HCP and supporting CEQA/NEPA documents must clearly specify enforcement provisions to ensure that final HCP policies and requirements are fully carried out. For example, any HCP needs to fully evaluate success and non-compliance criteria, including how State Parks will mitigate for any take or other adverse impacts to covered species not authorized by a final HCP/ITP. To ensure accountability, the HCP must have a strong monitoring and reporting function. Public education, including by informing visitors of habitat protection requirements, is a key part of this enforcement strategy, and the HCP should identify these public education parameters as well.

Again, thank you for the opportunity to provide these initial comments on the proposed HCP and the NOP/NOI. As you know, the Commission has been deeply involved for many years with the ongoing issues associated with the balancing of active public recreational and access opportunities for all with the protection and enhancement of sensitive species and their habitats in the Oceano Dunes District, both through the underlying CDP as well as the LCP, and potentially through an upcoming PWP. The Commission's program and involvement necessarily and directly intersects with that of USFWS under the ESA, and we are hopeful that an HCP/ITP and any associated CEQA/NEPA supporting documents can bridge the above-described analytic and substantive gaps to best allow for robust decision-making and good public policy. We look forward to continued collaboration on these important coastal resource issues of shared concern, and are available for consultation as you proceed forward. Please do not hesitate to contact me if you have any questions or would like to further discuss these matters.

Sincerely,

A handwritten signature in black ink that reads "Kevin Kahn". The signature is fluid and cursive, with the first name "Kevin" and last name "Kahn" clearly distinguishable.

Kevin Kahn
District Supervisor
Central Coast District Office
California Coastal Commission

cc: Mat Fuzie and Kevin Pearce, State Parks
Julie Vance, CDFW
Matt Janssen, San Luis Obispo County

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Edmund G. Brown Jr., Governor



January 31, 2018

Ronie Glick
 California Department of Parks and Recreation
 Oceano Dunes District
 340 James Way, Suite 270
 Pismo Beach, CA 93449

RE: SCH#2018011012 Oceano Dunes District Habitat Conservation Plan, San Luis Obispo County

Dear Mr. Glick,

The Native American Heritage Commission has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
- The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).
8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).
9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
- Avoidance and preservation of the resources in place, including, but not limited to:
 - Planning and construction to avoid the resources and protect the cultural and natural context.
 - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protecting the cultural character and integrity of the resource.
 - Protecting the traditional use of the resource.
 - Protecting the confidentiality of the resource.
 - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
 - Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
 - Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
 - The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

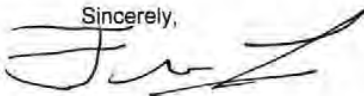
To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

- b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
- 3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
- 4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions, please contact me at my email address: frank.lienert@nahc.ca.gov

Sincerely,



Frank Lienert
Associate Governmental Program Analyst

cc: State Clearinghouse



California Four Wheel Drive Association, Inc.

Over 55 years advocating for recreation

Mr. Ronnie Glick, Senior Environmental Scientist
 California Department of State Parks and Recreation
 Oceano Dunes District
 340 James Way Ste. 270
 Pismo Beach Ca. 93449
Ronnie.glick@parks.ca.gov

The California 4 Wheel Drive Association (C4WDA) was founded in 1959 and we are a non-profit organization that has actively promoted the advancement of vehicle oriented outdoor recreation.

C4WDA is a volunteer-based organization of enthusiasts who promote responsible family recreation and exercise environmental conservation for the purpose of protecting access to public lands.

C4WDA represents over 8,000 members and 160-member clubs. We are the largest organization of this type in California and represent owners of all makes and models of 4WD vehicles, as well as non-owners who support responsible vehicle-oriented recreation.

C4WDA's mission is to work with the land managers for responsible OHV access and recreation opportunities. We support the concept of managed recreation and strategies for the building and maintenance of sustainable and quality OHV trails systems.

C4WDA has many members that are recreational visitors to the Oceano Dunes SVRA and they are very interested and concerned about actions that deal with the OHV recreational opportunity at Oceano Dunes SVRA.

As OHV recreation opportunities at the Oceano Dunes SVRA are reduced, the demand for OHV recreational opportunities by California citizen's increases. We are very concerned with systematic reduction in the size of the Oceano Dunes SVRA.

We feel that there should be no net loss in OHV opportunity.

The Oceano Dunes SVRA is a very unique recreation area. Nowhere in California can you camp and enjoy OHV recreational activities on the beach.

I personally have been recreating at the Oceano Dunes SVRA for over 30 years. My 3 kids that are now 30,28 and 17 have wonderful memories of their times at Oceano Dunes SVRA and I would hate for their kids not to have the same opportunity to enjoy the dunes the way we did.

OHV recreation is a substantial economic force in California, supporting jobs, local communities and tax revenues.

C4WDA appreciates this opportunity to be involved in the public planning process on behalf of its members who enjoy recreation in the Oceano Dunes SVRA.

Please contact me if you have questions or wish to discuss any aspect of these comments.

Jeff Blewett
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CENTER for BIOLOGICAL DIVERSITY

Because life is good.

*Protecting and restoring natural ecosystems and imperiled species through
Science, education, policy, and environmental law*

Via Electronic Mail

March 12, 2018

Mr. Ronnie Glick
Senior Environmental Scientist
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Field Supervisor,
Ventura Fish and Wildlife Office
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003.
lena_chang@fws.gov

Re: Oceano Dunes District HCP NOP

Dear Mr. Glick and Ms. Chang:

These comments are timely submitted on behalf of the Center for Biological Diversity (the “Center”) regarding the Notice of Preparation and Public Scoping Meeting for the California Department of Parks and Recreation (“CDPR” or “State Parks”), Oceano Dunes District Habitat Conservation Plan Joint EA/EIR or Joint EIS/EIR for a (ODD HCP) issued by the CDPR on January 9, 2018, and the notice published by the U.S. Fish and Wildlife Service (FWS), “Draft Habitat Conservation Plan for the California Department of Parks and Recreation Oceano Dunes District, San Luis Obispo County, California; Notice of Intent To Prepare Environmental Assessment or Environmental Impact Statement; Initiation of Public Scoping Process,” 83 Fed. Reg. 1380-1382 (January 11, 2018).

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.6 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people and wildlife in San Luis Obispo County.

I. The ODD HCP Must Ensure The Recovery Of All Covered Species.

The ODD HCP must ensure not merely the continued survival of covered species, but also the recovery of these species. “Conserve” as defined in the Federal Endangered Species Act (ESA) includes both survival and recovery: “the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.” (16 U.S.C. § 1532(3).)

Arizona • California • Nevada • New Mexico • Alaska • Oregon • Washington • Illinois • Minnesota • Vermont • Washington, DC

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www.BiologicalDiversity.org

Thus, the HCP must contain specific measures to “conserve,” or provide for the recovery of, the species. (*Sw. Ctr. for Biological Diversity v. Bartel*, 470 F. Supp. 2d 1118, 1128 (S.D. Cal 2006); *Sierra Club. v. Babbitt*, 15 F. Supp. 2d 1274, 1278 n.3 (S.D. Ala. 1998).) At a minimum, the ESA and implementing regulations require all HCPs to include the following: (1) a complete description of the activity sought to be authorized; (2) names of the species sought to be covered by the permit, including the number, age and sex of the species, if known; (3) the impact which will likely result from such taking; (4) what steps the applicant will take to monitor, minimize, and mitigate those impacts; (5) the funding that will be available to implement such monitoring, minimization, and mitigation activities; (6) the procedures to be used to deal with unforeseen circumstances; and (7) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized. (16 U.S.C. § 1539(a)(2)(A)(i)-(iv); 50 C.F.R. §§ 17.22, 17.32.) FWS cannot issue an ITP if the HCP does not contain this information. (16 U.S.C. § 1539(a)(2)(A).)

Upon reviewing a HCP and before permit issuance, the FWS must find that (i) the taking will be incidental; (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; (iii) the applicant will ensure that adequate funding for the plan will be provided; (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and (v) any other measures FWS requires will be met. (16 U.S.C. § 1539(a)(2)(B); 50 C.F.R. §§ 17.22, 17.32.)

In addition, the project area at Oceano Dunes includes designated critical habitat for the western snowy plover, tidewater goby, La Graciosa thistle, leatherback sea turtle, and south-central California Coast steelhead. The Ninth Circuit Court of Appeals explained that the purpose of critical habitat designations is not merely to ensure the species’ *survival*, but also to “carve out territory” that is “essential for the species’ *recovery*.” (*Gifford Pinchot Task Force v. United States Fish & Wildlife Serv.* (9th Cir. 2004) 378 F.3d 1059, 1070; emphasis added.) *Gifford Pinchot* concluded that the Endangered Species Act (the “ESA”) views “conservation and survival as distinct, though complementary, goals, and the requirement to preserve critical habitat is designed to promote both conservation and survival.” (*Id.*) Applying *Gifford* here, the ODD HCP must protect critical habitat and other habitat currently used by the covered species, and also protect habitat that could be used by the covered species in the future as these populations recover. By the same token, the ODD HCP must minimize and mitigate the impacts to and taking of covered species to the maximum extent practicable, as required by 16 U.S.C. § 1539.

II. The ODD HCP and the Environmental Review Must Be Based Upon The Best Available Science.

The ODD HCP and the EIS/EIR or EA/EIR must be based upon the best available science. In particular, multiple years of surveys are critical in order to capture changes in time of the resources under different climatic/recreational pressures. Single surveys of plants and wildlife are just snapshots in time and do not include sufficient survey data to evaluate potential impacts on covered species or ensure their continued survival and eventual recovery. The

environmental review should also rely upon multiple years of surveys to ensure that current “baseline” conditions are properly considered for the entire HCP area and surrounding natural areas. The Notice states that “HCP area includes Pismo State Beach, Oceano Dunes SVRA, and Pismo Lake located in San Luis Obispo County, California” which includes the Oso Flaco lake in the south. In addition, the activities in the HCP area may also affect other park lands and protected habitats, including but not limited to Nipomo Dunes National Wildlife Refuge to the south, and data must be obtained regarding resources in these areas as well. While we recognize that State Parks has conducted surveys, erected temporary closures to benefit beach nesting birds and managed other sensitive resources for protection in the past, the basis for the HCP should include up-to-date, comprehensive surveys conducted by qualified biologists using established FWS and CDFW protocols. Moreover, stakeholders in the environmental community should be notified prior to when such surveys occur and biologists from environmental organizations should be invited to attend and/or participate in such surveys.

At the same time, the ODD HCP and environmental review should be clear that any surveys conducted in preparation of the ODD HCP do not excuse or substitute for ongoing monitoring obligations or other issues falling under the California Environmental Quality Act (“CEQA”), the National Environmental Policy Act (“NEPA”), or the ESA.

III. The ODDHCP and Environmental Review Must Take Into Account The Impacts Of Climate Change On Covered Species.

The ODDHCP and environmental review must consider the impacts of global climate change, sea level rise, and local climatic changes on each of the covered species, including the need for climate change mitigation strategies (e.g., reducing greenhouse gas emissions from the recreational activities) and the need for climate change adaptation strategies for each of the covered species (e.g., conserving intact wild lands and nesting habitat and the corridors that connect them). Given the long-range planning associated with the ODD HCP, the ODD HCP and environmental review must consider potential impacts to covered species and their habitats arising from climate change on at least at 50 year horizon.

IV. The ODD HCP and Environmental Review Must Address Protection and Recovery of All Covered Species

The ODD HCP and environmental review must identify the impacts from habitat destruction and fragmentation on all of the covered species and include meaningful proposals for protection and recovery of these vulnerable species. Species include but need not be limited to:

- federally threatened western snowy plover (*Charadrius nivosus nivosus*),
- federally & State endangered, & State fully protected California least tern (*Sternula antillarum browni*),
- federally endangered tidewater goby (*Eucyclogobius newberryi*),
- federally threatened California red-legged frog (*Rana draytonii*),
- federally endangered & State threatened Gambel’s watercress (*Nasturtium (Rorippa)*)

- gambelii*),
- federally endangered & State threatened La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*),
- federally and State endangered marsh sandwort (*Arenaria paludicola*),
- federally and State endangered Nipomo Mesa lupine (*Lupinus nipomensis*)

In addition, the threatened south-central California Coast steelhead occur in the HCP area and area affected by the covered activities. Indeed, Arroyo Grande Creek within the Oceano Dunes SVRA is part of the designated critical habitat for south-central California Coast steelhead. The leatherback sea turtle (*Dermochelys coriacea*) also has federally designated critical habitat within the area affected by covered activities. While these species are not managed by the USFWS, but rather by NMFS/NOAA, they are listed species and take is prohibited without a permit. The impact to critical habitat must be analyzed, avoided, minimized and/or mitigated to meet the requirements of the ESA, NEPA and CEQA. The HCP should be revised to either ensure that all impacts to steelhead and its critical habitat and leatherback sea turtle and its critical habitat are avoided or to include the steelhead and leatherback sea turtle as a covered species. Currently, when the creek is flowing across the beach seasonally in winter and spring, vehicles crossing the creek and driving in the creek-bed may adversely affect steelhead habitat. Leatherback sea turtle critical habitat is located all along the coastal strand of the SVRA and could contribute to the recovery of the species. State Parks and USFWS must address ways to protect steelhead and leatherback and their critical habitats from the impacts of covered activities, and fully consider impacts and alternatives to avoid such impacts in the HCP and environmental review.

The Oceano Dunes area is crucial to maintain populations of these listed species, some of which have been under the ESA protections for decades, and yet their populations still show signs of decline. The ODD HCP and environmental review should ensure there are no further declines in breeding, nesting, feeding, loafing and recovery habitat and should also protect habitat used outside of the breeding season.

We oppose the proposal to reduce nesting and breeding habitat, in particular the snowy plover and least terns breeding habitat, as stated in the Federal Register notice which includes as part of the “proposed action” a “reduction of the Boneyard and 6 exclosures.” (83 Fed. Reg. at 1381.) We urge State Parks to withdraw this proposal which is an inappropriate consideration for an HCP. Instead the ODD HCP and environmental review should focus on a proposed action that will enhance, rather than diminish conservation for covered species. The review should also include consideration of alternatives that include expanding the protected nesting area exclosures for the plovers and terns, as well as the inclusion of permanently protected areas for resident plover loafing and feeding areas, in order to reduce the potential for impact from vehicles. While we are appreciative of the efforts that State Parks has put in place for the plovers/terns, we were concerned to see plovers loafing in fresh tire tracks on our most recent visit to the Oceano Dunes. (See, e.g., photo attached as Attachment A.) We request that the ODD HCP and environmental

review incorporate, at a minimum, the findings from the 2017 USFWS report¹ including the recommendations (starting at pg. 49) for improving the protections for nesting/brooding snowy plovers/least terns. We note that there were numerous “bumpouts” and “single nest enclosures” implemented in 2017 to protect nests in the open riding areas. While we appreciate that State Parks was pro-active about protecting these nests, the need for these additional enclosures indicates that *more* contiguous area, not less is needed to protect nesting terns and plovers during the breeding/brooding season.

V. The ODD HCP and Environmental Review Must Appropriately Address Habitat Needs of Resident Snowy Plovers

Currently State Parks is implementing only temporary enclosures for breeding/brooding snowy plovers. However, some snowy plovers are now year-round residents of Oceano Dunes. Mortalities have been documented during the non-breeding season with birds being driven over and killed. Therefore, the ODD HCP must address safeguards for the non-breeding season above and beyond what is currently being implemented (currently consisting of some education efforts & signs). While the current activities are helpful, clearly they are inadequate to prevent mortalities, and additional measures need to be put in place to further avoid mortalities such as placing more of the near-shore areas off limits to motorized vehicles, lowering speed limits and enhancing enforcement efforts.

VI. The ODD HCP and Environmental Review Must Appropriately Address Least Tern as a Fully Protected Species

The scoping notice indicates that the least tern will be a covered species under the ODD HCP. The least tern is also a fully protected species under California law, and therefore any take of this species is unlawful under the fully protected statute except, as relevant here, as part of a Natural Communities Conservation Plan (NCCP). Therefore in order for the State Parks to avoid illegal take under California law, this process should either ensure complete avoidance of impacts to least tern or include development of an NCCP as well as the HCP in order to assure that conservation is fully addressed for the least tern.

VII. The ODD HCP and Environmental Review Should Consider Addressing Additional Unlisted Species In Order to Preclude Future Listings.

The ODD HCP and environmental review need to provide a science-based path for protection and recovery for other sensitive species that are known from the ODD. Such species have been documented in the ODD² and include:

- Vaux’s Swift (*Chaetura vauxi*)
- Brant (*Branta bernicla*)

¹<https://www.fws.gov/arcata/es/birds/wsp/documents/siteReports/California/2017%20Oceano%20Dunes%20SVRA%20California%20Least%20Tern%20and%20Western%20Snowy%20Plover%20an....pdf>

²<https://ebird.org/hotspot/L4870985> and <https://ebird.org/hotspot/L2757130> and <https://ebird.org/hotspot/L208487>

- Northern Harrier (*Circus cyaneus*)
- Least Bittern (*Ixobrychus exilis*)
- Tricolored blackbird (*Agelaius tricolor*), also a candidate species under CESA
- Willow flycatcher (*Empidonax traillii*), State listed endangered
- Purple martin (*Progne subis*)

We request that a full list of sensitive species be considered to be included in the ODD HCP and certainly all of these species must be considered in the environmental review even if they are not considered as covered species under the HCP. If such species are ultimately not included in the ODD HCP, the environmental review must clearly discuss the reasons for their non-inclusion.

VIII. The ODD HCP Needs To Include An Adequate Funding and Enforcement Plan.

In order for the ODD HCP to be valid and effective, it must include a long-term plan to fund the ODD HCP compliance activities. (*See* 16 USC § 1539(a)(2)(B)(iii).) ODD HCP funding should not be tied to general funding mechanisms for the State Parks, but should instead operate independently or receive specially designated funds. This is particularly important because agency budgets can fluctuate due to general economic conditions – funding of ODD HCP compliance should remain constant regardless of economic conditions.

While enforcement of the ODD HCP and protective measures will be the responsibility of State Parks, with oversight from the USFWS and CDFW, monitoring data and reporting should be made public on the State Parks website to encourage public oversight as well. Agency staff tasked with enforcing the ODD HCP must also have sufficient experience, expertise, and resources to ensure compliance with ODD HCP. Enforcement and implementation activities should be conducted in consultation with the public and the environmental community, including the Center and other stakeholders.

Finally, the ODD HCP must ensure that stakeholders and the public have ample opportunity to comment on activities involving the implementation of the ODD HCP. In short, it is only through implementation, enforcement, and public participation that actual conservation outcomes can be successfully achieved.

IX. The ODD HCP Must Address Water Quality and Water Flow Associated with the Oso Flaco Lake and Creek and Arroyo Grande Creek.

The ODD HCP area includes Oso Flaco Lake and Creek and Arroyo Grande Creek and their associated wetlands and riparian areas. These areas are home to rare and endangered plants and wildlife which depend upon the freshwater habitats for their continued survival. Accordingly, the ODD HCP and environmental review must ensure that water quality and flow rates are considered and any impacts that may significantly impact flow rates or water quality have remedies and are applied in the ODD area in order to prevent water quality/quantity degradation.

X. The ODDHCP Should Clearly Define “Covered” Activities, Account for All Impacts, and Avoid, Minimize and Mitigate Those Impacts.

The ODD HCP should clearly define the “covered” activities. Impacts of motorized recreational activities in the HCP area must be fully addressed including air quality impacts from combustion emissions (including GHG emissions), gas and oil spills, and dust and particulates in the air from riding activities. In addition, the loss of intact soil surfaces and plant cover from riding must be addressed and remediated.

Trash created by recreational use and camping must also be addressed in the environmental review. Trash bins must be covered at all times to reduce attraction of predators to the HCP area which in turn impact breeding and nesting birds. If necessary, trash pick-up and hauling must be increased to reduce trash on site during busy weekends.³ Additional educational efforts to inform visitors about the need to properly stow trash and keep it covered should be required as part of the HCP.⁴ These efforts should be in addition to other needed educational efforts to reduce impacts of motorized vehicle use on the beach to covered species including plovers and terns, and to reduce impacts to steelhead habitat from motorized vehicles crossing Arroyo Grande Creek when water is flowing.

Any additional development and infrastructure that could increase riding in this area or the size and frequency of and so-called special events in the area, and thereby increase the impacts to the covered species, should not constitute “covered activities”. The HCP and environmental review should consider capacity limits for the HCP area to ensure that busy weekends do not decimate species habitat and undo efforts at conservation by State Parks and others.

To the extent that the ODD HCP does allow for future motorized recreation in the HCP area to be included as “covered” activities, the environmental review must comprehensively analyze the impacts on covered species of these “covered” activities. In addition, the ODD HCP environmental review must include proper analysis and assessment of the environmental baseline and impacts from these activities as well as alternatives that could reduce impacts such as limits to covered species, air and water quality, and other impacts. The ODD HCP should explicitly provide that protocol level surveys for appropriate covered species will still be required in connection with all additional special events and projects in connection with that project’s individual environmental review. This is necessary because on-the-ground conditions will vary

³ At other parks, State Parks uses animal proof trash bins and has added more frequent trash pick-ups, including on weekends, to protect listed species from predators attracted to trash. Specifically, State Parks committed to increase animal proof food lockers and continue to use animal proof trash bins and to increase trash pick-ups at Big Basin Redwood State Park, Portola Redwoods State Park, and Butano State Park to protect marbled murrelet populations (*See* Stipulated Judgement and Settlement Agreement (attached as Attachment B).)

⁴ (*Id.*) State Parks also added additional educational efforts including an educational video linked to the reservation system for these parks to help visitors understand the need to reduce trash to protect species and habitats.

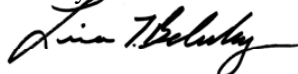
over the life of the ODD HCP, and covered species could occur in areas that were not originally noted in the ODD HCP or evaluated in the environmental review.

Lastly the ODD HCP needs to include an alternative that would limit the number of vehicles allowed to ride on the beach at any given time that would be compatible with management of the covered species.

XI. Conclusion

Thank you for the opportunity to submit scoping comments on the ODD HCP and the environmental review. We look forward to working with both State Parks and USFWS to assure that the ODD HCP and environmental review conform to the requirements of state and federal law and to assure that the HCP provides for robust conservation of the covered species and other special status species in the HCP area. We hope and expect that all significant impacts to the environment from the covered activities are fully analyzed, avoided, minimized or if necessary mitigated. Please do not hesitate to contact me at the Center with any questions at the number listed below. We look forward to reviewing the ODD HCP and the environmental review document once they are made available for public review.

Sincerely,



Lisa T. Belenky, Senior Attorney
CENTER for BIOLOGICAL DIVERSITY
1212 Broadway, Suite 800
Oakland, CA 94612
lbelenky@biologicaldiversity.org

cc: David Hacker CDFW David.Hacker@wildlife.ca.gov

Attachments:

Attachment A: Photo of plovers loafing in tire tracks on Oceano Dunes SVRA beach.

Attachment B: Settlement Agreement

Attachment A



Photo: I. Anderson, Nov. 27, 2017

Attachment B

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*Attorneys for
Department of Parks and Recreation and California
State Park and Recreation Commission*

FILED
MAR 18 2014

ALEX CALVO, CLERK
BY JUSTINE KHOURY
DEPUTY, SANTA CRUZ COUNTY

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF SANTA CRUZ

**CENTER FOR BIOLOGICAL
DIVERSITY,**

Petitioner and Plaintiff,

v.

**CALIFORNIA DEPARTMENT OF
PARKS AND RECREATION, an agency of
the State of California; and CALIFORNIA
STATE PARK AND RECREATION
COMMISSION,**

Respondents and
Defendants.

Case No. CV177159

**STIPULATION FOR ENTRY OF
JUDGMENT AND PROPOSED
JUDGMENT**

Judge: Hon. Paul M. Marigonda
Dept.: 5
Action Filed: June 19, 2013

The parties to this action, Petitioner and Plaintiff Center for Biological Diversity and Respondents and Defendants California Department of Parks and Recreation and California State Park and Recreation Commission, by and through their counsel of record, agree and stipulate to entry of judgment in this action as follows:

1. Judgment will be entered in this action pursuant to the terms and provisions of the Settlement and Release attached hereto as Exhibit 1 and incorporated herein by reference.

FILED BY FACSIMILE

2. The parties waive all rights of appeal from the judgment.

3. The court shall retain jurisdiction to enforce the provisions of the judgment as indicated in the attached Settlement and Release Agreement.

IT IS SO STIPULATED.

Date: 1-28-2014

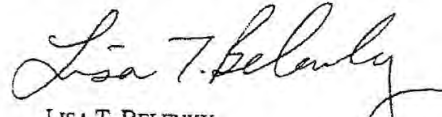
KAMALA D. HARRIS
Attorney General of California
CHRISTIANA TIEDEMANN
Supervising Deputy Attorney General



SUSAN A. AUSTIN
Deputy Attorney General
*Attorneys for Respondents and Defendants
Department of Parks and Recreation and
California State Park and Recreation
Commission*

Date: 1/24/14

CENTER FOR BIOLOGICAL DIVERSITY



LISA T. BELENKY
*Attorney for Petitioner and Plaintiff
Center for Biological Diversity*

JUDGMENT

IT IS HEREBY ORDERED that judgment is entered pursuant to the terms of the parties' Stipulation for Entry of Judgment as set forth above.

Date: MAR 13 2014

PAUL M. MARIGONDA
HON. PAUL M. MARIGONDA
JUDGE OF THE SUPERIOR COURT

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90373668.doc

Exhibit 1

SETTLEMENT AND RELEASE AGREEMENT

This Settlement and Release Agreement ("Agreement") is made and entered into by and among, the California State Park and Recreation Commission ("Commission") and the California Department of Parks and Recreation ("Department") (collectively "State Parks"), on the one hand, and the Center for Biological Diversity ("the Center"), a nonprofit public interest corporation. State Parks and the Center are individually referred to in this Agreement as a "Party" and collectively as the "Parties." The Parties make this Agreement in light of the following recited facts (each a "Recital").

RECITALS

A. On May 17, 2013, the Commission approved the Department's Big Basin Redwoods State Park General Plan ("Project" or "General Plan"), certified a final environmental impact report ("EIR"), and adopted a Statement of Overriding Considerations for the Project. The Department filed the Notice of Determination on May 20, 2013, which was received by the State Clearing House on May 21, 2013, and was assigned State Clearing House Number 2001112104.

B. Challenging the EIR and General Plan approval under the California Environmental Quality Act ("CEQA") and the California Endangered Species Act ("CESA"), the Center timely filed a Petition for Writ of Mandate and Complaint for Declaratory Relief in the Superior Court of the State of California, Santa Cruz County, *Center for Biological Diversity v. California Department of Parks and Recreation, et al.*, Case No. CV 177159 ("CEQA Lawsuit").

C. State Parks disputes the allegations and contentions raised in the Center's CEQA Lawsuit.

D. The Parties recognize that continuing their dispute over the General Plan and the CEQA Lawsuit will result in significant costs to each Party, with an uncertain outcome to each Party. Through this Agreement, the Parties now wish to resolve their disputes over the General Plan and the Center's CEQA Lawsuit.

E. This Agreement's language binding principals, directors, officers, and agents is effective only to the extent that such entities or people can be legally bound by such agreements.

In consideration of the above recitals, which are incorporated herein, and the promises set further herein, the Parties agree as follows:

AGREEMENT

1. Marbled Murrelet Protection. The marbled murrelet is a federally threatened Pacific seabird that nests in the upper branches of old growth redwood and Douglas Fir trees in the Santa Cruz Mountains region, including in the following three state parks: (1) Big Basin Redwoods State Park ("Big Basin") (composed of the main part of the park ["Big Basin proper"] and a recently-acquired part of the park ["Little Basin"]); (2) Portola Redwoods State Park

("Portola"), and (3) Butano State Park ("Butano"). (See map attached as Exhibit A.) To further efforts to protect the marbled murrelet, Parks agrees to do the following:

A. Trash management program

Implement the following trash management measures by the specified dates in Big Basin Redwoods, Portola, and Butano State Parks, to improve upon existing measures:

(A1) Contract with a waste management provider to empty all of the dumpsters in Big Basin proper (not including Little Basin) on a frequent, regular schedule that will prevent trash overflow, particularly during peak visitation times. This would require emptying dumpsters on the weekends and holidays. Amend the contract with the waste management provider at Little Basin to address the issue of full dumpsters during peak use in the summer. New trash pick-up measures must be implemented by April 2014.

(A2) By April 2014, ensure sufficient permanent and seasonal maintenance staff to monitor and empty the animal-proof trash bins throughout the Parks to prevent trash overflow. Provide a mechanism for park visitors to notify staff if trash bins or dumpsters are overflowing and a plan for park staff to clean up any overflow within two hours of being notified.

(A3) Animal proof trash containers are already installed in human-use areas of Big Basin proper and at Portola and Butano State Parks. By April 2014, install a sufficient number of animal-proof, user-friendly trash bins and dumpsters in all human-use areas in Little Basin, making sure that bins are large enough and numerous enough to prevent spill-over during peak visitation.

(A4) By April 2014, install animal-proof food lockers in all campsites and cabin sites in the Parks, including the Little Basin campground.

(A5) By April 2014, post "no dishwashing" signs at all spigots. Several studies are underway in other parks to test the efficacy of different types of drain grates to prevent birds and other animals from eating food scraps left under the spigots. When the data are available and if drain grates are effective, Parks will install grates under the spigots in the campgrounds. In addition, Parks will retrofit the existing campground restroom buildings with dishwashing facilities as follows.

(a) There are fourteen restroom buildings with running water and flush toilets in Big Basin campgrounds. By May 31, 2015, Parks will install a dishwashing station at seven or more of these restroom buildings, distributed across the campgrounds to reflect visitor use to the extent possible.

(b) There are two restroom buildings with running water and flush toilets at the main Portola campground. By May 31, 2015, Parks will install a dishwashing station at one or both of these restroom buildings.

(c) Sky Meadows campground in Big Basin has running water and vault toilets. By June 30, 2016, Parks will install at least one dishwashing station.

(d) Unlike the restroom buildings in (a), (b), and (c), the following have not yet been retrofitted to be compliant with the Americans with Disabilities Act ("ADA"): (1) the restroom building in Butano and (2) the restroom building at the Portola group campground. When these restroom facilities are retrofitted to be ADA compliant, Parks will install a dishwashing station at each.

(A6) Parks, together with other local, state, and federal agencies, has created highly visible, user-friendly, and durable weather-resistant signs to educate visitors to discard trash in animal-proof bins, to clean up crumbs, and to refrain from feeding birds and other wildlife. New signs to educate visitors with the message "Keep it crumb clean: never leave food unattended, use food lockers where available, never feed wildlife, your crumbs attract jays and ravens who eat eggs and babies of endangered marbled murrelets", have already been posted in some areas. By April 2014, these or similar signs should be posted at all visitor facilities in the Parks including all campsites, campground information kiosks, food storage lockers at campsites and cabin sites, visitor centers, nature centers, stores, picnic areas, picnic tables, bathrooms, dumpsters, trailheads, and at the parking lot information kiosks for Berry Creek Falls and Sunset Trail Camp. The same or similar signs should be posted in Spanish in at least one-third of the locations.

B. Public education measures

(B1) Make the marbled murrelet a focal point of a comprehensive, sustained public education campaign within Big Basin Redwoods State Park to encourage park visitors to participate in saving the Santa Cruz Mountains marbled murrelet by not feeding wildlife and by properly storing and throwing away all trash.

(B2) By April 2014, at Big Basin, Portola, and Butano State Parks, incorporate into publications including park event schedules, natural history literature, and a brochure to be made available in the Sempervirens room (or similar location), information that: (i) identifies the marbled murrelet as a focal point of the Park, (ii) highlights its precarious status in the Santa Cruz Mountains and provides natural history highlights about the marbled murrelet, (iii) discusses the threat that visitor trash poses to the marbled murrelet by attracting jays and ravens, (iv) discusses the importance of not feeding jays, ravens, and other wildlife, and keeping areas free of trash and crumbs and (v) educates Park visitors regarding appropriate dish-washing techniques.

(B3) As soon as feasible and at the latest at the time a new reservation contract is in place, Parks will arrange for campers to receive with their reservation a digital link to a short, educational video about the marbled murrelet. The link will be sent to campers with all correspondence regarding their reservation. The video will include information that: (i) identifies the marbled murrelet as a focal point of the Park, (ii) highlights its precarious status in the Santa Cruz Mountains and provides interesting natural history highlights about the marbled murrelet, (iii)

discusses the threat that visitor trash poses to the marbled murrelet by attracting jays and ravens, (iv) discusses the importance of not feeding jays, ravens, and other wildlife, and keeping areas free of trash and crumbs and (v) educates Park visitors regarding appropriate dish-washing techniques and the new dishwashing stations. The video should be provided in English and Spanish.

(B4) By April 2014, create marbled murrelet displays in high use areas of the Park. Display areas will include but are not limited to the Sempervirens Room (or similar location) in the Headquarters Building, the Nature Lodge, and the future visitor contact center at Saddle Mountain. At the Nature Lodge, the existing marbled murrelet video should be made visible by creating an accompanying sign alerting the visitor to the video; the Spanish language option for the video should be operational.

(B5) By April 2014, approach Audubon or another potentially interested partner with citizen science experience to create and run a citizen science program focused on the marbled murrelet, nest predation, and trash. For example, this program and a website could allow visitors to record (a) sightings of marbled murrelets; (b) sightings of Steller's jays, common ravens, and other wildlife; (c) where animals are seen eating human food; (d) overflowing trash bins and dumpsters; (e) where they see trash on the ground. If Parks, after making a good faith effort, is unsuccessful in finding an interested partner to create and run a citizen science program, Parks shall have no obligation to initiate a citizen science program of its own.

(B6) By April 2014, complete an education session for all Park staff in Big Basin, Portola, and Butano State Parks on the new marbled murrelet conservation measures with guidance on how to talk with Park visitors and enforce the measures.

(B7) Continue the interpretive program on the marbled murrelet that is presented by Parks staff at interpretive and educational programs at the Campfire Center. The program will include information that: (i) identifies the marbled murrelet as a focal point of the Park, (ii) highlights its precarious status in the Santa Cruz Mountains and provides natural history highlights about the marbled murrelet, (iii) discusses the threat that visitor trash poses to the marbled murrelet by attracting jays and ravens, (iv) discusses the importance of not feeding jays, ravens, and other wildlife, and keeping areas free of trash and crumbs, and (v) educates Park visitors regarding appropriate dish-washing techniques and the new dishwashing stations.

(B8) Continue to incorporate information on marbled murrelet conservation on guided hikes in the Park. For example, the Redwood Loop Trail passes by a giant tree where marbled murrelets have nested, providing an opportunity for visitor education.

(B9) During the peak camping season (from April to September), continue to hire staff dedicated to talking to visitors in the Headquarters area and all campgrounds about not feeding wildlife, proper disposal and storage of food, and marbled murrelet conservation. It is especially important to talk to campers at mealtimes (breakfast, lunch, dinner).

C. Monitoring and Adaptive Management

To implement Parks' commitment to undertaking adaptive management activities on State Park properties as part of a larger regional effort to conserve and protect the marbled murrelet, Parks will take the following steps:

(C1) On or before January 31, 2017, Parks will compile and analyze all survey data collected as a result of activities described in (D2) and other relevant information from the 2014, 2015, and 2016 seasons, including the analysis of long-term trends through and including the 2016 season using the long-term survey data, and make this data, analysis, and information available to the public on its website. Parks will take steps to seek input from U.S. Fish and Wildlife Service, California Department of Fish & Game, and other experts on marbled murrelets and seabirds in evaluating the data and information.

(C2) Based on the evaluation of the data and information and input from members of the public, agencies, and experts (if any), Parks will make a determination on or before March 31, 2017, whether adaptive management measures need to be implemented in the Parks to provide additional protection for the marbled murrelet in Big Basin, Portola, and Butano State Parks. Additional measures considered will include potential closures of human-use areas. Parks' determination of whether or not any adaptive management measures are needed, and the basis for the determination, will be memorialized in writing and made available to the public on its website within 5 business days.

(C3) Parks will undertake the same compilation and analysis of data and information, public notice, outreach to wildlife agencies and experts, and a determination regarding any needed adaptive management every 3 years (January 31/March 31, 2020, January 31/March 31, 2023) until and unless a new general plan is adopted for Big Basin Redwood State Park.

D. Coordination and Funding

(D1) A number of the actions to protect the marbled murrelet will require funding, and these commitments are made subject to availability of funding. Parks commits to apply for funding these activities through available sources such as state funding, federal funding including the Fish and Wildlife Service's Section 6 funds, Oil Spill Natural Resource Damage Assessment (NRDA) Restoration Funding when applicable, California Coastal Conservancy, and others.

(D2) Funding is already established through the year 2020 for (1) at-sea surveys to determine overall regional marbled murrelet numbers and locations; and (2) corvid studies to determine predator numbers. Funding will also be sought for other types of studies. State Parks will apply for funding to continue (1) annual audio-visual studies to evaluate marbled murrelet nesting activity in Big Basin, Portola, and Butano State Parks, and will seek funding for (2) radar surveys at the mouth of Waddell, Butano, and Pescadero Creek several times a year to provide another index of inland marbled murrelet activity.

(D3) Working towards the recovery of the marbled murrelet will require a regional effort that includes State Parks as well as other agencies and organizations and dedicated funding. Parks will take an active role to support a regional effort to protect the marbled murrelet. Parks will continue to support regional and Park specific monitoring and research efforts by providing access, complimentary camping, and assistance with permits.

E. Corvid management measures

(E1) Beginning in 2014, contingent on approval and funding from the Luckenbach Oil Spill Trustee Council, implement conditioned taste aversion experimental treatments in Big Basin Redwoods State Park. Implementation is planned to occur within 1.5 kilometers of facilities including the campgrounds. The treatments should have well-defined measures to evaluate effectiveness. If the taste aversion treatments in Big Basin, Portola, and Butano, State Parks prove successful in reducing nest depredation, State Parks will continue to seek funding for these measures and implement these measures (contingent on funding being secured).

(E2) Continue with raven depredation efforts utilizing park staff. Evaluate the current program in fall 2014. Following that evaluation, alternative approaches may be deployed as needed, including but not limited to hiring outside experts to remove ravens from the Park for two seasons. If an alternative approach is undertaken, it will be evaluated in fall 2016 to determine whether to continue or whether a different program for raven management is needed.

(E3) Steller's jay adults in Park campgrounds produce large numbers of juveniles, many of which remain in the Park or disperse back into the Park. By April 2014, the Park should draft a plan that considers options for the humane removal of Steller's jay juveniles from the campground areas of the Park at the end of each jay breeding season. Scientists are currently conducting research on jays. This research will assist Parks in making decisions regarding the removal of jays.

F. Other

(F1) Parks currently has a staff position dedicated to overseeing and implementing marbled murrelet mitigation measures. In the next fiscal year, Parks will seek to make that position permanent.

(F2) Park Rangers have full peace officer powers to enforce laws within the parks, including laws pertaining to food storage (14 CCR § 4323), feeding wildlife (14 CCR § 4305; 36 CFR § 2.2) and littering (California Penal Code § 374.4; 14 CCR § 4310). Officer discretion is an important part of their authority and they use their discretion to warn, cite, or arrest violators as the situation requires. Park Rangers will continue to talk with visitors one-on-one when issuing warning tickets or citations to explain the importance of following the rules to protect marbled murrelets.

(F3) Parks will comply with the CEQA before proceeding with any site-specific proposals to build new infrastructure in and adjacent to old-growth habitat in Big Basin Redwoods State Park.

2. ADA Compliance. In carrying out the activities described in 1.B5 (above), State Parks shall comply with the Americans with Disabilities Act to the extent such compliance is required by law.

3. Effective Date. The effective date of this Agreement ("Effective Date") shall be the date the Agreement becomes signed by all of the Parties. Accordingly, each Party shall include the date it executes the Agreement next to its respective signature, and the Effective Date shall be the latest of these dates. The Agreement may be executed in counterparts.

4. Free and Voluntary Agreement. Each Party represents and warrants that its execution of this agreement and release is free and voluntary and acknowledges its independent right, absent this agreement, to litigate the CEQA Lawsuit.

5. Attorneys' Fees and Costs. Parks agrees to pay the Center's attorneys' fees and costs in connection with the CEQA Lawsuit and the negotiation of this Agreement in the amount of \$33,795.57. Payment shall be made in the form of a check made payable to the Center for Biological Diversity and shall be sent to Lisa Belenky, Senior Attorney, Center for Biological Diversity, 351 California Street, Suite 600, San Francisco, CA 94104.

6. Continuing Jurisdiction. The Parties agree that consistent with California Code of Civil Procedure Section 664.6, the Santa Cruz County Superior Court shall retain continuing jurisdiction over the Parties to enforce the terms of this Agreement for ten years after the Effective Date.

7. Stipulated Judgment. It is hereby stipulated by and between the parties that Santa Cruz Superior Court action number CV 177159 is settled and judgment shall be entered pursuant to the terms and conditions of this Agreement, which are and shall be binding on the parties hereto.

8. Notice. All notices under this Agreement shall be in writing. All notices shall be effective when personally delivered, or e-mailed, or 48 hours after deposit in the United States mail, as registered or certified mail, postage prepaid, return receipt requested, to the following representatives of the parties at the addresses indicated below:

If to California Department of Parks and Recreation:

Kathryn J. Tobias
Senior Staff Counsel
California State Parks
1416 9th Street, P.O. Box 942896
Sacramento, CA 94296-0001
kathryn.tobias@parks.ca.gov

With a copy to:

Susan A. Austin
Deputy Attorney General
California Attorney General's Office
1515 Clay Street, 20th Floor
Oakland, CA 94612
susan.austin@doj.ca.gov

If to the Center for Biological Diversity:

Lisa T. Belenky, Senior Attorney
Center for Biological Diversity
351 California St., Suite 600
San Francisco, CA 94104
(415) 632-5307
lbelenky@biologicaldiversity.org

With a copy to:

Shaye Wolf, Climate Science Director
Center for Biological Diversity
351 California St., Suite 600
San Francisco, CA 94104
(415) 632-5301
swolf@biologicaldiversity.org

9. Modification. This Agreement may not be altered, amended, modified or otherwise changed except by writing duly executed by authorized representatives of the Parties. A Party seeking to modify the Agreement shall make a request for modification according to the

notice provisions of paragraph 8. The other Party shall respond to the request within 15 calendar days, and acceptance of the request shall not be unreasonably withheld.

10. Informal Negotiations. In the event a Party believes that the other Party is in default of any provision or provisions of this Agreement, that Party shall provide the other Party with written notice of the alleged default pursuant to the notice procedures identified in paragraph 8.

10.1. Notice of Default or Notice of Claim. The written notice shall identify the provision of the Agreement that the Party believes has been breached and/or circumstances have arisen that require immediate injunctive relief, a general summary of the facts supporting the alleged default or circumstances and, where appropriate, the manner in which the default or circumstances may be satisfactorily cured. Failure or delay in giving notice of any default shall not constitute a waiver of any default, nor shall it change the time to cure the default.

10.2. Informal Dispute Resolution. After notice of default is given, the Parties shall commence good faith negotiations to resolve the dispute no later than 15 days from the date of the written notice.

10.3. Cure Period. The Party who is alleged to be in default shall have 30 days from the date of the written notice to cure the alleged default, or, if the default cannot be fully cured in the 30-day period, make reasonable efforts to commence to cure the default within the period and, thereafter, diligently prosecute such cure to completion.

10.4. Judicial Action. The Parties agree that in the event of any dispute over the terms of this Agreement, including any default issues, they will first undertake the Informal Dispute Resolution process outlined above in paragraph 10.2. Any dispute not resolved through such informal dispute resolution may be submitted to the Superior Court of Santa Cruz. The Parties further agree that in any such proceeding they will not reinstate any claims otherwise compromised by this Agreement. Nothing in this provision, however, relinquishes or waives the right of any party to seek immediate injunctive relief.

10.5. Timing. The Parties agree that they have a strong, mutual interest in having any judicial dispute resolved as quickly as possible. Accordingly, within ten days of the filing of any judicial action pursuant to paragraph 10.4, the Parties agree to meet and confer in good faith to discuss and attempt to agree upon procedural methods for achieving an early resolution of the claim through motions or other procedures.

11. Waiver of Right to Enforce. The failure of any Party to enforce any term, covenant, or condition of this Agreement on the date it is to be performed shall not be construed as a waiver of that Party's right to enforce such term, covenant or condition, or any other term, covenant, or condition of this Agreement. A waiver of any Party's right to enforce any provision of this Agreement shall not be effective unless such a waiver is made expressly in writing. An express waiver of any one breach shall not be deemed a waiver of any other breach of the same or any other provision of this Agreement.

12. Headings. The paragraph headings herein are for the convenience of the Parties and are not intended to be used as an aid to interpretation of the terms of this Agreement.

Settlement and Release Agreement

Page 9 of 12

Date 2/26/2014

CALIFORNIA STATE PARK AND RECREATION COMMISSION; CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

By: Anthony L. Jackson
Major General Anthony L. Jackson,
USMC (Ret.)
Director, California Department of Parks and Recreation

Date 1/24/14

CENTER FOR BIOLOGICAL DIVERSITY

By: Lisa T. Belenky
Lisa T. Belenky, Senior Attorney

Approved as to form:

Date 2/24/14

CALIFORNIA STATE PARK AND RECREATION COMMISSION; CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

By: Kathryn J. Tobias
Kathryn J. Tobias, Senior Staff Counsel

Date 1-28-2014

ATTORNEY GENERAL OF THE STATE OF CALIFORNIA

By: Susan A. Austin
Susan A. Austin, Deputy Attorney General
Attorneys for the California State Park and Recreation Commission and the California Department of Parks and Recreation

Date: January 23, 2014

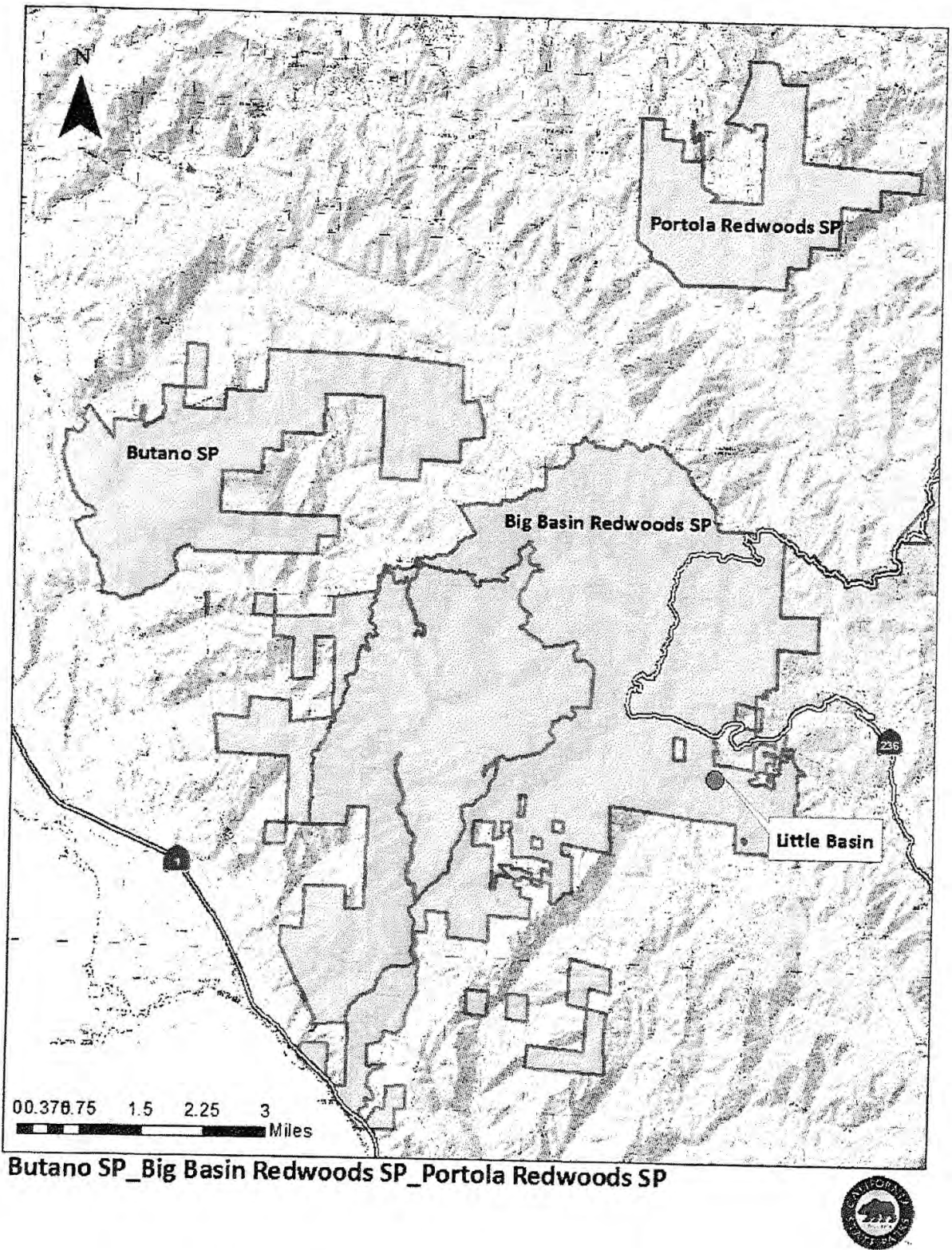
CHATTEN-BROWN & CARSTENS



By: _____

Jan Chattan-Brown
Michelle Black
Attorneys for the Center for Biological
Diversity

EXHIBIT A



Butano SP_Big Basin Redwoods SP_Portola Redwoods SP

DECLARATION OF SERVICE BY U.S. MAIL

Case Name: *Center for Biological Diversity v. CA Dept of Parks & Rec., et al.*
 No.: Santa Cruz Superior Court Case No.: CV177159

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter. I am familiar with the business practice at the Office of the Attorney General for collection and processing of correspondence for mailing with the United States Postal Service. In accordance with that practice, correspondence placed in the internal mail collection system at the Office of the Attorney General is deposited with the United States Postal Service with postage thereon fully prepaid that same day in the ordinary course of business.

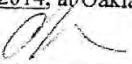
On March 12, 2014, I served the attached **STIPULATION FOR ENTRY OF JUDGMENT AND PROPOSED JUDGMENT** by placing a true copy thereof enclosed in a sealed envelope in the internal mail collection system at the Office of the Attorney General at 1515 Clay Street, 20th Floor, Oakland, CA 94612-0550, addressed as follows:

Jan Chatten-Brown
 Douglas P. Carstens
 Michelle Black
 Chatten-Brown & Carstens
 2200 Pacific Coast Highway, Ste. 318
 Hermosa Beach, CA 90254

Lisa T. Belenky
 Senior Attorney
 Center for Biological Diversity
 351 California Street, Suite 600
 San Francisco, CA 94104

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on March 12, 2014, at Oakland, California.

Christine Soo
 Declarant


 Signature

OK2013309732
 90382183.doc



1540 Marsh Street
Suite 110
San Luis Obispo California
93401 ph: 805-593-0926
fax: 805-593-0946

babaknaficy@sbcglobal.net

Law Offices of **Babak Naficy**

March 12, 2018

Via US Mail and email

Mr. Ronnie Glick
Senior Environmental Scientist
California Department of Parks and Recreation
Oceano Dunes District
340 James Way, Ste. 270
Pismo Beach, CA 93449
Ronnie.Glick@parks.ca.gov

Field Supervisor
Ventura Fish and Wildlife Office
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003
lena_chang@fws.gov

Re: Oceano Dunes District HCP NOP

Dear Mr. Glick and Ms. Chang:

Sierra Club submits these comments regarding the Notice of Preparation and Public Scoping Meeting for the California Department of Parks and Recreation (“CDPR” or “State Parks”), Oceano Dunes District Habitat Conservation Plan Joint EA/EIR or Joint EIS/EIR for a (ODD HCP) issued by the CDPR on January 9, 2018, and the notice published by the U.S. Fish and Wildlife Service (FWS), “Draft Habitat Conservation Plan for the California Department of Parks and Recreation Oceano Dunes District, San Luis Obispo County, California; Notice of Intent To Prepare Environmental Assessment or Environmental Impact Statement; Initiation of Public Scoping Process”, 83 Fed. Reg. 1380-1382 (January 11, 2018). The CDPR is proposing the HCP for issuance of an incidental take permit (ITP).

Sierra Club is a well-known California non-profit membership organization that is concerned with protection of the environment and government compliance with environmental laws. The Sierra Club has tens of thousands of members throughout the United States and California including in the vicinity of the Oceano Dunes.

A. The HCP must ensure both the survival and recovery of covered species.

Under prevailing law, the HCP cannot merely focus on the continued survival of covered species; it must also ensure the *recovery* of these species. Federal Endangered Species Act (ESA) defines “conserve” as including both survival and recovery of species: “the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.” (16 U.S.C. § 1532(3)). Accordingly, the HCP must contain specific measures to “conserve,” or provide for the recovery of, the species. (*Sw. Ctr. for Biological Diversity v. Bartel*, 470 F. Supp. 2d 1118, 1128 (S.D. Cal 2006); *Sierra Club v. Babbitt*, 15 F.Supp.2d 1274, 1278 n.3 (S.D. Ala. 1998)).

The project area at Oceano Dunes also includes designated critical habitat for the western snowy plover, tidewater goby, La Graciosa thistle, and south-central California Coast steelhead. The purpose of critical habitat designations is to ensure enough territory is set aside to safeguard the species’ recovery. *Gifford Pinchot Task Force v. United States Fish & Wildlife Serv.* (9th Cir. 2004) 378 F.3d 1059, 1070. According to *Gifford Pinchot*, the ESA views “conservation and survival as distinct, though complementary, goals, and the requirement to preserve critical habitat is designed to promote both conservation and survival.” *Id.* Accordingly, under *Gifford*, the ODD HCP must protect and preserve in perpetuity critical habitat and other currently occupied habitat used by the covered species, and also protect habitat that would be essential for the future recovery of covered species. The ODD HCP must also avoid, or otherwise minimize and mitigate the impacts to and the taking of covered species to the **maximum extent practicable**, as required by 16 U.S.C. § 1539.

To be lawful, the HCP must include (1) a complete description of the activity sought to be authorized; (2) name of the species sought to be covered by the permit, including the number, age and sex of the species, if known; (3) the impact that will likely result from such taking; (4) the specific steps the applicant will take to monitor, minimize, and mitigate those impacts; (5) the funding that will be available to implement such monitoring, minimization, and mitigation activities; (6) the procedures to be used to deal with unforeseen circumstances; and (7) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized. (16 U.S.C. § 1539(a)(2)(A)(i)-(iv); 50 C.F.R. §§ 17.22, 17.32.) FWS cannot issue an ITP if the HCP does not contain this information. (16 U.S.C. § 1539(a)(2)(A)).

Before issuing an Incidental Take authorization, the FWS must find that (i) the taking will be incidental; (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; (iii) the applicant will ensure that the plan is adequately funded; (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and (v) any other measures FWS requires will be met. (16 U.S.C. §

1539(a)(2)(B); 50 C.F.R. §§ 17.22, 17.32.)

B. The ODD HCP and environmental review must address recovery of all covered species, including the threatened south-central California Coast steelhead.

As stated immediately above, ODD HCP must include specific measures to ensure the recovery of the covered species. As such, the ODD HCP and the relevant environmental review must identify and describe the overall conditions affecting covered species, including the impacts from habitat destruction and fragmentation. The ODD HCO must also include meaningful measures and proposals for both the protection and recovery of the covered species.

The covered Species include but need not be limited to:

- the federally threatened western snowy plover (*Charadrius nivosus nivosus*),
- the federally and State endangered and State fully protected California least tern (*Sternula antillarum browni*),
- the federally endangered tidewater goby (*Eucyclogobius newberryi*),
- the federally threatened California red-legged frog (*Rana draytonii*),
- the federally endangered and State threatened Gambel’s watercress (*Nasturtium(Rorippa) gambelii*),
- the federally endangered and State threatened La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*),
- the federally and State endangered marsh sandwort (*Arenaria paludicola*),
- the federally and State endangered Nipomo Mesa lupine (*Lupinus nipomensis*)

The threatened south-central California Coast steelhead is also a covered species as it is affected by covered activities. Indeed, Arroyo Grande Creek, which runs through a portion of the Oceano Dunes SVRA (“ODSVRA”) is part of the designated critical habitat for south-central California Coast steelhead. In fact, all vehicles accessing the camping and off-road recreation areas of the ODSVRA must cross the Arroyo Grande Creek. During storm events in the fall and spring, when steelhead or juvenile trout migrate to or from the Pacific Ocean, heavy flows in the Arroyo Grande Creek often makes it difficult, if not impossible, for vehicles in the ODSVRA to cross the creek as it flows across the beach. During these events, vehicles attempting to cross the Creek often become disabled and/or stuck in the Creek’s heavy flows and require assistance. The HCP must therefore specifically address the impacts associated with vehicular crossing of the Arroyo Grande Creek.

While this species is not managed by the USFWS, but rather by NMFS/NOAA, it is a listed species whose unlawful take is prohibited. The HCP must, therefore, be revised to ensure the steelhead is a covered species. The HCP must address ways to protect steelhead and its critical habitat from the impacts of covered activities, and fully consider impacts and alternatives to avoid such impacts in the HCP and environmental review.

C. The proposed alternative that would reduce current nesting and breeding snowy plover and least tern habitat must be eliminated from further consideration and, instead, the Service should consider expanding the protected area and making the protection year-round.

CDPR's proposed alternative which would reduce nesting and breeding habitat for the snowy plover and least terns breeding habitat exclosures must be rejected. 83 Fed. Reg. at 1381. This proposal would cause take of both species and be severely damaging to the species' conservation.

It is well-settled that least terns have a high rate of return to sites where they had nested during the preceding year and have a significant tendency toward nesting at their natal colony site. Jonathan, JL, Massey, BW, 1988, Site Fidelity of Least Terns in California, The Condor 90:389-394¹. Likewise, Western snowy plovers have a high rate of return to sites they had nested during the preceding nesting season. See, Colwell, et al., Final Report: 2014 Snowy Plover Breeding in Coastal Northern California, Recovery Unit 22. As the CDPR is aware, the creation of the seasonal exclosure for the least tern and snowy plover, which came about as a result of a settlement with the Sierra Club, has resulted in a successful breeding program at ODSVRA. Accordingly, any reduction in the size of the seasonal exclosure would significantly harm these species and likely result in unlawful take by interfering with the species nesting and breeding.

The ESA defines the term "take" to mean: "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C. § 1532(19). "Harass" has been defined by regulation as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, **breeding**, feeding or sheltering." See 50 C.F.R. § 17.3 (emphasis added). "Harm" has been defined by regulation as "an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including **breeding**, feeding, or sheltering." *Id.*

Rather than reducing the size of the plover and terns protected nesting area, the Service should consider expanding the area and/or protecting it year-round in order to reduce the potential for impact from vehicles. As the Service is aware, in addition to the plovers that come to ODSVRA only during the breeding season, a distinct population of plovers reside in this area year-round. Each year a number of plovers are killed at the ODSVRA as a result of vehicular activities; many of these incidents occur outside the breeding season. Accordingly, expansion of the protected areas and making these areas protected year-round is vital to reduce the take of plovers at the ODSVRA.

D. The ODD HCP and Environmental Review Must Appropriately Address Least Tern as a Fully Protected Species.

The scoping notice indicates that the least tern will be a covered species under the ODD HCP. The least tern is also a fully protected species under California law, and, therefore, any take of this species is unlawful under the fully protected statute except as part of a Natural Communities Conservation Plan (NCCP). Therefore, in order for State Parks to avoid illegal take, this process should include development of an NCCP, as well as the HCP, in order to assure that conservation is fully addressed for the least tern.

E. The ODD HCP Must Address Water Quality and Water Flow Associated with the Oso Flaco Lake and Creek and the Arroyo Grande Creek and Lagoon.

The ODD HCP area includes Oso Flaco Lake and Creek and the Arroyo Grande Creek and Lagoon and their associated wetlands and riparian areas. These areas are home to rare and endangered plants and wildlife which depend upon the freshwater habitats for their continued survival. Accordingly, the ODD HCP and environmental review must ensure that water quality and flow rates are considered and any impacts that may significantly impact flow rates or water quality have remedies and are applied in the ODD area in order to prevent water quality/quantity degradation. In addition, the ODD HCP must also address San Luis Obispo County's ongoing flood control activities in and along Arroyo Grande Creek and Lagoon. In fact, the County has a practice of artificially breaching the sand bar at the Arroyo Grande Lagoon every time high water levels in the Lagoon threaten to flood the nearby residents. While the County has a practice of describing these artificial breaches as "emergency" actions, in fact, the seasonal need for such action is entirely predictable. Because the Lagoon and the sandbar are both located on ODSVRA and the County's flood control actions are conducted with the consent of the CDPR, these activities must be addressed by ODD HCP as the County's flood-control activities are capable of causing take of the federally-covered tidewater goby.

F. The ODD HCP Should Analyze CDPR's Currently Proposed and Foreseeable Dust Mitigation Activities.

The off-highway activities at the ODSVRA is responsible for significant particulate matter (PM 10 and 2.5) pollution downwind of the park on the Nipomo Mesa. The CDPR is currently engaged in some limited mitigation activities that include revegetation of certain parcels, as well as other dust mitigation, including placement of straw bales and wind fencing. Some off-roading special interest groups have suggested that some of these activities may cause take of some of the covered species. The ODD HCP should therefore cover these activities.

G. Conclusion

We thank you for the opportunity to submit scoping comments on the ODD HCP and the environmental review. We look forward to reviewing the ODD HCP and environmental review document once it is available for public review.

Sincerely,

Babak Naficy
Babak Naficy

References

1. <https://sora.unm.edu/sites/default/files/journals/condor/v090n02/p0389-p0394.pdf>
2. https://www.fws.gov/arcata/es/birds/WSP/documents/siteReports/California/RU2_Final_Report_2014.pdf

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By Email

March 12, 2018

Lena Chang
US Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003

Re: Friends of Oceano Dunes' Comments
on Oceano Dunes HCP

Dear Ms. Chang:

These comments are filed on behalf of Friends of Oceano Dunes, Inc. ("Friends"), which is a California not-for-profit corporation, representing approximately 28,000 members and users of the Oceano Dunes State Vehicular Recreation Area ("SVRA") located near Pismo Beach, California. Friends is a public watchdog organization created in 2001 expressly to preserve and expand recreational uses at Oceano Dunes SVRA.

Friends contends that the scope of the Oceano Dunes HCP here requires a full Environmental Impact Statement (EIS) analysis in order to comply with the National Environmental Policy Act. This is a complex and controversial HCP, and the resource agencies have been working on it for at least 10 years. The resource agencies have largely shielded their discussions from the public to date, and it is now time to fully reveal the issues underlying this HCP to the public by preparing a full EIS.

FWS is required to prepare an EIS for "major Federal actions significantly affecting the quality of the human environment." The HCP and any incidental take permit here would be a major federal action requiring an EIS.

Within the last year or so, FWS has undertaken an EIS, rather than an EA, for less controversial projects of similar scope and size to the Oceano Dunes HCP (or smaller). For instance, FWS announced the availability of a draft environmental impact statement and draft environmental impact report (EIS/EIR) for the proposed South Sacramento Habitat Conservation Plan (SSHCP). FWS also recently has elected to prepare an EIS for the Yolo Habitat

Conservation Plan and Natural Community Conservation Plan, the Orange County Transportation Authority (OCTA) M2 Natural Community Conservation Plan/Habitat Conservation Plan, and the Bakersfield HCP. Similarly, a full EIS must be prepared for the Oceano Dunes HCP. There is no meaningful basis to distinguish the Oceano Dunes HCP from the above HCPs in terms of the significance of the impacts that should be studied.

Friends also alerts FWS that the Oceano Dunes HCP must comply with the lawsuit settlement dated April 2003. That settlement required State Parks to return the plover exclosure boundary from Post 6 to Post 7.

Friends is particularly concerned about impacts of dust control measures at Oceano Dunes SVRA. In an EIR under CEQA, the California Department of Parks and Recreation recently determined that the public works project would have significant environmental impacts on the western snowy plover. The California Coastal Commission ignored and dismissed these findings, and authorized the placement of dust control measures within and adjacent to critical habitat for the western snowy plover, which will result in the take of the plover in violation of section 9 of the ESA, and in adverse modification of critical habitat. To remedy this error, FWS has an obligation to fully study this issue under NEPA.

Thank you.

Sincerely,

/s/

Tom Roth

Cc: Jim Suty, President, Friends of Oceano Dunes

Dear Sir,
 People in Black Lake, Triloggy +
 all the way to Main St. Santa
 Maria are against the contaminated
 air we have to breathe because
 a few idiots + their children have
 to drive vehicular dune buggies
 on our NIPOMO Beaches, +
 cause our air to be polluted.
 It has been proven to exist in
 the town of Santa Maria - It
 could result in a law suit.

Get RID OF THE DUNE BUGGIES
 30 yrs of pollution is enough!

Mine Skadden
 1250 Black Sage
 Circle
 NIPOMO, CA 93444

Ph. 343-5561

for Black Lake
 Greg Louse

March 8, 2018

Lena Chang
Senior Biologist
Ventura Fish and Wildlife Office
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, California 93003

Re: Oceano Dunes HCP and NEPA Environmental Analysis

Dear Lena Chang,

The following comments are in response to the U.S. Fish and Wildlife Service's (USFWS) request for public input to identify potential issues for environmental analysis in the proposed Habitat Conservation Plan (HCP) for Oceano Dunes State Vehicular Recreation Area (ODSVRA) in San Luis Obispo County. A draft HCP and an accompanying draft National Environmental Policy Act (NEPA) document will be first available for public review when released together at a future time. Comments are limited to the federally listed Pacific coast population of the western snowy plover (plover, plovers) and several make note of take, in the form of direct mortality, due to vehicle strikes. Such mortality is expected to periodically occur at a busy Off-Highway Vehicle (OHV) park, and is an additional take threat either absent or present at a much lower level at other sites in the U.S. range of the plover. As described in the population viability analysis included in the USFWS Recovery Plan¹ for the plover small increases in adult mortality can have substantial impacts on a population over time.

Correction factor for detection of juvenile and adult plover mortality caused by vehicle strikes

Within the vehicle use area the actual number of plover carcasses found that are likely a result of vehicle strikes will certainly underestimate the total number. The vehicle use area of the park is very large and such carcasses can go unnoticed. In addition, carcasses can be quickly scavenged by gulls and other animals, crushed into the sand by passing vehicles, or

¹ U.S. Fish and Wildlife Service. 2007. Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*). In 2 volumes. Sacramento, California. xiv + 751 pages.

covered by wind-blown sand. To more reasonably reflect actual take impacts there should be a correction factor applied to the number of carcasses actually found and where mortality by vehicle strike is suspected.

Take assessment of plover eggs, chicks, and juveniles and conversion to adult equivalents

Losses to take of plover eggs, chicks, and juveniles should also be expressed as adult equivalents to better identify cumulative impacts for the overall production and number of adults that are available for the subsequent breeding season (available adults are the most critical life stage to reach and sustain recovery). Because the plover is well studied at multiple sites within the U.S. range information on average survival rates of the different life stages is available for this analysis. This is the approach taken in the Oregon coast plover HCP² to better assess take impacts.

Threat analysis for juvenile and adult plovers during vehicle activity at night

There can be a wide range of vehicle activity at night at the park, including number of vehicles, speed, abrupt changes in direction of travel, and intensity of headlights and overhead light bars. It is likely this threat remains poorly understood and a review of the best information and professional judgement available would be beneficial. Any gaps of information on this issue pertinent for the park can be identified. I am aware of one study³ conducted at the park in late 2004 and early 2005 involving shorebird (including the plover) response to vehicles at night. I have not seen a final and released report but it will be important to take into consideration limitations identified in the report in drawing any conclusions about this issue.

Information collected during a five-year study at ODSVRA on seasonal exposure wrack zone and wrack-dependent invertebrates

The ODSVRA 2017 season report⁴ on the plover and California least tern breeding season notes in its Recommendations section that a five-year (2007-11) study on select ecological components of the seasonal exposure shoreline was conducted by researchers from the Marine Science Institute at the University of California Santa Barbara. The study looked at the substantial negative impacts to the wrack zone and presence of wrack-dependent

² ICF International. 2010. Habitat Conservation Plan for the Western Snowy Plover. August. (ICF 06537.06.) Portland, OR. Prepared for Oregon Parks and Recreation Department.

³ Study conducted by Mad River Biologists, located at time of study in Arcata, California.

⁴ Nesting of the California Least Tern and Western Snowy Plover at Oceano Dunes State Vehicular Recreation Area, San Luis Obispo County, California, 2017 Season. December 2017. Report prepared by California Department of Parks and Recreation, Off-Highway Motor Vehicle Division, Oceano Dunes District.

invertebrates (an important food resource for both adult plovers and broods) that occurred in this habitat during the time the shore is open to public use, including vehicles. The study also looked at ways to improve these resources during the breeding season. My understanding is a report detailing the findings has not yet been provided to the park. It would be valuable for both the HCP and environmental analysis to have access to the findings of this site-specific study. Information on the availability of food resources for broods and any competition for what may be a limiting resource would be valuable, especially in view of any considered reductions in the size of the seasonal enclosure shoreline that would further increase brood density and competition for invertebrate prey.

Climate Change and Sea Level Rise

ODSVRA has been designated as critical habitat⁵ by the USFWS, in part due to consideration for climate change and sea level rise. ODSVRA currently contains space that can accommodate inland retreat and continue to provide habitat for plovers. As the HCP may be for 25 years, ongoing management at the park should maintain space for this response to provide resiliency for plover and tern habitat. Analysis could provide information on current models for rates of sea level rise.

Thank you for the opportunity to provide comments and I look forward to reviewing the draft HCP and draft NEPA environmental analysis documents when they become available.

Sincerely,



Doug George
Coastal Program Biologist

cc: Ellie Cohen, President and CEO
Point Blue Conservation Science

⁵ Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover; Final Rule. Department of the Interior, U.S. Fish and Wildlife Service. June 19, 2012.

California State Parks/U.S. Fish and Wildlife Service

Oceano Dunes Habitat Conservation Plan
February 7th, 2018 Scoping Meeting

Comment Card

Zette Harbour
NAME

785 Quintana Rd #126
ADDRESS
Morro Bay, CA 93442

ORGANIZATION /AFFILIATION

zetteharbour@gmail.com
E-MAIL ADDRESS

Comment: I appreciate that State Parks is finally moving forward with this Habitat Conservation Plan. The HCP must provide for robust conservation that ensures recovery, not just survival of all imperiled species.

The HCP should not reduce protections for nesting birds. A proposal that includes reducing protective enclosures for nesting birds to make room for recreation is unacceptable.

Increased recreation will harm nesting and breeding birds and has no place in a conservation plan.

In its environmental review, State Parks needs to address air quality impacts from increased off-road vehicle use and include a State Natural Communities Conservation Plan for fully protected species.

(Continue on back if necessary)

Thank You



From: **rachelle toti** <rachelletoti@gmail.com>
Date: Mon, Mar 12, 2018 at 12:19 PM
Subject: Comments for Draft Habitat Conservation Plan - Oceano Dunes
To: "Chang, Lena" <lena_chang@fws.gov>

I am submitting the following comments for your consideration.

I feel the following provisions should be included in the draft Habitat Conservation Plan.

1. Eliminate truck jumping events and large events of all kinds.
2. Provide a bridge over the Arroyo Grande creek when it is connected to the ocean to protect the tidewater goby, steelhead trout and other aquatic animals.
3. Eliminate night riding as this further disturbs wildlife and birds trying to rest or which hunt at night.
4. Decrease the intensity of use at the park as it is over crowded much of the time.
5. Enforce the protection of all wildlife, especially the shore birds which are driven through and frightened by vehicles.
6. Keep the Western Snowy Plover /Calif. Least Tern enclosure up year around to protect the birds which winter in this area. Currently, the fencing comes down from Oct thru Feb. This would also protect the vegetation which is run over by vehicles as soon as the fencing comes down.
7. Give citations to persons intentionally running over vegetation.

Thank you for the opportunity to provide input.

Rachelle Toti
San Luis Obispo County resident

From: June Gill [<mailto:junegill21@msn.com>]
Sent: Tuesday, February 6, 2018 12:15 AM
To: Glick, Ronnie@Parks <Ronnie.Glick@parks.ca.gov>
Subject: Oceano Dunes HCP

Mr. Ronnie Glick, Senior Environmental Scientist,
California Department of Parks and Recreation,
Oceano Dunes District,
[340 James Way, Ste. 270,](#)
[Pismo Beach, CA 93449](#)
Ronnie.Glick@parks.ca.gov

Attn: Oceano Dunes HCP.
Field Supervisor
Ventura Fish and Wildlife Office,
U.S. Fish and Wildlife Service
[2493 Portola Road, Suite B,](#)
[Ventura, CA 93003](#)
lina_chang@fws.gov

Dear Sir,

While I appreciate that State Parks is finally moving forward with this Habitat Conservation Plan for Oceano Dunes State recreational vehicle area, I think The HCP must guarantee real conservation that ensures recovery , not just survival, of all imperiled species. Therefore it should not reduce protections for nesting birds. A proposal that includes reducing protective exclosures for nesting birds to make room for recreation is not a move we should make since more dunebuggies will only harm nesting and breeding birds and does not belong in a conservation plan that aims to protect endangered species like the Snowy Plover.

Sincerely,

Dr. June Gill
Santa Barbara

Sent from my Verizon, Samsung Galaxy smartphone

First Middle	Last	City	State	First Middle	Last	City	State
Andrew	Abate	Ventura	CA	Judith S	Anderson	Long Beach	CA
Amir	Abdi	Los Angeles	CA	Melody	Anderson	San Diego	CA
June	Abner	San Diego	CA	Beth	Anderson	Arroyo Grande	CA
Jesse	Abrams	Irvine	CA	Sandra	Anderson	Valley Village	CA
Alberto	Acosta	Burbank	CA	Susan	Anderson	Escondido	CA
Mike	Acosta	Riverside	CA	Joan	Andersson	Topanga	CA
Margaret	Adachi	Glendale	CA	Michelle	Angelini	Los Angeles	CA
Margaret	Adams	North Hollywood	CA	Ruth Ann	Angus	Morro Bay	CA
Spencer	Adams	Los Angeles	CA	Gina	Anson	Orange	CA
Willy	Aenlle	Altadena	CA	Martha	Anson	Azusa	CA
Alan Frank	Aeschliman	Long Beach	CA	Marcella	Anthony	Valencia	CA
Paul	Agosti	Rancho Cucamonga	CA	mary	anthony	Fontana	CA
Dina	Aguilar	Long Beach	CA	Judith	Antin	Sherman Oaks	CA
Rhiannon	Aguilar	Los Angeles	CA	Susaan	Aram	Dana Point	CA
Colleen	Aguirre	Castaic	CA	Christopher	Argyros	Sacramento	CA
Amy	Agzarian	Culver City	CA	Elvira	Arias	Harbor City	CA
Natalie	Aharonian	North Hollywood	CA	Behnoosh	Armani	Brea	CA
Achilles	Aiken	Whittier	CA	Elisabeth	Armendarez	Santa Ana	CA
Leslie	Aisenman	Sylmar	CA	Carlos	Arnold	Santa Maria	CA
Kim	Akeman	Pacific Grove	CA	Fernando	Arrangoiz	Beverly Hills	CA
Kathi	Aker	Tujunga	CA	Susan	Ashlock	Santa Barbara	CA
Jackee Van	Akin	Covina	CA	Kristine	Ashton	Van Nuys	CA
Tamadhur	Al-Aqeel	Los Angeles	CA	Florence	Assalit	Monterey	CA
Paul	Albright	Ojai	CA	Alexandra	Athens	Oceanside	CA
Cheryl	Alden	Solana Beach	CA	Kathryn	Atkins	San Luis Obispo	CA
Charles	Alexander	Rialto	CA	Melissa	Atkinson	Los Angeles	CA
Natalie	Alexander	Lake Forest	CA	Tupefaavae	Auelua	Victorville	CA
Judy	Alexandre	Ventura	CA	Ella	Auger	Venice	CA
Alice	Alford	Blythe	CA	Sylvie	Auger		G8Y6S9
Dennis	Allen	Santa Barbara	CA	jane	august	Topanga	CA
Lisa	Allen	Ojai	CA	Helen	Auzins		90513
susan	Allen	Lake Forest	CA	Marilyn	Avila	Whittier	CA
Tracee	Allen	Mission Viejo	CA	Rachel	Axelrod	Burbank	CA
Colby	Allerton	Venice	CA	Zoe	Azuremare	Pasadena	CA
Charles	Almack	Coronado	CA	Charles	B.	Tarzana	CA
Rawan	Almomani	Monterey Park	CA	Veronica	B.	Placerville	CA
Marge	Almond	Riverside	CA	Janet	Baas	Tarzana	CA
Gregory	Alper	Pacific Palisades	CA	Christina	Babst	West Hollywood	CA
Salma	Alquza	Bell Gardens	CA	Martin	Baclija	Riverside	CA
Steve-Rachael	Alvarezjett	Torrance	CA	Shawnee	Badger	Valencia	CA
Gloriamarie	Amalfitano	San Diego	CA	Marion Taylor	Baer	Los Angeles	CA
Gabriel	Amaro	Lake Forest	CA	Rosa	Baeza	Reseda	CA
Les	Amer	North Hollywood	CA	Carol	Baier	San Diego	CA
Krista	Amigone	Los Angeles	CA	Mary	Baker	North Hollywood	CA
Eric	Amundsen	Encinitas	CA	Barbara	Baldock	Monterey	CA
Rose	An	Arcadia	CA	Dale	Ball	La Canada Flintridge	CA
Celeste	Anacker	Santa Barbara	CA	George	Ball	Inglewood	CA
Janis	Andersen	San Diego	CA	Gloria	Bando	Santa Monica	CA
Elaine	Anderson	Chino Hills	CA	Marcia	Banks	Coronado	CA
Anabelle	Anderson	La Verne	CA	Denise	Barger	Bishop	CA
Connie	Anderson	Camarillo	CA	Rebecca	Barker	Glendora	CA
Frank B.	Anderson	San Pedro	CA	Gary	Barnett	Phelan	CA

First Middle	Last	City	State	First Middle	Last	City	State
Roberleigh	Barnhart	Grover Beach	CA	Janek	Bielski	Sunland	CA
D. R.	Baron	Sherman Oaks	CA	Elaine	Bierman	San Diego	CA
John	Barone	Santa Monica	CA	Shelley	Billik	Encino	CA
Laurie	Barre	Altadena	CA	Greg	Bishop	Los Alamitos	CA
Elaine	Barrett	San Diego	CA	Inge	Bjorkman	Placerville	CA
Debra	Barringer	Santa Barbara	CA	C	Black	Costa Mesa	CA
Janice	Bartlett	San Diego	CA	Glenn	Black	Ontario	CA
Kiku	Bartschi	Santa Barbara	CA	Hillary	Black	Los Angeles	CA
N. J.	Bast	Morro Bay	CA	Josephine	Black	Carpinteria	CA
Rosanne	Basu	Hermosa Beach	CA	Jeri	Black	Irvine	CA
Elizabeth	Bauman	Los Angeles	CA	Gina	Blades	Santa Clarita	CA
Judith	Bayer	San Diego	CA	Richard	Blain	Temecula	CA
Jackie	Bear	Los Angeles	CA	Elissa	Blair	Eureka	CA
Janet	Beatty	San Luis Obispo	CA	Gary	Blair	Costa Mesa	CA
Laura	Bebault	Huntington Beach	CA	Sheila	Blake	Pismo Beach	CA
Corinna	Bechko	Los Angeles	CA	Russell	Blandino	Burbank	CA
David	Beck	San Juan Capistrano	CA	Elisabeth	Blaney	San Gabriel	CA
Connie	Beck	El Cajon	CA	Carol	Blaney	Redlands	CA
Carol	Becker	Sherman Oaks	CA	Sabrina	Blash	San Juan Capistrano	CA
Shari	Becker	West Hills	CA	Patricia	Bleha	Carlsbad	CA
Mary	Becker	Encino	CA	Ralph	Bocchetti	Fontana	CA
Gary	Beckerman	Santa Ynez	CA	MaRia	Bodmann	Granada Hills	CA
Brice	Beckham	Los Angeles	CA	Susan	Bohannan	Santa Ana	CA
Dan	Beeman	San Diego	CA	Julie Du	Bois	Canoga Park	CA
Victoria	Behar	Thousand Oaks	CA	Richard	Bold	Vista	CA
Ann	Bein	Los Angeles	CA	Randall	Boltz	San Diego	CA
Michmicharlael	Bellinger	Canoga Park	CA	Steve	Bond	Los Angeles	CA
Mercedes	Benet	Carlsbad	CA	Mary	Bonhote	Santa Ana	CA
Nancy	Beningo	Los Angeles	CA	Joseph	Boone	San Luis Obispo	CA
Elaine	Benjamin	Alpine	CA	Carolyn	Boor	Rancho Cucamonga	CA
maureen	benjelloun		ts69aj	Michael	Bordenave	Fresno	CA
Travis	Benneian	Lake Elsinore	CA	Sylvia	Boris	Culver City	CA
John	Bennett	Chino	CA	Robert	Bortolin	El Segundo	CA
Allison	Benoit	Gonzales	CA	Deborah	Bortot	Fontana	CA
Richard	Benson	Lawndale	CA	Lynn	Bossone	Culver City	CA
Zinka	Benton	Santa Barbara	CA	Marty	Bostic	Los Angeles	CA
Myra	Berario	Castaic	CA	Vic	Bostock	Altadena	CA
Marie-Ange	Berchem	Garden Grove	CA	Joy	Bosworth		FY1
Elaine	Berg	Simi Valley	CA	Lesley	Bosworth		FY1
Melissa	Bergemann	Venice	CA	Eleni	Bountalis	Los Angeles	CA
Brad	Berger	Pioneertown	CA	Sandi	Bowen	Menifee	CA
Karen	Berger	Montrose	CA	Olga	Bowles	Fresno	CA
Colleen	Bergh	Santa Ana	CA	Ann	Bowman	Santa Monica	CA
Debi	Bergsma	Fontana	CA	Jennifer	Bradley	Santa Monica	CA
Rachel	Berks	Los Angeles	CA	Jacqui	Bradshaw	Tehachapi	CA
Jennifer	Berman	Los Angeles	CA	Tim	Brady	Aliso Viejo	CA
Daniel	Berns	Desert Hot Springs	CA	Tim	Brady	Aliso Viejo	CA
Lorik	Bernstein	Huntington Beach	CA	Dennis	Brand	Santa Barbara	CA
David	Berry	Los Angeles	CA	Victoria	Brandon	Northridge	CA
Hans	Bertsch	Imperial Beach	CA	Julia	Brandreth	Los Angeles	CA
Elizabeth	Bettenhausen	Cambria	CA	Kelly	Brannigan	Oceanside	CA
Terry	Bezner	Torrance	CA	Teresa	Bransfield	Arroyo Grande	CA

First Middle	Last	City	State	First Middle	Last	City	State
Tom	Brasseur	Palm Springs	CA	Connie	Call	Los Angeles	CA
Joseph	Braus	Burbank	CA	Rich	Camp	San Bernardino	CA
Gayle	Brennan	Woodland Hills	CA	Joyce	Campbell	Torrance	CA
Carol	Brenner	Moorpark	CA	Gilbert	Canary	Upland	CA
Jeff	Brent	Fontana	CA	Elaina	Caner	Mission Viejo	CA
Rachel	Bretado	San Diego	CA	Shari	Canete	San Diego	CA
Marianna	Breton	Diamond Bar	CA	RI	Cannon	Thousand Oaks	CA
Mastaneh	Brett	Carmel	CA	Ina	Cantrell	La Mesa	CA
Ann	Breuer	Centralia	IL	Diane	Cantwell	Tujunga	CA
Tamara	Briggs	Rancho Cucamonga	CA	Raymond	Capezuto	Encinitas	CA
Lisabette	Brinkman	Santa Barbara	CA	Junko	Card	Exeter	CA
Joanne	Britton	San Diego	CA	David	Carlson	West Hollywood	CA
David	Broadwater	Atascadero	CA	David	Carlson	Carlsbad	CA
Blaise	Brockman	Arcadia	CA	Judith	Carlson	Newport Beach	CA
Allison	Brooker	Los Angeles	CA	Patricia	Carlson	Los Angeles	CA
Elena	Brookes	Ventura	CA	Ravin	Carlson	San Clemente	CA
Mary	Brooks	Frazier Park	CA	Gina	Carollo	San Diego	CA
Linda	Brophy	Santa Barbara	CA	Anjanette	Caron	Alhambra	CA
Ron	Broschart	Ventura	CA	Cathy	Carpenter	Adelanto	CA
Carol	Broughton	Hemet	CA	Rhonda	Carr		40740
James R	Brown	Los Angeles	CA	Seth	Carr	Long Beach	CA
Shelley	Brown	Los Angeles	CA	Ken	Carrell	Lake Forest	CA
Damon	Brown	Los Angeles	CA	Nancy	Carter	Westlake Village	CA
Dace	Brown	San Diego	CA	Jennifer	Cartwright	Mission Viejo	CA
Emma	Brown	Santa Monica	CA	Veronica	Casale	San Diego	CA
Roderick	Brown	San Diego	CA	Mary Casares	Casares	Long Beach	CA
Rosalie	Brown	Fresno	CA	Stewart	Casey	Garden Grove	CA
Lisi	Brown	Burbank	CA	Lisa	Cash	Sherman Oaks	CA
Justine	Bruhanski	Lancaster	CA	Tiffany	Casler	Laguna Beach	CA
Stephen	Bryne	Ventura	CA	Virginia	Castellanos	Coronado	CA
George	Budd	Los Angeles	CA	Suzie	Castle	Morro Bay	CA
Heidi	Buech	Los Angeles	CA	Kari	Castro	Santa Ana	CA
tammy	bullock	El Cajon	CA	Joseph	Catania	Fresno	CA
Kat	Burgess	Santa Monica	CA	Michael	Cavanaugh	Redondo Beach	CA
Holly	Burgin	Van Nuys	CA	Kim	Central	La Crescenta	CA
Bonnie	Burke	San Diego	CA	Rosie	Cerda	La Mesa	CA
Bentley	Burn	Santa Monica	CA	Veronica	Cerpa	South El Monte	CA
Shawn	Burn	San Luis Obispo	CA	Kay	Cessna	Los Angeles	CA
Lou	Burrola	Hawaiian Gardens	CA	Patricia	Chamberlain	San Diego	CA
Jasmeen	Burton	Reseda	CA	B.	Chan	San Diego	CA
JESSICA	BURTON	Riverside	CA	Gabriel	Chang	Bellflower	CA
Ricki	Bush	Van Nuys	CA	Cherie	Chantal	Moorpark	CA
Connie	Butler	San Clemente	CA	Marcy	Chapin	San Luis Obispo	CA
Sam	Butler	Los Angeles	CA	John	Charbonneau	Spring Valley	CA
Kimberly	Buzdygon	Claremont	CA	Carol	Chargualaf	La Mirada	CA
Barbara	Byer	Pasadena	CA	Michelle	Charime	Tarzana	CA
Sharon	Byers	Downey	CA	Connie	Charles	El Cajon	CA
F	C	Venice	CA	Lindsay	Charlton	Goleta	CA
Carlos	Cabezud	San Ysidro	CA	Danielle	Charney	Santa Monica	CA
L	Cadman	San Diego	CA	Phyllis	Chavez	Santa Monica	CA
Maxine	Cain	Altadena	CA	Aimee L.	Cheek	San Diego	CA
Ursula	Calef	Laguna Beach	CA	Mark	Chenevey	Long Beach	CA

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Carole	Chen-Garson	Santa Clarita	CA	Susan	Considine	Los Angeles	CA
Ruth	Cherico	Santa Monica	CA	Steven	Cook	Big Bear Lake	CA
Tom	Chester	Fallbrook	CA	Gordon	Cook	Bakersfield	CA
Animae	Chi	Beverly Hills	CA	Anita	Coolidge	Cardiff By The Sea	CA
Antonia	Chianis	Blue Jay	CA	Sandra	Cope	Irvine	CA
Benny	Chien	La Jolla	CA	Roberta	Cordero	Santa Barbara	CA
Robert	Chirpin	Northridge	CA	Jeff	Cordes	Squaw Valley	CA
Emilia	Chiuzzi	Los Angeles	CA	Stacy	Cornelius	Laguna Beach	CA
Mlou	Christ	Santa Ana	CA	Hana	Correa	La Quinta	CA
Gail	Christensen	Burbank	CA	Jennifer	Corrigan	Newbury Park	CA
Karen	Christensen	Laguna Niguel	CA	Sean	Corrigan	Bellflower	CA
Sandra	Christopher	Burbank	CA	Ronit	Corry	Santa Barbara	CA
Barbara	Chudilowsky	Pacific Grove	CA	M. C.	Corvalan	Redondo Beach	CA
		Rancho Palos		Diana	Cosand	Rancho Cucamonga	CA
Eva	Cicoria	Verdes	CA	Renee	Cossutta	Sierra Madre	CA
John	Clapper	Rancho Cucamonga	CA	Suzanne	Costello	Santa Barbara	CA
Frances	Clark	Needles	CA	Donna	Cottrell	Long Beach	CA
Rebecca	Clark	West Hills	CA	Marc	Couacaud	San Luis Obispo	CA
Lucy	Clark	Bakersfield	CA	Penny	Coulthard	Bakersfield	CA
Matthew	Clark	Tarzana	CA	David	Councilman	Minneapolis	MN
		Rancho Santa		Cathy	Cousins	North Hollywood	CA
Jeffrey	Clark	Margarita	CA	Richard	Cox	Venice	CA
W.	Clark	Lynchburg	VA	Stacie	Cox	Santa Monica	CA
Audrey	Clark	Carlsbad	CA	Nora	Coyle	Anaheim	CA
Cher	Clarke	Beverly Hills	CA	Laura	Craun	Bakersfield	CA
Brady	Clay	Escondido	CA	Katherine	Crawford	Los Osos	CA
Curt	Clay	San Diego	CA	Holly	Crawford	Orange	CA
Robert	Clay	San Diego	CA	Phillip	Cripps	Cathedral City	CA
Michael	Clayton	Los Angeles	CA	Kurt	Cruger	Long Beach	CA
Regina	Clemente	Los Angeles	CA	Tina da	Cruz		HP14
Jim	Clough	Glendale	CA	Bernadette	Cuellar		11200
H.	Coetzee	La Canada Flintridge	CA	Susan	Cullen	Anaheim	CA
Jonathan	Coffin	Inglewood	CA	Lauren	Cummins	Placentia	CA
Bea	Cohen	Desert Hot Springs	CA	Sherrell	Cuneo	Los Angeles	CA
Joanne	Cohen	San Diego	CA	Alan	Cunningham	Carmel Valley	CA
Myrna	Cohen	Laguna Beach	CA	Bob	Cunningham	Santa Barbara	CA
Roslyn	Cohn	Van Nuys	CA	Grace	Cunningham	Camarillo	CA
Bradley	Colden	Whittier	CA	Debra	Cunningham	Carlsbad	CA
Flynn	Coleman	Los Angeles	CA	Heather	Curle	Lake Elsinore	CA
James	Collier	Burbank	CA	Clyde	Curtis	Los Angeles	CA
Geoffrey	Collins	Garden Grove	CA	Robert	Curtis	Ventura	CA
Deborah	Collodel	Malibu	CA	Michael	Curtis	San Diego	CA
Stephanie	Colshan	Santa Ana	CA	Joe	Cuviello	Solana Beach	CA
Joan	Combes	Huntington Beach	CA	Romona	Czichos	Hollister	CA
Barbara	Combs	San Diego	CA	Donna	Daane	San Diego	CA
Martin	Comerford	Thousand Oaks	CA	Joseph	Dadgari	Los Angeles	CA
Carmen	Compagno	Seaside	CA	Casey	Dake	Thousand Oaks	CA
JANINE	COMRACK	Ojai	CA	Laurie	Dalke	Laguna Beach	CA
Julia	Conklin	Pasadena	CA	Amanda	Dalonzo	South Gate	CA
Suzanne J	Conlon	San Diego	CA	Rhea	Damon	Calabasas	CA
Jean O	Connell	Santa Barbara	CA	William	Dane	Rancho Cucamonga	CA
Thomas	Conroy	Manhattan Beach	CA	Erin	Daniels	Carson	CA

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Eileen	Daniels	Canyon Country	CA	Barbara	Dincau	Ventura	CA
Avron	Daniller	Tarzana	CA	Kandace	Dingle	Taft	CA
Mac	Danzig	Los Angeles	CA	Mary	Dixon	Watsonville	CA
Jessica	Dardarian	Winnetka	CA	Joanne	Doherty	Simi Valley	CA
Michael	Darling	Frazier Park	CA	Ronna	Dolin	Studio City	CA
Lisa	Darner	San Diego	CA	Cody	Dolnick	Joshua Tree	CA
Aimee	Darrow	Venice	CA	Bonnie	Dombrowski	Pasadena	CA
Eka	Darville	Los Angeles	CA	Sharon	Domenigoni	Hemet	CA
Jeanne	Davenport	Long Beach	CA	Jennifer	Donaldson	Glendale	CA
Rita	Davenport	Lake Elsinore	CA	Audrey	Doocy	Pacific Grove	CA
Bob	Davey	Laguna Beach	CA	Michelle	Dorado	Brea	CA
Elizabeth	Davidson	Calimesa	CA	Dawna	Dorcas-Werner	Fontana	CA
Judith	Davies	Santa Monica	CA	Rob	Doucette	Playa Del Rey	CA
Carol	Davis	Los Angeles	CA	Paulette	Doulatshahi	Los Angeles	CA
Adrienne	Davis	Los Angeles	CA	Deanna	Doull	Riverside	CA
Madeline	Davis	Claremont	CA	Rick	Dow	Camarillo	CA
Patti	Davis	Santa Monica	CA	Steve	Downing	Santa Barbara	CA
Timothy	Davis	Garden Grove	CA	Wena	Dows	Culver City	CA
Jonathan	Day	Laguna Beach	CA	Mia	Dravis	Rancho Cucamonga	CA
Andres	Daza	San Pedro	CA	Tim	Dressel	San Diego	CA
Stephanie	De Los Rios	Del Mar	CA	Nancy	Dubuc	Pasadena	CA
Rayline	Dean	Ridgecrest	CA	Robert	Duckson	Hemet	CA
Lynned Eaton	Deaton	Upland	CA	Anne	Dugaw	Costa Mesa	CA
Therese	DeBing	Pacific Grove	CA	Steve	Duggan	Littlerock	CA
Katherine	Dekker	Castroville	CA	Alexander	Dunaev	Sherman Oaks	CA
Cheryl	Delvecchio	Paso Robles	CA	Terre	Dunivant	San Luis Obispo	CA
Towa	Demorst	Perris	CA	Terre	Dunivant	San Luis Obispo	CA
Angela	Dench	Glendale	CA	Julianne	Dunkley	Cambria	CA
Andrew	Deniger	Castroville	CA	Kelly	Dunn	Aliso Viejo	CA
Jack and Margarita	Denman	Fullerton	CA	Dayna	Dunne	Los Angeles	CA
Brett	Dennison	Garden Grove	CA	Nic	Duon	Santa Ana	CA
Carolyn	Dennison	Garden Grove	CA	Sarah	Dupree	Carlsbad	CA
Sean	Denny	Santa Barbara	CA	Donna	Duran	Northridge	CA
Sherry	Denton-Noonan	San Pedro	CA	Eve	Duran	Lemon Grove	CA
Wendy	Derbort	Redlands	CA	kira	durbin	Van Nuys	CA
Lauren	Derby	Santa Monica	CA	John	Dutton	Santa Barbara	CA
Richard	Desantis	Palm Desert	CA	John	Dutton	Los Angeles	CA
Antonio	Dettori	San Diego	CA	Laura	Dutton	Los Angeles	CA
Vivian	Deutsch	Calabasas	CA	Jackie	Duval	Laguna Hills	CA
Karla	Devine	Manhattan Beach	CA	Douglas	Dyakon	West Hollywood	CA
Scott	Devries	San Pedro	CA	Tonya	Dysart	San Diego	CA
Dolores	DeVries	Vista	CA	Bonnie	Earls-Solari	Port Hueneme	CA
Charles	Deweese	Monterey	CA	Jerry	Eckel	Granada Hills	CA
Mary Ann	Di Flaviano	Clovis	CA	Janet	Eckholm	Los Angeles	CA
Leigh Ann	DiCarlo	Winchester	CA	Elaine	Edell	Thousand Oaks	CA
Lori	Dick	Claremont	CA	Elizabeth	Edinger	North Hollywood	CA
Claudia	Dikinis	Santa Monica	CA	Teresa	Edmonds	Carmel Valley	CA
Tamara	Dilley	Lake Elsinore	CA	Lorrie	Edmonson	South Pasadena	CA
Patrick	Dillon	Van Nuys	CA	Jane	Edwards	La Palma	CA
Sheila	Dillon	Willmar	MN	Carole	Ehrhardt	Pebble Beach	CA
Richard	DiMatteo	San Diego	CA	Frank	Eichenberg	South Lake Tahoe	CA
				J	Eiser	Long Beach	CA
				Gregg	Eisman	Valley Center	CA

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Anaunda	Elijah	San Luis Obispo	CA	Kim	Ferlazzo	Northridge	CA
Michael	Elkins	Oceanside	CA	Aixa	Fielder	Los Angeles	CA
Virginia	Ellenson	Huntington Beach	CA	Demarcus	Fierro	Los Angeles	CA
Norm	Ellis	Laguna Hills	CA	Daphne	Figueroa	San Diego	CA
Bonnie	Elsten	Long Beach	CA	Donald	Fischer	Running Springs	CA
Maria	Emmetti	Manhattan Beach	CA	Juels	Fisher	Chino Hills	CA
Scott	Emsley	Carmel	CA	Melanie	Fisher	Calabasas	CA
Jane	Engelman	San Diego	CA	Stephen	Fitch Ph.D.	Thousand Oaks	CA
Richard	Engle	Winnetka	CA	Lissette	Fitter	San Pedro	CA
William	Engs	Highland	CA	Doug	Flack	New York	NY
Mary	Eninger	Torrance	CA	Dylan	Flather	Long Beach	CA
Walter	Erhorn	Spring Valley	CA	Daniel	Fleischman	Torrance	CA
Eric	Ericson	Pacific Palisades	CA	Tina	Florell		10000
Mack	Errea	Laguna Niguel	CA	Brian	Florian	Beverly Hills	CA
Kelle	Erwin	Long Beach	CA	Kim	Floyd	Palm Desert	CA
Vanessa	Escamilla	Los Angeles	CA	Sara	Fogan	Valencia	CA
Lucy	Escobar	Colton	CA	Joanna	Fong	Rosemead	CA
Karen	Espanol	Culver City	CA	Sibyl	Forsberg	West Hollywood	CA
Linda Aurora	Espino	San Diego	CA	Aimie	Foster	Salinas	CA
Dan	Esposito	Manhattan Beach	CA	Linda	Foster-Brooks	La Palma	CA
Nicholas	Esser	Simi Valley	CA	Ashley	Fouk	Long Beach	CA
Michael	Esten	San Diego	CA	Kathleen	Fox	Grover Beach	CA
Ruth	Estrada	National City	CA	Anne	Fragasso	Encinitas	CA
Albert	Eurs	Cypress	CA	Caroline	Fraissinet	Los Angeles	CA
Michael	Evans	Altadena	CA	Barbara	Frances	Aromas	CA
Ramona	Evans	Long Beach	CA	Suzanne	Francis	Van Nuys	CA
Susan	Evans	Sherman Oaks	CA	Rodrigo	Franco	San Diego	CA
Nancy	Everett	San Diego	CA	Karla	Frandsen	San Diego	CA
Kai	Ewert	Oak View	CA	Peter	Frank	Santa Monica	CA
John	Faber	Ontario	CA	Laurie	Franklin	North Hills	CA
D.	Fachko	Buena Park	CA	Amy	Franz	La Habra	CA
Eric	Faibish	San Diego	CA	Antoinette	Franz	Huntington Beach	CA
Judith	Falck-Madsen	Carpinteria	CA	Angela	Freberg	San Luis Obispo	CA
Roberta	Falke	Los Angeles	CA	Nancy	Freedland	Big Bear City	CA
Susan	Falkenbach	Torrance	CA	Clint	Freeland	Santa Maria	CA
Erin	Farber	Valley Village	CA	Lionel	Friedberg	Woodland Hills	CA
Fran	Farina	Carmel	CA	Sarah	Friedenberg	San Diego	CA
Gail	Farina	Los Angeles	CA	Bernard	Friedrich	Westlake Village	CA
Quinn	Farrand	Pinedale	WY	Rochelle La	Frinere	San Diego	CA
Fran	Farrell	Moreno Valley	CA	Carissa	Fritts	Pacific Grove	CA
Darius	Fattahipour	San Diego	CA	Jeff	Fromberg	Los Angeles	CA
Regina	Favarote	Pasadena	CA	Amanda	Frost	Santa Barbara	CA
Deborah	Favila	Kerman	CA	Earl	Frounfelter	Santa Maria	CA
Elissa	Faye	North Hollywood	CA	Julie	Frumkin	Bishop	CA
Joy	Fedele	Ojai	CA	Joyce	Frye	La Quinta	CA
Marla	Feierabend	Santa Barbara	CA	Luis	Fuentes	Palm Springs	CA
Dana	Feldman	Marina Del Rey	CA	Jed	Fuhrman	Topanga	CA
Drew	Feldmann	San Bernardino	CA	Kristina	Fukuda	Los Angeles	CA
Grace	Feldmann	Santa Barbara	CA	Judy	Fukunaga	Arroyo Grande	CA
Paul	Felice	Long Beach	CA	C	G	San Diego	CA
Ashley	Felix	Riverside	CA	J	G	La Mesa	CA
Virginia	Ferguson	San Diego	CA	Tamara	G	Carlsbad	CA

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W.	G.	Glendale	CA	Gary	Goetz	Pacific Grove	CA
Marnie	Gaede	La Canada Flintridge	CA	Frances	Goff	Pasadena	CA
Gary	Gall	Cambria	CA	Ruth	Gold	San Diego	CA
Lourdes	Gallegos	Hemet	CA	Susan	Goldberg	Glendale	CA
Juanita	Gama	Palm Desert	CA	g	goldfarb	Malibu	CA
Greg	Garavani	Fresno	CA	Celia	Goldman	Los Angeles	CA
Marcia	Garceau	San Diego	CA	Jill	Goldman	Toluca Lake	CA
Erin	Garcia	Tarzana	CA	Kathleen	Gonnoud	Los Angeles	CA
Bas	Garcia	Altadena	CA	Daniel	Gonzales	Lancaster	CA
Evette	Garcia	Hawaiian Gardens	CA	Tara	Gonzales	Atascadero	CA
John	Garcia	Carlsbad	CA	Bernie	Gonzales	Caruthers	CA
Isabel	Garcia	Long Beach	CA	Aida	Gonzalez	Costa Mesa	CA
Wayne	Garcia	San Diego	CA	Charysma	Gonzalez	Sierra Madre	CA
Sam	Garcia	Culver City	CA	Yazmin	Gonzalez	Bellflower	CA
Olivia	Garcia	Long Beach	CA	Cecilia	Gonzalez	Los Angeles	CA
Steven	Garcia	Los Angeles	CA	Beth	Goode	Topanga	CA
Angela	Gardner	Whittier	CA	Veronica	Goode	Porter Ranch	CA
Jan	Garen		12345	Sarah	Gooderham	Los Angeles	CA
Gary	Gargantos	Long Beach	CA	Luna	Gooding	Los Angeles	CA
		Rancho Santa		Janet	Goodwin	Los Angeles	CA
Aida	Garralda	Margarita	CA	Susan	Goran	Tarzana	CA
Lisa	Garvey	Venice	CA	Gail	Gordon	Westminster	CA
Kris	Gata	Redondo Beach	CA	Kathleen	Gordon	Vista	CA
Genevieve	Gates	Culver City	CA	Stanley	Gordon	Canoga Park	CA
Remi	Gauchet	Lake Forest	CA	Carol	Gordon	Los Angeles	CA
Angelica				Dara	Gorelick	Van Nuys	CA
Danielle	Gavino	Bakersfield	CA	Laurie	Gorman	Visalia	CA
Cecile	Geary	Laguna Niguel	CA	Lois	Gorrell	Santa Ana	CA
Terri	Gedo	Los Angeles	CA	Dan	Gotch	Pacific Grove	CA
elaine	genasci	San Luis Obispo	CA	Nancy	Gowani	Woodland Hills	CA
Jeremiah	George	Manhattan Beach	CA	Kay	Graetz	Huntington Beach	CA
Mark	Geraghty	Santa Monica	CA	Barbara	Graham	San Diego	CA
Janice	Gero	Glendale	CA	Susan	Graham	Glendale	CA
Dani	Gerz	Marina Del Rey	CA	Kyra	Graham	Costa Mesa	CA
Sandra	Geyer	Fallbrook	CA	Elizabeth	Grainger	Claremont	CA
Janine	Giaime	Valley Village	CA	Donna	Grampp	Fullerton	CA
Christina	Gibson	San Diego	CA	Fred	Granlund	North Hollywood	CA
Ron	Giddings	Los Osos	CA	Susan	Grant	Los Angeles	CA
Camille	Gilbert	Santa Barbara	CA	Marc	Grawunder		49492
Tracy	Gilbert	Rialto	CA	Lisa	Gray	Anaheim	CA
Anthony	Gilchrist	Los Angeles	CA	Sara	Graybill	New Providence	PA
Amber	Gill	Fullerton	CA	Bronwen	Grebe	Castaic	CA
Thomas	Gillespie	La Mirada	CA	Jamie	Green	Ventura	CA
Cheryl	Gillette	Carmel	CA	Stuart	Greenburg	Stevenson Ranch	CA
Ken	Gilliland	Tujunga	CA	Anne	Greene	Carmel	CA
Matt	Gilsdorf	Escondido	CA	Bill	Greene	Pismo Beach	CA
Anthony	Giordano	Ventura	CA	Evelyn	Greenwald	San Luis Obispo	CA
Perri	Glass	Los Angeles	CA	Marie	Grenu		61100
Joe	Glaston	Desert Hot Springs	CA	Don	Grierson	Los Angeles	CA
Sandra	Gleason	Hemet	CA	Melody	Grigg	Santa Maria	CA
Paula	Glez	Van Nuys	CA	David	Griggs	Carpinteria	CA
Amanda	Goad	Los Angeles	CA	Malcolm	Groome	Topanga	CA

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William	Grosh	El Centro	CA	Laurie L	Hatch	Lone Pine	CA
Ellen	Grossman	Chicago	IL	Patty	Hatcher	Buena Park	CA
Tanya	Guchi	Sherman Oaks	CA	Artineh	Havan	Burbank	CA
Mike	Guerreiro	Carlsbad	CA	Gary	Haven	Agoura Hills	CA
Paul	Gullam	Bakersfield	CA	Paula	Hawkins	San Diego	CA
Ellen	Gutfleisch	Sussex	WI	Shereen	Hawkins	Huntington Beach	CA
Perry	Gx	Tustin	CA	Suzanne	Hayano	Santa Barbara	CA
Reem	H	La Verne	CA	Sara	Hayes	Long Beach	CA
Eleonora	Haas	Hawthorne	CA	Christine	Hayes	Upland	CA
Alan	Haas		N1R	Felecia	Hays	Carlsbad	CA
Marcia C.	Hackett	Laguna Woods	CA	Julie	Hazard	Burbank	CA
Nadia	Haddad	Monterey Park	CA	Yuriko	Hazlett	Oxnard	CA
Ellen	Haden	Pacific Palisades	CA	Kathleen	Head	Murrieta	CA
Brenda	Haig	Long Beach	CA	Kris	Head	Garden Grove	CA
Barbara	Haire	Mira Loma	CA	Paulette	Heath	Los Angeles	CA
Teni	Hakopian	Glendale	CA	Nancy	Heck	Santa Maria	CA
Madison	Hales	Riverside	CA	Ken	Hedges	Lemon Grove	CA
Chris	Hall	Los Angeles	CA	Christine	Hein	Huntington Beach	CA
Holly	Hall	Temecula	CA	Janet	Heinle	Santa Monica	CA
Stacy	Hall	San Diego	CA	Bridgett	Heinly	San Diego	CA
Maryann	Haller	Escondido	CA	Susan	Heisler	Patton	CA
Cathy	Halley	Oak View	CA	Ciara	Helland	San Luis Obispo	CA
Ellen A	Hamilton	Goleta	CA	Bonnie	Hemauer	Santa Monica	CA
Frederick	Hamilton	Rancho Cucamonga	CA	Carol	Hemingway	Santa Barbara	CA
Denise	Hamilton	Altadena	CA	Marilyn	Hempel	Yucaipa	CA
Khai	Hang	Baldwin Park	CA	Michael	Henderson	Huntington Beach	CA
Susan	Hanger	Topanga	CA	Kelly	Hendricks	Temecula	CA
Steve	Hanlon	Los Angeles	CA	Grace	Hengst	Los Angeles	CA
Caren	Hanson	Sun City	CA	Bryan	Hennes	Simi Valley	CA
Constance	Hanson	South Pasadena	CA	Matthew	Hennes	San Jose	CA
Kathryn	Hanson	Huntington Beach	CA	Debbie	Hennessey	Culver City	CA
Nalani	Ha'o	Long Beach	CA	Kevin	Henry	Carmel	CA
Joseph	Hardin	Santa Monica	CA	Kathlene	Henry-Gorman	Cambria	CA
Jana	Harker	Arcadia	CA	Christina	Heon	Arroyo Grande	CA
Karlen	Harmison	San Clemente	CA	Ian	Heptinstall	Huntington Beach	CA
Lori	Harmon	Van Nuys	CA	Teri	Herbst	Torrance	CA
Kate	Harper	Irvine	CA	Amber	Heredia	Ladera Ranch	CA
Barbara	Harper	Castroville	CA	Micki	Hergenreder	Trabuco Canyon	CA
Beverly	Harris	Beverly Hills	CA	Nicholas	Hermosillo	Highland	CA
Dwain	Harris	Westminster	CA	Crystal	Hernandez	Cypress	CA
Freya	Harris	Atlanta	GA	Chris	Hernandez	Sun Valley	CA
Jennie	Harris	Los Angeles	CA	Thomas	Hernandez	Corona	CA
Lois	Harris	Claremont	CA	Paula	Hernandez	Long Beach	CA
William	Harris	Los Angeles	CA	Joan	Hernandez	Lemon Grove	CA
Mary Elise	Harris	Fallbrook	CA	Steven	Hernandez	Long Beach	CA
Dorothea	Hartley	Oak View	CA	Teddi	Hernandez	Hanford	CA
Lauri	Hartman	Camarillo	CA	Marisa	Herrera	Chula Vista	CA
Randall	Hartman	San Clemente	CA	Magge	Herrera	Valley Center	CA
Gayle	Harvey	Morro Bay	CA	Sandra	Herrera	Parlier	CA
Anne	Harvey	San Diego	CA	Tasya	Herskovits	Joshua Tree	CA
Bill	Haskins	Sacramento	CA	Jennifer	Herstein	Altadena	CA
Karen	Hastings	Santa Barbara	CA	Brian	Herzog	Altadena	CA

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Diane	Hesford	Fresno	CA	Robert	Husbands	San Diego	CA
Rilla	Heslin	La Mesa	CA	Steven	Huskey	Los Angeles	CA
William	Heuser	Arcadia	CA	Judi	Hutchinson	Malibu	CA
William	Hewes	Simi Valley	CA	Stephen	Hutchinson	Glendale	CA
John	Hewett	Playa Del Rey	CA	Graciela	Huth	Los Angeles	CA
Carol	Hewitt	Signal Hill	CA	Theresa	Hvassman	Monterey	CA
Percy	Hicks-Severn	Newbury Park	CA	Barbara	Ige	Los Angeles	CA
Richard	Hieber		87700	Maryan	Infield	Los Angeles	CA
Karen	Higgins	Arcadia	CA	LouAnne	Insprucker	La Canada Flintridge	CA
Susi	Higgins	Glendale	CA	Lynne	Irvine	Pacific Palisades	CA
Eleanor	High	Ventura	CA	Freyda	Isaacs		M2M
Andrea	Hilario	La Puente	CA	Jodi	Isaacs	San Luis Obispo	CA
Deborah	Hill	Los Angeles	CA	Elizabeth	Jache	Lemon Grove	CA
Sue	Hill	Valley Center	CA	Maryanne	Jackson	El Cajon	CA
Tangerine	Hill	Lomita	CA	Suzanne	Jacobs	Woodland Hills	CA
Brien	Hindman	Montrose	CA	Lisa	Jaime	Los Angeles	CA
Stephanie	Hines	Dana Point	CA	Kathy	Jakary	Laguna Niguel	CA
Eugene	Hinton	Porterville	CA	Kim	James	Lake Arrowhead	CA
Glenn	Hiramatsu	Santa Maria	CA	Jennifer-Lynn	Jankesh	Santa Monica	CA
Lynn	Hoang	Fullerton	CA	Cynthia	Jansen	Orange	CA
Eva	Hofberg	Anaheim	CA	Audrey	Jansen	Redlands	CA
Colleen	Hoff	Bayfield	CO	Susan Alcott	Jardine	Sherman Oaks	CA
Florence	Hoffert	El Segundo	CA	Bert	Jarnagin	Lone Pine	CA
Maren	Hoflund	Vista	CA	C.K. Nuetzie	Jasiorkowski	Goleta	CA
Michael	Hogan	Del Mar	CA	Lisa	Jasso	Beaumont	CA
Lisa	Hoivik	Monterey	CA	Julien	Jegou	Irvine	CA
Elaine	Holder	San Luis Obispo	CA	Laurie	Jensen	La Jolla	CA
roger	hollander	Tarzana	CA	Sisse	Jensen	Beverly Hills	CA
Paula	Hollie	Laguna Woods	CA	Lee	Jesmain	Twentynine Palms	CA
Corinne	Hollings	Bonita	CA	Darynne	Jessler	Valley Village	CA
Chris Van	Hook	Pacific Palisades	CA	S	Jitreun	Ann Arbor	MI
Melissa	Hoover	San Bernardino	CA	Ann	Johnson	Yorba Linda	CA
Kathy	Hopkins	San Bernardino	CA	Beverly	Johnson	Hesperia	CA
Laura	Horning	Westlake	OH	Chad	Johnson	Los Angeles	CA
Carolyn	Horowitz	West Covina	CA	Erica	Johnson	Gardena	CA
Cleda	Houmes	Salinas	CA	Jane	Johnson	Los Osos	CA
Roseanne	Hovey	San Diego	CA	Matthew	Johnson	Anaheim	CA
Susan	Howe	Oceano	CA	Katherine	Johnson	Santa Barbara	CA
Linda	Howie	Valencia	CA	Christine	Johnson	Indio	CA
Katherine	Hoyt	Chula Vista	CA	Mara	Johnson	Santa Clarita	CA
george	hrouda	Moreno Valley	CA	Reid	Johnson	Los Angeles	CA
Bess	Hsieh	San Diego	CA	Robert	Johnson	El Segundo	CA
Gail	Hubbs	Newbury Park	CA	Shawn	Johnson	Encinitas	CA
Vicki	Hughes	Huntington Beach	CA	Evelyn	Johnson-Todd	Fresno	CA
Tamara	Hulsey	El Cajon	CA	Jessica	Johnston	Los Angeles	CA
Erica	Hummel	Huntington Beach	CA	Michael A.	Johnston	San Diego	CA
Paul	Hunrichs	Santee	CA	Amelia	Jones	Santa Monica	CA
Peggy	Hunsaker	San Marcos	CA	Roslyn	Jones	Riverside	CA
Linda	Hunt	Pasadena	CA	Gary	Jones	San Marino	CA
Star	Hunt	Goleta	CA	Jeffrey	Jones	Sherman Oaks	CA
Catherine	Hunter	La Crescenta	CA	Martha	Jones	Santa Clarita	CA
Laura	Hunter	Escondido	CA	S	Jones	Costa Mesa	CA

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Stanleigh	Jones	Claremont	CA	Brian	Kessler	Sherman Oaks	CA
Truman	Jones	Big Sur	CA	Ted	Key	Cambria	CA
Laura	Jones-Bedel	San Diego	CA	Ruth	Keyser	Ramona	CA
Cea	Jordan	Los Angeles	CA	Mha Atma S	Khalsa	Los Angeles	CA
John	Jordan	Fresno	CA	Simran	Khalsa	Los Angeles	CA
Alena	Jorgensen	Temple City	CA	Maryann	Khan	Oceanside	CA
Anna	Jozefowicz	Santa Ana	CA	Sareepark	Khumurai	Los Angeles	CA
Scott	Jung	South Pasadena	CA	Mary Ann	Kiger	Anza	CA
Philip	Jupp	Little Falls	NY	Jim	Kilby	Escondido	CA
Stacy	K	Bakersfield	CA	Catherine	Kimbrough	Mission Viejo	CA
Rose	Kabir	Mira Loma	CA	Perri	Kimono	Los Angeles	CA
Vinay	Kadambi	Santa Ana	CA	Janis	King	Reno	NV
Holly Ann	Kaiakapu	Seaside	CA	Nancy	Kingston	Mission Viejo	CA
Sarah	Kalinay	Bakersfield	CA	Brian	Kirk	Orange	CA
Cindy	Kamler	Bishop	CA	Sue	Kirk	San Diego	CA
Celine	Kan	Diamond Bar	CA	Tracey	Kirsten	El Segundo	CA
Lindsay	Kanani	Costa Mesa	CA	Zoltan	Kiss	Tarzana	CA
Cat	Kane	San Juan Capistrano	CA	Jo Ann	Kiva	Pasadena	CA
Philip	Kane	Norco	CA	Larry	Klaasen	San Diego	CA
Rose	Kanno	Los Angeles	CA	Joel	Klayman	Huntington Beach	CA
Fredrica	Kanter	Riverside	CA	Daryl	Klein	San Clemente	CA
Steven	Kapchinske	San Diego	CA	Joanne	Klein	Bakersfield	CA
Alexa	Kaplan	San Diego	CA	Linda	Klein	El Segundo	CA
Chono	Kapono	Santa Monica	CA	Leslie	Klein	Los Angeles	CA
Ann-Kristin	Karling	Van Nuys	CA	Shirley	Klein	San Diego	CA
Raquel	Karno	Pala	CA	Diana	Kliche	Long Beach	CA
Chuck	Karp	Palm Desert	CA	George F.	Klipfel II	Cathedral City	CA
Sandy	Kasper	Hemet	CA	Harry	Knapp	Riverside	CA
Lise	Kastigar	Laguna Niguel	CA	Brianna	Knickerbocker	Reseda	CA
Eli	Kat	Rialto	CA	Brooke	Knight	Ventura	CA
Gary	Katona	Los Osos	CA	Tony	Knight	Studio City	CA
Pucznik	Katz	Los Angeles	CA	Pamela	Knoll	Los Angeles	CA
Sara	Katz	Manhattan Beach	CA	Cybele	Knowles	Tucson	AZ
Kathryn	Kawecki	Rancho Cucamonga	CA	Mayumi	Knox	San Marino	CA
Josh	Kaye-Carr	Ventura	CA	Anne	Kobayashi	San Diego	CA
Lori	Kegler	San Pedro	CA	Francisco	Koch	North Hills	CA
Jaemi	Kehoe	Norwalk	CA	Patti	Koger	Cardiff By The Sea	CA
Rachel	Kelley	Santa Monica	CA	Joyce	Kolasa	Springville	CA
Bev	Kelly	Long Beach	CA	Robert	Kolesnik	Upland	CA
Leslie	Kelly	Chula Vista	CA	Raleigh Koritz	Koritz	Minneapolis	MN
Joanna	Kelly	Studio City	CA	Kathy	Kosinski	Goleta	CA
Teri	Kelly	San Marcos	CA	Linda	Kourtis	San Diego	CA
Lisa Ann	Kelly Family	Santa Barbara	CA	Yvonne	Kouza	Bonita	CA
Jennifer	Kelsey	Los Angeles	CA	Betty	Kowall	Penngrove	CA
Angelika	Kempter		72770	Joshua	Krasnoff	Oak View	CA
Eden	Kennan	Van Nuys	CA	Cathy	Kraus	North Hollywood	CA
Joyce Lain	Kennedy	Encinitas	CA	Annica	Kreuter	Joshua Tree	CA
Kate	Kenner	Brattleboro	VT	Ulrich	Krieger	Acton	CA
Jean	Kennerson	Yucaipa	CA	Kathleen	Kuczynski	Lake Forest	CA
John	Kerby	Fontana	CA	Peter	Kuhn	San Diego	CA
Madeleine				Rosemarie	Kuhn	Fresno	CA
Fisher	Kern	Los Angeles	CA	Julie	Kummel	Santa Barbara	CA

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Giar-Ann	Kung	Alhambra	CA	Clara	Levy	Los Angeles	CA
Jamie	Kurnik	San Clemente	CA	Ellen	Levy	Altadena	CA
Celia	Kutcher	Capistrano Beach	CA	Cynthia	Lewis	Templeton	CA
Delfin	Labao	San Diego	CA	O	Lewis	Los Angeles	CA
Georgia	Labey	Indio	CA	Polly	Lewis	Frazier Park	CA
Ligia	Laffitte	Pismo Beach	CA	Susanna	Liberty	Pasadena	CA
Carly	Lake	Costa Mesa	CA	Debra	Lichstein	Agoura Hills	CA
Caitlin	Lamb	Studio City	CA	Suzanne	Licht	San Pedro	CA
Jerome	Lambert	La Jolla	CA	Kortney	Lillestrand	Laguna Beach	CA
Robin	Lande	Los Angeles	CA	Susan	Lilly	Berkeley	CA
Dennis	Landi	Long Beach	CA	Susan	Lindberg	San Diego	CA
Sarah	Lane	Pebble Beach	CA	Emily	Lindsey	Los Angeles	CA
Kathryn	Lanning	Visalia	CA	Ruth	Litton	South Yarmouth	MA
Gavin	Lantry	Escondido	CA	Elaine	Livesey-Fassel	Los Angeles	CA
Paul	Lapidus	Aromas	CA	Debbie	Llewellyn	San Diego	CA
Kenneth	Lapointe	Los Angeles	CA	Colleen	Lobel	San Diego	CA
Venetia	Large	Altadena	CA	Robert	Loebl	Coronado	CA
Nicole	Larson	San Diego	CA	Frances	Logan	San Diego	CA
Bethany	Lasala	San Diego	CA	Wendy	Lohman	Los Angeles	CA
Clincy	Latimer	Los Angeles	CA	Larisa	Long	Woodstock	IL
Kristin	Laughtin-Dunker	Santa Ana	CA	Mary Lou	Long	Studio City	CA
Janet	Laur	Chatsworth	CA	Ernie	Looney	Santa Clarita	CA
Aaron	Lavine	Los Angeles	CA	Irene	Lopez	San Diego	CA
Timothy	Lawnicki	Long Beach	CA	Andrea	Lopez	Fallbrook	CA
Marisa	Lawson	Yorba Linda	CA	Stacey	Lopez	Yucaipa	CA
Andrea	Lazar	Sherman Oaks	CA	Iliana	Lopez	Glendora	CA
Yolanda	Leaird	Los Angeles	CA	Juan	Lora	Los Angeles	CA
Jan	Leath	Glendale	CA	Judith	Lotz	Burbank	CA
chuck	leavell	Anaheim	CA	Patty	Lotz	Santa Monica	CA
Timothy	Ledford	Fresno	CA	Lawrence	Lovell	South Pasadena	CA
Barbara	Lee	Orange	CA	Patricia	Loverme	South Pasadena	CA
Richard	Lee	Salinas	CA	Jacklyn	Lowe	San Diego	CA
Sheryl	Lee	Topanga	CA	Margot	Lowe	Oceanside	CA
Susie	Lee	La Habra	CA	Donita	Lowrey	Paris	TX
Claudia	Lee	Pasadena	CA	Bettina	Luboff	Los Angeles	CA
Dennis	Lees	Encinitas	CA	John	Lucas	Los Osos	CA
Teresa	Lees	Cambria	CA	Rosa	Lucas	Palm Desert	CA
Sierra	Leffers	Costa Mesa	CA	Marsha	Lucero	Nipomo	CA
Jonathan	Lehrer-Graiwer	Los Angeles	CA	George	Ludwig	Oceanside	CA
Mindy	Leighton-Toth	Los Angeles	CA	Don	Lukenbill	Sherman Oaks	CA
Anne	Lemay	Los Angeles	CA	Rose	Luna	Huntington Beach	CA
Amy	Lentine	Buena Park	CA	Kimberly	Lundy	Thousand Oaks	CA
C	Leonard	San Bernardino	CA	Andy	Lupenko	Lemon Grove	CA
Cody	LePow	Ojai	CA	Judith	Luscalzo	Long Beach	CA
Bob	Leppo	Pismo Beach	CA	Jennifer	Lutje	Spring Valley	CA
Jim	Leske	North Hollywood	CA	Robyn	Lutsky	Tarzana	CA
Michelle	Lesmond		2000	Andrea	Lux	Fullerton	CA
Tamara	Lesser	Agoura Hills	CA	Dennis	Lyday	Los Angeles	CA
Rob	Leverson	Castaic	CA	Heidi	Lynn	Spring Valley	CA
Aaron	Levine	San Diego	CA	Barbara	Lyon	Goleta	CA
Judy	Levitt	Los Angeles	CA	C	M	Arcadia	CA
Lacey	Levitt	San Diego	CA	Jessie	MacLeod	Ventura	CA

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Cecilia	Macy	Long Beach	CA	Lisa	Mazzola	Tampa	FL
Candris	Madison	Los Angeles	CA	Kevin W.	McAlister	Bellmore	NY
Mike	Madrigal	Santa Clarita	CA	Mary	McAuliffe	Los Angeles	CA
Mary Ann	Mahaffie	Torrance	CA	Sheryl	McCabe	Long Beach	CA
David	Maher	Los Angeles	CA	Ellen	McCann	Escondido	CA
David	Maillet	Van Nuys	CA	Wendy	McCarthy	Santa Ana	CA
Dineo	Maine	Chula Vista	CA	Patricia	McCauley	Anaheim	CA
Eugene	Majerowicz	Los Angeles	CA	Karen	McCaw	Los Angeles	CA
Janet	Maker	Los Angeles	CA	Roger And Judy	McClure	Canyon Country	CA
Veronica	Maldonado	Los Angeles	CA	Dorothy	McCollom	Huntington Beach	CA
Ariana	Malik	Playa Del Rey	CA	Debbie	McCormick	Tustin	CA
Arlene	Malkin	Beaumont	CA	Douglas	McCormick	Trabuco Canyon	CA
Sonja	Malmuth	Santa Ynez	CA	Dan	McCoy	Carlsbad	CA
Rose	Maly	Los Angeles	CA	Maria	McCutchan	La Jolla	CA
Patrick	Manalio	Westlake Village	CA	Haley	McDonald	North Hollywood	CA
Lisa	Mandarino	Santa Monica	CA	Maureen	McDonald	Los Angeles	CA
Kathryn	Manis	Riverside	CA	Pamela	McDonald	Riverside	CA
Garrett	Mann	San Diego	CA	Peter	McDonald	Fresno	CA
Judy	Mann	Santa Barbara	CA	Tracy	mcdonald	Glendale	CA
Helen	Manning-Brown	Atascadero	CA	Stacey	McDonald	Westlake Village	CA
Eva	Manus	Laguna Niguel	CA	Taylor	McDonald	North Hollywood	CA
Curtis	Marantz	Riverside	CA	Robert	Mcdonnell	Aliso Viejo	CA
Kirk	Margo	North Hollywood	CA	Doreen	McElvany	Indian Wells	CA
Laura	Marinelli	Los Angeles	CA	Duncan	McFarland	Encinitas	CA
Samantha-Jane	Markevich	Marina Del Rey	CA	Carolita	McGee	Carlsbad	CA
Shawnda	Marmorstein	Los Olivos	CA	Bruce	McGraw	San Diego	CA
Frances	Marsh	Santa Barbara	CA	Jane	McGraw	San Bernardino	CA
Rhys	Marsh	Los Angeles	CA	Colleen	McHugh	San Diego	CA
Sherry	Marsh	Oceanside	CA	Marsha	McIntosh	Stanton	CA
Dorrine	Marshall	Irvine	CA	Brenda	McIntyre	Laguna Niguel	CA
Staci	Martin	Carlsbad	CA	Tawny	McLellan	Ojai	CA
Joanna	Martin	Mission Viejo	CA	Michael	McMahan	Huntington Beach	CA
Julie	Martin	Frederic	WI	Gail	McMullen	Los Angeles	CA
Dick	Martin	Hesperia	CA	Jerry	McMurry	Lakeside	CA
John	Martinez	Lomita	CA	Anita	McMurtrey	Hanford	CA
c.	martinez	San Diego	CA	Nick	McNaughton	Los Angeles	CA
Ray	Martinez	Covina	CA	Susan	McNulty	Downey	CA
Gabriela	Martinez	North Hollywood	CA	Tom	McVay	Ladera Ranch	CA
Ann	Martini	Culver City	CA	Joan	Mead	Los Angeles	CA
Jaime	Marx	Pasadena	CA	Janet	Means	Laguna Woods	CA
Kris	Mashburn	Ojai	CA	Sherry	Meddick	Silverado	CA
Francesco	Masiello	Long Beach	CA	Ulrike	Mehler	Culver City	CA
Mary M.	Mason	Huntington Beach	CA	Adil	Mehta	Chatsworth	CA
Katherine	Massey	San Marcos	CA	Robert	Meier	Los Angeles	CA
Ann Gould	Massoubre	Los Osos	CA	Maeve	Meighan	Studio City	CA
Beth	Mather	San Diego	CA	Lily	Mejia	Hemet	CA
Dan	Matthews	Valley Center	CA	Russell	Melching	Pasadena	CA
Tamara	Matz	Los Angeles	CA	Carlos	Melgar	San Diego	CA
Casee	Maxfield	Los Angeles	CA	Marc	Melinkoff	Woodland Hills	CA
Geraldine	May	Creston	CA	Gilberto	Mello	Los Angeles	CA
Francoisel	May	Palm Springs	CA	Marissa	Mendoza	Hacienda Heights	CA
Joseph	Mayer	San Diego	CA	Jennifer	Mercede	Van Nuys	CA

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Beth	Merrill	Newbury Park	CA	Jim	Moseman	San Diego	CA
Jibralta	Merrill	Valley Village	CA	hen ryjj	moser	Laguna Woods	CA
Lesley	Meyer	Los Angeles	CA	Rich	Moser	Santa Barbara	CA
Twyla	Meyer	Pomona	CA	Jill	Mulato	Dana Point	CA
Donna	Meyers	Lancaster	CA	James	Mulcare	Clarkston	WA
Yolande	Michaels	Topanga	CA	Teresa	Mullins	Santa Barbara	CA
Sue	Michelson	Studio City	CA	Ken	Mundy	Los Angeles	CA
Gary	Milano	Bishop	CA	Erica	Munn	Los Angeles	CA
Ljiljana	Milic		11000	Amy	Munnelly	Irvine	CA
Brad	Miller	Santa Barbara	CA	Brigid	Murphy	Chino	CA
Jerrilyn	Miller	Valley Village	CA	J	Murphy	San Diego	CA
Kellie	Miller	Santa Ana	CA	Tim	Murphy	North Hollywood	CA
Kelly	Miller	San Diego	CA	barbara	Murray	Los Angeles	CA
Rachelle	Miller	Fullerton	CA	Joan	Murray	Los Angeles	CA
Gary	Miller	Laguna Niguel	CA	KATHRYN	MYERS	Paso Robles	CA
Victoria	Miller	Encino	CA	Gina	Nanarjain		1078JN
John	Miller	Newport Beach	CA	Jerry	Napombhejara	Irvine	CA
Aileen	Milliman	Long Beach	CA	Matthew	Nasser	Los Angeles	CA
Christina	Mills	Needles	CA	Loretta	Nathan	Los Angeles	CA
Randy	Mills	Culver City	CA	Julie	Naumann	Redondo Beach	CA
Janelle	Milner	San Diego	CA	Lezlie	Navarro	Wildomar	CA
Jill	Miotke	Costa Mesa	CA	Matilde	Navarro	Garden Grove	CA
Amalia	Miranda	San Juan Capistrano	CA	NANCY	NEELY	Rancho Cucamonga	CA
Deedee	Mirmak	Yorba Linda	CA	Stephanie	Neira	Ontario	CA
Keary	Missler	Monterey	CA	Brad	Nelson	Oxnard	CA
Michal	Mitchell	Ojai	CA	Julie	Nelson	North Hollywood	CA
Robert	Mize	Inyokern	CA	Pamela	Nelson	Warner Springs	CA
Negar	Modgeddi	Los Angeles	CA	Brennan	Nerhus	Long Beach	CA
Lea	Mohr	Wildomar	CA	Lisa	Neste	High Point	NC
Irene	Molina	Seeley	CA	Steven	Netkin	Sun City	CA
Anneliese	Monnes	Monterey	CA	Christa	Neuber	West Hollywood	CA
Myrian	Monnet	Pasadena	CA	Karen	Neubert	Los Angeles	CA
Jeanette	Monroe	Aliso Viejo	CA	Alice	Neuhauser	Manhattan Beach	CA
Dana	Monroe	San Diego	CA	Therese	Neustaedter	Hermosa Beach	CA
Alida	Montanez-Salas	Norwalk	CA	Sandra	Neveras	Watsonville	CA
Peter	Monteforte	Pacific Grove	CA	Laura	Newton	Cathedral City	CA
Thea	Montella	Pebble Beach	CA	Christine	Ney	Anaheim	CA
Carol	Montgomery	Glendale	CA	Anna	Nichols	Redondo Beach	CA
	Moore-MS-			Kim	Nicholson	Valley Village	CA
Nadia	UCDavis	San Diego	CA	Christina	Nillo	West Hollywood	CA
Karla	Morales	North Hollywood	CA	Lena	Nilsson	Laguna Beach	CA
		Rancho Palos		Greg	Nishihira	Oceanside	CA
Rosy	Morales	Verdes	CA	Stacy	Nisperos	Fullerton	CA
Jennifer	Moramarco	Temecula	CA	Barbara	Nogal	San Diego	CA
Dan	Morgan	Rosamond	CA	Michale	Noll	Valley Village	CA
Reyko	Mori	Glendale	CA	David	Nolterieke	Aliso Viejo	CA
Amber	Morris	San Diego	CA	James	Noordyk	San Diego	CA
Tiffany-Marie	Morrison	Winnetka	CA	Shaun	Norris	Oxnard	CA
Keir	Morse	Claremont	CA	Ellen	North	Laguna Niguel	CA
Jeffery	Morton	Marina	CA	Deena	Novak	Los Angeles	CA
Karen	Morton	Joshua Tree	CA	Jean	Nunamaker	Santee	CA
Lance	Moseley	Marina Del Rey	CA	stephanie	nunez	Van Nuys	CA

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Zero	Nunez	Van Nuys	CA	Dr R	Parkes	Encinitas	CA
Annabelle	Nye	West Hills	CA	Anthony	Parr	Altadena	CA
Tarin	O'Brien	Palm Springs	CA	Caryl	Parrish	Carlsbad	CA
Cynthia	Obyrne	Lompoc	CA	Elizabeth	Parro	Huntington Beach	CA
Melissa	Ochoa	Los Angeles	CA	Ronald	Partridge	Simi Valley	CA
Dan	OConnor	Arroyo Grande	CA	Anne	Parzick	Corona Del Mar	CA
Edward	O'Connor	Kansas City	MO	JOHN	PASQUA	Escondido	CA
Mark	ODell	Sierra Madre	CA	Dixie	Patterson	Morro Bay	CA
Gregg	Oelker	Altadena	CA	Mark	Pattullo	Los Angeles	CA
Edith	Ogella	Santa Barbara	CA	Lori	Paul	Altadena	CA
Alice	Okeefe	Anaheim	CA	Brenna	Pavey	Los Angeles	CA
Sean	O'Keefe	Los Angeles	CA	Vivian	Peacock	Hollister	CA
Sofia	Okolowicz	Temecula	CA	Evelin	Pekin	San Dimas	CA
Nancy	Oliver	Valencia	CA	Dione	Peniche	Tarzana	CA
Nora	Oliver	La Canada Flintridge	CA	Paula	Pepin	San Clemente	CA
Jeffery	Olson	Vista	CA	Leah	Perales	Wildomar	CA
Allen	Olson	Minneapolis	MN	Giana	Peranio-Paz	Hendersonville	NC
Amanda	Olson	San Diego	CA	Richard	Perez	Torrance	CA
Krister	Olsson	Los Angeles	CA	Cristina	Perez	Playa Vista	CA
Jennifer	Olvera	Aliso Viejo	CA	Leticia	Perez	Chino Hills	CA
Cathy	O'Neill	Santa Monica	CA	Holly	Perez	Chula Vista	CA
Tammy	O'Neill	Los Angeles	CA	Yecenia	Perez	Marina	CA
Frances	Onesti	Lawndale	CA	Greg	Perkins	Long Beach	CA
Deanna	Onozuka	San Luis Obispo	CA	Anne	Perkins	Santa Monica	CA
Lynn	Orabona	Claremont	CA	Susan	Perry	Cambria	CA
Paula	Orbaugh	Carlsbad	CA	Allen And			
Gerald	Orcholski	Pasadena	CA	Karen	Perry	Yucca Valley	CA
Patricia	O'Reilly	La Mesa	CA	Makiko	Peters	Huntington Beach	CA
Angel	Orona	Alhambra	CA	Staci	Peters	San Diego	CA
Rosie	Orozco	Baldwin Park	CA	Garrine	Petersen	Sun Valley	CA
Gina	Ortiz	Claremont	CA	John	Peterson	Temecula	CA
Kathryn	Osborn	La Mesa	CA	David	Peterson	San Diego	CA
Rita	Ospelt	Vista	CA	Rachel	Peterson	La Jolla	CA
Hillary	Ostrow	Encino	CA	Todd	Peterson	Anaheim	CA
Gina	Otos	Torrance	CA	Denis	Petitt	Burbank	CA
Annie	P	San Diego	CA	Sue	Petteway	Los Angeles	CA
S	P	Del Mar	CA	Carolyn	Pettis	Santa Clarita	CA
S	P	Chatsworth	CA	Jamaka	Petzak	Glendale	CA
Michele	Pacheco	Upland	CA	Victoria	Peyser	Newark	DE
Pat	Padilla	Porterville	CA	John	Pham	Encinitas	CA
Matthew	Page	Ventura	CA	Tanya	Phillips	Pasadena	CA
Trisha	Pahmeier	Vista	CA	Andrew	Philpot	Solvang	CA
John	Palafoutas	Los Angeles	CA	Steven	Pickering	Pasadena	CA
Beatriz	Pallanes	Santa Ana	CA	Susan	Pierszalowski	Pacific Grove	CA
allie	palmer	San Clemente	CA	Lisa	Piner	Costa Mesa	CA
Heidi	Palmer	Rancho Cucamonga	CA	Anna	Pinto	Bakersfield	CA
Aydee	Palomino	La Quinta	CA	Tina	Pirazzi	Long Beach	CA
Sandra	Pankow	San Diego	CA	Danielle	Pirotte		4120
Robert	Pann	Los Angeles	CA	Barbara	Piszczek	Oxnard	CA
Heidi	Paris	Chula Vista	CA	Trisha	Pitsch	Van Nuys	CA
Ruth	Park	Palm Desert	CA	Marcella	Plant	San Diego	CA
Jennifer	Parker	Los Angeles	CA	Raymond	Plasse	West Hills	CA

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Mary F	Platter-Rieger	San Diego	CA	paulo	reeson	Pasadena	MD
Marie	Pleasant	San Diego	CA	Natasha	Reeves	Monrovia	CA
Pam	Plummer	Long Beach	CA	Sheri	Reeves	North Hollywood	CA
Allen	Pluth	Spring Valley	CA	Geoff	Regalado	Burbank	CA
Barbara	Poland	La Crescenta	CA	Fawn	Regan	Baker	CA
Tony	Policelli	Beverly Hills	CA	Alvaro de	Regil	Moorpark	CA
Docken	Polk	Woodland Hills	CA	Karen	Reibstein	San Diego	CA
Alan	Pollack	Woodland Hills	CA	Carol	Reiche	Santa Barbara	CA
Jeannie	Pollak	Oxnard	CA	Regina	Reinhardt	San Diego	CA
Diana	Polsky	Long Beach	CA	Robin	Reinhart	San Diego	CA
Michaela	Pond	Corona Del Mar	CA	Jennifer	Reinish	Santa Barbara	CA
Donnal	Poppe	Northridge	CA	Stephanie	Reis	Los Angeles	CA
Jessica Jean	Posner	Palmdale	CA	Nicholas	Remelman	Panorama City	CA
Rick	Posten	Los Angeles	CA	Edwyna	Rennie	Alhambra	CA
Janice	Powell	Goleta	CA	Kristen	Renton	Valencia	CA
Linda	Premo	Oceanside	CA	Cynthia	Replogle	Oceano	CA
Louise	Priest	Santa Paula	CA	Lisa	Reutzel	Lompoc	CA
Meredith	Priestley	Solana Beach	CA	James	Reynolds	Sunland	CA
Rosalie	Prieto	Bakersfield	CA	Lloyd	Reynolds	Fountain Valley	CA
Fiona	Priskich	Beverly Hills	CA	Janet	Rhodes	Cathedral City	CA
Penelope	Prochazka	Simi Valley	CA	Robert	Ricewasser	Monrovia	CA
Corey	Prost	Santa Monica	CA	Jacob	Richards	Carlsbad	CA
Mary	Proteau	Los Angeles	CA	Bob	Richardson	Huntington Beach	CA
Felena	Puentes	Bakersfield	CA	Heather	Rider	Los Angeles	CA
Evelina	Pulleva	San Diego	CA	Carol	Rigrod	Encino	CA
Judi	Putnam	Ramona	CA	D.	Rincon	Fresno	CA
Linda	Pydeski	Placentia	CA	James	Ring	Cathedral City	CA
		Rancho Santa		Alisa	Risso	Ladera Ranch	CA
Franklin	Quan	Margarita	CA	Rev. Maria	Riter Wilson	San Dimas	CA
Patricia	Quimby	Los Angeles	CA	Mario	Rivas	Sherman Oaks	CA
Hilary	Quinn	Goleta	CA	Brittany	Rivera	Los Angeles	CA
V	R	Los Angeles	CA	Katrina	Rivers	Lancaster	CA
Kendra	Rachels	Camarillo	CA	Tania	Roa	La Mirada	CA
Andy	Ramirez	Santa Ana	CA	Rob	Roberto	Santee	CA
Jessica	Ramirez	Los Angeles	CA	Les	Roberts	Fresno	CA
Melodie	Rammer	Carmel By The Sea	CA	Gail	Roberts	Tecate	CA
Paul	Ramos	Santa Ynez	CA	Jacquelyn	Roberts	Tehachapi	CA
Phillip	Randall	Woodland Hills	CA	Laura	Robinson	Irvine	CA
LOUISE	RANGEL	Santa Paula	CA	Nancy	Robinson	Ridgecrest	CA
Rosemary	Rannes	Salem	NH	Rima	Robinson	Santa Barbara	CA
Joan	Raphael	San Diego	CA	Jim	Robinson	Morro Bay	CA
Stephen	Rasmussen	Dana Point	CA	Chuck	Rocco	Simi Valley	CA
Elaine	Rathbun	San Luis Obispo	CA	Candace	Rocha	Los Angeles	CA
Robert	Rauh	Hesperia	CA	Katie	Rock	El Cajon	CA
Suzanne	Rawlings	San Diego	CA	Terrell	Rodefer	Van Nuys	CA
Joseph	Razo	Camarillo	CA	John	Rodrigues	Lakeside	CA
Mark	Reback	Los Angeles	CA	Levinson	Rodriguez	Mission Hills	CA
Ronald	Rediger	Newhall	CA	Rachel	Rodriguez	Pasadena	CA
Gordon	Reed	Newport Beach	CA	Erin	Roedeinger	San Diego	CA
Christy	Reed	Fillmore	CA	Pam Rogers	Rogers	Bellflower	CA
Stefany	Reed	La Mesa	CA	jeanne	rogers	Estero	FL
Gary	Reese	San Clemente	CA	stephanie	rohmer	Pasadena	MD

First Middle	Last	City	State	First Middle	Last	City	State
Tisa	Roland	Salinas	CA	Bruce	Saltzer	Glendale	CA
Sharon	Rollins	Bellflower	CA	Warren	Samuels	Aromas	CA
Marjorie	Roman	Newport Beach	CA	Sue	Sands	Malibu	CA
Mary	Romanek	Santa Monica	CA	Ken	Sanford	Escondido	CA
Gwen	Romani	Castaic	CA	Antonia	Santagati	San Diego	CA
Jessie	Root	Vista	CA	Kathryn	Santana	Duarte	CA
PJ	Rosch	Lake Forest	CA	Benedetta	Santopietro	Escondido	CA
Leah	Roschke	Encinitas	CA	Claudia	Saporiti	Hawthorne	CA
Ken	Rosen	Beverly Hills	CA	David	Sarricks	Running Springs	CA
roy	rosenblatt	Sherman Oaks	CA	Cathi	Sasser	Yorba Linda	CA
Lisa	Rosenfield	Van Nuys	CA	L	Saunders		4122
Steve	Rosin	Pasadena	CA	Leslie	Sayre	Irvine	CA
Kathleen	Ross	Encinitas	CA	Lynne	Schabert	Santa Barbara	CA
Deborah	Ross	Los Osos	CA	Dale	Schafer	Malibu	CA
Kat	Ross	Los Angeles	CA	Ginger	Schedler	Fresno	CA
Sara	Ross	Los Angeles	CA	Doug	Scheel	Los Osos	CA
Ana	Rosvall	Vista	CA	Amy Van	Schijndel	San Diego	CA
Gary	Roswell	Long Beach	CA	Arnold	Schildhaus	Santa Barbara	CA
Michael	Rotcher	Mission Viejo	CA	Denise	Schlatter	Winnetka	CA
Amy	Rouillard	San Diego	CA	Melissa	Schlothan	Huntington Beach	CA
Shea	Rowan	Woodland Hills	CA	Diana	Schmidt	Fallbrook	CA
Shea	Rowan	Woodland Hills	CA	Fran	Schmidt	La Jolla	CA
Lynnette	Royce	Bishop	CA	Richard	Schmitt	Hemet	CA
Gene	Rubin	Ventura	CA	George	Schneider	San Diego	CA
J.	Rubin	El Toro	CA	Jerry	Schneider	Los Angeles	CA
Jessica De	Ruiter	Los Angeles	CA	Judeen	Schneider	Long Beach	CA
Cecilia	Ruiz	Rancho Cucamonga	CA	Anna	Schofield	Los Angeles	CA
Nicholas	Rulli	Los Angeles	CA	Sarah	Scholar	Fresno	CA
Tom	Rummel	San Diego	CA	Heather	Schraeder	Culver City	CA
Angela	Russell	Goleta	CA	David	Schroeder	Los Angeles	CA
Elaine	Russell	Long Beach	CA	James	Schulte	San Luis Obispo	CA
Robin	Russell	Beverly Hills	CA	Caryn	Schultz	San Clemente	CA
Jennifer	Russell	Santa Monica	CA	Jonathon	Schumacher	Los Angeles	CA
Adrienne	Russo	Santa Barbara	CA	Greg And			
Robert	Russo	Glendora	CA	Laurie	Schwaller	Three Rivers	CA
Jayson	Ruth	Huntington Beach	CA	Alan	Schwartz	Oxnard	CA
Brian	Rutkin	Culver City	CA	Axel	Schwarz	San Diego	CA
John	Ruttner	Redlands	CA	Dena	Schwimmer	Los Angeles	CA
Gerald	Ryan	Flemington	NJ	Diane	Scioli	Costa Mesa	CA
Tim	Ryan	Capistrano Beach	CA	Joan	Scott	Joshua Tree	CA
Kimberly	Ryan	Wichita	KS	Laurel	Scott	San Diego	CA
Therese	Ryan	Palmdale	CA	Alain	Scott	La Mesa	CA
Susan	Ryan	Los Angeles	CA	Ann	Scott	Carlsbad	CA
Dominique	Ryba	Vista	CA	Anna	Scotti	Burbank	CA
Gail	Ryland	Pebble Beach	CA	Patricia	Seaward	Idyllwild	CA
Laurie	S	Beverly Hills	CA	Susan	Sebanc	Marina Del Rey	CA
Naomi	Sahay	San Diego	CA	Ellen	Segal	North Hollywood	CA
Maxine	Saine	Bakersfield	CA	Carl	Seibert	Costa Mesa	CA
Mariana	Salerno	San Diego	CA	Rob	Seltzer	Malibu	CA
Judith	Salkin	Cathedral City	CA	Sylvia	Silverston	San Diego	CA
Claudia	Sall	Pioneertown	CA	Rishabh	Sen	Fulton	CA
Reece	Salmons	San Diego	CA	Jon	Senour	San Diego	CA

First Middle	Last	City	State	First Middle	Last	City	State
Barbara	Sentovich	Los Alamitos	CA	Holly	Sletteland	Templeton	CA
Elliott	Sernel	Palm Springs	CA	Susan	Sloan	Los Angeles	CA
Robert	Sewekow	Bonita	CA	June	Smith	San Pedro	CA
marcia	sewelson	Studio City	CA	Diane	Smith	Los Angeles	CA
Casey	Seyb	Sierra Madre	CA	Gaye	Smith	Los Angeles	CA
Gordon	Seyfarth	Vandalia	MI	Kelly	Smith	San Diego	CA
Janette	Shablow	Oceano	CA	Yvonne	Smith	Upland	CA
Linda	Shadle	Anaheim	CA	Missie	Smith	Tehachapi	CA
Brooke	Shaffer	Hesperia	CA	Nancy	Smith	Santa Monica	CA
Gerald	Shaia	Sun Valley	CA	Philip	Smith	Thousand Oaks	CA
Sheila	Shane	Huntington Beach	CA	Julie	Smith	Los Osos	CA
	Shannahoff-			Richard	Smith	Kissimmee	FL
David	Khalsa	Del Mar	CA	Robert	Smith	Fillmore	CA
Michael	Shapiro	Goleta	CA	Wendy	Smith	Anaheim	CA
Virginia	Sharkey	San Diego	CA	Irene	Snavely	Covina	CA
June	Sharp	Bakersfield	CA	Gerald	Sobel	Santa Monica	CA
Donna	Shaw	Simi Valley	CA	Isabelle Du	Soleil	Los Angeles	CA
Katie	Shaw	Manhattan Beach	CA	Jessica	Solis	Duarte	CA
Phyllis	Shaw	West Hollywood	CA	Diana	Solomon	Culver City	CA
Phyllis	Shaw	West Hollywood	CA	Lauren	Sopata	La Mesa	CA
A.f.	shayne	Los Angeles	CA	C	Sor	San Diego	CA
Lenore	Sheffield	Los Angeles	CA	Scott	Soria	Encinitas	CA
Jason	Shepherd	Newbury Park	CA	Michael	Sosa	Los Angeles	CA
Sheila	Sheppard	Carmel By The Sea	CA	Edy	Soto	Sylmar	CA
Amrit	Shergill	Encinitas	CA	Amanda	Sousa	San Diego	CA
Tawny	Sherrill	Garden Grove	CA	Mary	Sousa	Irvine	CA
Paul	Shires	Arroyo Grande	CA	Mitzi	Spallas	Los Angeles	CA
Judy	Shively	San Diego	CA	Linda	Spanski	Oceanside	CA
Clare	Shomer	Los Angeles	CA	Rick	Sparks	North Hollywood	CA
Ryan	Shopay	Woodland Hills	CA	Michelle	Sparks-Gillis	Solvang	CA
Tami	Shotts	Highland	CA	Margrit	Spear	Jamul	CA
Tina	Shull	Costa Mesa	CA	Mary	Speare	San Diego	CA
Robin	Shushan	San Diego	CA	Kurt	Speidel	San Clemente	CA
Marguerite	Shuster	Sierra Madre	CA	Brent	Spencer	Long Beach	CA
John	Shutt	Marina Del Rey	CA	D R	Spencer	San Diego	CA
Amir	Siassi	Los Angeles	CA	Constance	Spenger	Big Pine	CA
Kimberly	Sickel	Cypress	CA	leslie	spoon	Los Osos	CA
Joleen	Siebert	Reedley	CA	Richard	Spotts	Saint George	UT
Nancy	Siegrist	Apple Valley	CA	Judy	Sprinkle	San Diego	CA
Ceaser	Sigala	El Monte	CA	Joan	Squires	Oceanside	CA
Jessica	Silva	San Diego	CA	Mari	Stachenfeld	Aliso Viejo	CA
Dan	Silver	Los Angeles	CA	Ken	Stack	Los Angeles	CA
Victoria	Silver	Irvine	CA	Lynn	Stafford	Pine Mountain Club	CA
Violet	Simmons	Van Nuys	CA	Gail	Staley	Wildomar	CA
Theresa	Simpson	Santa Ana	CA	Mark	Standon	San Bernardino	CA
Cheryl	Sims	Los Angeles	CA	Jerry	Stanley	Arroyo Grande	CA
Christina	Singleton	Pacific Palisades	CA	Russell	Stanley	San Bernardino	CA
Joan	Sitnick	Encino	CA	Mark	Stannard	Los Angeles	CA
Dita	Skalic	Palm Desert	CA	Neil	Stanton	Chula Vista	CA
Ingrid	Skei	Thousand Oaks	CA	Diane	Starzak	Oak Park	CA
John	Skillman	Wrightwood	CA	Nancy	Stassinopoulos	San Diego	CA
Pam	Slater-Price	Del Mar	CA	Lori	Stayton	Sherman Oaks	CA

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Peter	Stearns	Long Beach	CA	Georgia	Tattu	Hermosa Beach	CA
Sara	Steck	Bishop	CA	Michele	Taylor	Oceanside	CA
Billy	Steele	San Diego	CA	Robert	Taylor	Thousand Oaks	CA
Mary	Steele	Laguna Niguel	CA	Susannah	Teague	Reseda	CA
George	Steeves	Van Nuys	CA	Tevet	Tee	Los Angeles	CA
Cindy	Stein	Thousand Oaks	CA	Joanne	Tenney	Escondido	CA
Ken	Stein	Thousand Oaks	CA	Anne	Terhune	El Cajon	CA
Neal	Steiner	Los Angeles	CA	Leslie	Ternullo	Pacific Grove	CA
Andrea	Steloff	West Hollywood	CA	Michael	Terry	Santa Monica	CA
Kate	Stemig	Hermosa Beach	CA	Lesley	Terwilliger	Ventura	CA
Sandra	Sterling	Borrego Springs	CA	Marlene	Testaguzza	Aromas	CA
Herb	Stern	San Diego	CA	Roberta	Teubner	Atascadero	CA
Lewis And				Jeff	Thayer	San Diego	CA
Diane	Sternfels	Los Angeles	CA	Eric	Thein	Escondido	CA
Robin	Steuale	Laguna Woods	CA	CHERYL	THOMAS	Mission Viejo	CA
Christine	Stewart	Escondido	CA	Danielle	Thomas	Santa Monica	CA
pat	stewart	Ventura	CA	Carrie	Thomas	Huntington Beach	CA
Bonnie	Stillwater	Los Angeles	CA	Shad	Thomas	Pasadena	CA
Amy	Stinstrom	Irvine	CA	Donna	Thomas	Morongo Valley	CA
Cristina	Stobaugh	Irvine	CA	Shakayla	Thomas	Compton	CA
Connie	Stomper	Santa Barbara	CA	Brian	Thompson	Santa Barbara	CA
Peter	Stone	San Diego	CA	Roberta	Thompson	Sun Valley	CA
Sue	Stone	Fresno	CA	Brenda	Thompson	La Mesa	CA
Colleen	Stoyas	San Diego	CA	Paula	Thompson	San Diego	CA
Ann	Stratten	La Mesa	CA	Barbara	Thornton	Redondo Beach	CA
Rosa	Strayer	Whittier	CA	Casey	Tibbet	Riverside	CA
Liz	Stromath	Manhattan Beach	CA	Deborah	Tibbetts	San Diego	CA
Jennifer	Strong-Pardus	South Pasadena	CA	Gaby	Till	Escondido	CA
Carolyn	Stuart	Beverly Hills	CA	Carol	Tinker	El Cajon	CA
Bruce	Stubbs	Carlsbad	CA	Bob	Tintle	Pacific Grove	CA
Sandy	Stuhaan	Ridgecrest	CA	Elisenda	Toda		17007
Kris	Sullivan	Los Angeles	CA	Zachary	Todd	Long Beach	CA
Mary	Sullivan	Huntington Beach	CA	Lisa	Toliver	Carlsbad	CA
Joan, Paul, and PJ	Sullivan	Ventura	CA	Thi	Tonolshaskie	Arroyo Grande	CA
Kathleen	Sullivan	Camarillo	CA	Michele	Tornabene	Summerland	CA
Mark	Sussek	Van Nuys	CA	Laura	Torres	Los Angeles	CA
Debra	Swartz	Los Angeles	CA	Yvette	Torres	Riverside	CA
Annika	Swenson	Long Beach	CA	Sharon	Torrise	Hermosa Beach	CA
Tyffanie Bell	Sypher	Chatsworth	CA	Barbara	Tosh	Seaside	CA
Sheila	T.	Moreno Valley	CA	Susan	Tova	Santa Ynez	CA
Kenneth	Tabachnick	West Hills	CA	Arlette	Towner	La Crescenta	CA
Barbara	Tacker	Camarillo	CA	Carlos	Townsend	Fountain Valley	CA
Ann	Tait	Pasadena	CA	Michelle	Trafficante	South Pasadena	CA
Cornelia	Talbott	Brawley	CA	Jackie	Tran	Rosemead	CA
Donna	Tanner	Concord	MA	Kim	Tran	Santa Ana	CA
Carol	Tao	Salinas	CA	Adam	Trauger	Long Beach	CA
Alec	Taratula	Alhambra	CA	Madeleine	Travis	Los Angeles	CA
Joanne	Tasher	Escondido	CA	Teresa	Trebotic	Los Angeles	CA
Fred	Tashima	Los Angeles	CA	Ivy	Trent	Altadena	CA
Terance	Tashiro	Los Angeles	CA	Linda	Trevillian	Alhambra	CA
Thomas	Tataranowicz	Malibu	CA	Fancisco	Trevino	Long Beach	CA
				Charles	Tribbey	San Luis Obispo	CA

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Edie	Trimmer	Big Pine	CA	Aino	Vimb	Sunland	CA
Irina	Tripolskaya	Arcadia	CA	Bruce	Vincent	Ojai	CA
Martin	Tripp	Santa Clarita	CA	Cynthia	Vinney	Culver City	CA
Olga	Trojakova		90501	Nichelle	Virzi	Jurupa Valley	CA
Beth	Trussell	Burbank	CA	Mikhail	Vizel	Moorpark	CA
Laura	Tryon	Carmel	CA	Janny	Vogel	Oceanside	CA
Haley	Tsarofski	La Crescenta	CA	Alex	Von Dallwitz	Carmel	CA
Marlene	Tucay	Anaheim	CA	A	Vs	San Diego	CA
Nancy	Tucker	Los Angeles	CA	V	W	Lancaster	CA
Timothy	Tucker	Fresno	CA	E	W	Beverly Hills	CA
Gabriella	Turek	Pasadena	CA	Mary	Wade	La Mesa	CA
Joy	Turlo	Redondo Beach	CA	Victoria	Wade	Marina	CA
Jeanne	Turner	Monterey	CA	Gene W	Waggoner II	Pinon Hills	CA
Lana	Turner	Woodland Hills	CA	Inge	Wagner	Los Angeles	CA
Ilya	Turov	Moreno Valley	CA	Marie	Wakefield	Newport	OR
Sherry	Tyler	Ventura	CA			Rancho Santa	
Erica	Tyron	Claremont	CA	Sandra	Walker	Margarita	CA
Kathleen	Tyson	Riverside	CA	Nancy	Walker	Glendale	CA
Holly	Urbanus	Goleta	CA	Verla D.	Walker	West Covina	CA
Jolene	Vadillo	San Marcos	CA	Barry	Wallace	Highland	CA
Aaron	Valdez	Salinas	CA	Jon	Wallace	Ventura	CA
Alexia	Valdora	La Quinta	CA	Simone	Wallace	Trona	CA
K	Valentine	Carson	CA	Karina	Walsh	San Diego	CA
Javier Del	Valle	Monterey Park	CA	Judith	Walter	Palmdale	CA
Danny	van Huizen		5665PT	Nancy	Walter	San Luis Obispo	CA
Maritza	Vance	Canoga Park	CA	Sara	Wan	Malibu	CA
Pamela	Vancortlandt	Los Angeles	CA	Lew	Warden	Big Bear City	CA
Lise	vandal	Schenectady	NY	John	Warner	Goleta	CA
Ron	Vanderford	Burbank	CA	Paula	Warner	Lakewood	CA
John	Varga	Huntington Beach	CA	Katherine	Warner	Ventura	CA
Christopher	Vargas	Anaheim	CA	Vic	Warren	San Diego	CA
Jessica	Varlet	Pasadena	CA	Scott	Warwick	Altadena	CA
Melissa	Vasconcellos	Ventura	CA	Tracy	Watada	Marina Del Rey	CA
Crystal	Vassil	Oceanside	CA	Marsha	Waterbury	Los Angeles	CA
Joe	Vecchi	Garden Grove	CA	Diana	Waters	Torrance	CA
Victoria	Vega	West Covina	CA	Breana	Watkins	Calabasas	CA
Glen	Venezio	San Juan	PR	Danuta	Watola		42660
Lesley	Vennero	Santa Clarita	CA	Mary	Watson	San Pedro	CA
Dirk	Verbeuren	Valley Village	CA	Virginia	Watson	Los Angeles	CA
Shellie	Vermeer	Laguna Hills	CA	Stephanie	Watters	Trabuco Canyon	CA
Geena	Verna	Torrance	CA	Margret	Watts	Glendale	CA
Shirley	Vernale	Los Angeles	CA	Don	Webb	Santa Barbara	CA
Kara	Vesely	Long Beach	CA	Faith	Weedn	Los Olivos	CA
Janice	Vieth	Covina	CA	Annie	Wei		48700
Genny	Villa	Oceanside	CA	Laurie	Weigandt	La Mesa	CA
Juan	Villagomez	Palmdale	CA	Garrett	Weinstein	West Hills	CA
Victoria	Villagran	Temecula	CA	Joe	Weis	Reedley	CA
Gladys	Villagrana	Moreno Valley	CA	Rita	Weisheit	Manhattan Beach	CA
Timothy	Villalobos	Spring Valley	CA	Lynne	Weiske	Los Angeles	CA
Constance	Villalvazo	Los Angeles	CA	Valerie	Weitz	Encino	CA
Mishel De	Ville	Fullerton	CA	Jeff	Wells	San Diego	CA
Saul	Villicana	Long Beach	CA	R	Wells	Los Angeles	CA

First Middle	Last	City	State	First Middle	Last	City	State
Jennifer	Wesson	Fresno	CA	Jean	Woodrow	San Pedro	CA
Lori	West	Coronado	CA	Tansy	Woods	San Diego	CA
Karen	Weston	Palmdale	CA	Scott	Workinger	Yucca Valley	CA
Amber	Wheat	Redondo Beach	CA	Emily	Worrell	San Luis Obispo	CA
Linda	Whetstine	Poway	CA	Darcy	Wright	Vista	CA
Dave	Whipple	Pacific Grove	CA	Madeline	Wright	Los Angeles	CA
Mindi	White	Los Angeles	CA	Susan	Wright	Bakersfield	CA
Karina	White	Sierra Madre	CA	Tiffany	Wu	Oak Park	CA
Steve	White	Santa Monica	CA	Kristina	Wunder	Santa Monica	CA
Michael	White	Los Angeles	CA	Caitlin	Wylde	Los Angeles	CA
Frances	Whiteside	Montclair	CA	June	Yamada	Westminster	CA
Erika	Whitton	Irvine	CA	Mary	Yang	Solana Beach	CA
Barbara	Whyman	Ventura	CA	Kenneth	Yates	Pacific Palisades	CA
Joan	Wickham	Pasadena	CA	Gail	Yborra	Wilmington	DE
Monica	Wiesener	Calabasas	CA	Kathy	Yeomans	Ventura	CA
Kathryn	Wild	San Diego	CA	Julian	Yerena Jr	Parlier	CA
Laura	Wild	Santa Barbara	CA	Patricia	Yoder	Oceanside	CA
Carol	Wiley	Victorville	CA	Jo	Young	Culver City	CA
Gail	Wilke	Sunland	CA	Noah	Youngelson	Los Angeles	CA
Wendy	Wilke	Fresno	CA	Ethan	Zachadnyk	La Jolla	CA
Jere	Wilkerson	Avila Beach	CA	Ethan	Zachadnyk	La Jolla	CA
Jennifer	Wilkerson	Pacific Grove	CA	Julie	Zack	Fresno	CA
Connie	Wilkinson	Pismo Beach	CA	Cindy	Zacks	Joshua Tree	CA
Bri	Williams	Julian	CA	Rena	Zaman-Zade	Escondido	CA
Christina	Williams	Los Angeles	CA	Sandra	Zaninovich	Los Angeles	CA
Cole	Williams	Los Angeles	CA	Patrice	Zboya	Concord	NH
Cassandra	Williams	Brawley	CA	Felicia Chase	Zeff	Woodland Hills	CA
Sandy	Williams	Covina	CA	Sandy	Zelasko	Valley Center	CA
John	Williams	Los Angeles	CA	Kathy	Zelaya	Los Angeles	CA
Ted	Williams	Ralls	TX	Silvana	Zelmanovich		20036
Judy	Williams	Caliente	CA	Esther	Zepeda	Los Angeles	CA
Donna	Williams	Los Angeles	CA	Jose	Zermeno	Fontana	CA
James	Wilson	Verona	MS	Paige	Ziehlermartin	Pasadena	CA
Tim	Wilson	Poway	CA	Erika	Ziesmann	Covina	CA
Agnew	Wilson	West Hollywood	CA	Monika	Zimaniova	Sherman Oaks	CA
Marianne	Wilson	Granada Hills	CA	Louise	Zimmer	Temecula	CA
		Rancho Palos		Loy	Zimmerman	Long Beach	CA
William	Winburn	Verdes	CA	Nicholas	Zizelis	Palm Springs	CA
Betty	Winholtz	Morro Bay	CA	Steve	Zmak	Marina	CA
Joie	Winnick	Sherman Oaks	CA	Malgorzata	Zmuda		32332
Karen	Winnick	Beverly Hills	CA	Teresa	Zollars	Fresno	CA
Teresa	Winsor	San Diego	CA				
Anita	Wisch	Valencia	CA				
Melissa	Witt	Van Nuys	CA				
Rose Ann	Witt	Thousand Oaks	CA				
Wendy	Wittl	Santa Barbara	CA				
Amy	Wolfberg	Los Angeles	CA				
Charles	Wolfe	Sylmar	CA				
Pat	Wolff	Arcadia	CA				
Nina	Wong	San Gabriel	CA				
Valeree	Woodard	Joshua Tree	CA				
Joann	Woodring	San Diego	CA				

FORM EMAILS

Comment #	
1 (Form Letter) ~2,050	<p>Dear Oceano Dunes HCP Field Supervisor,</p> <p>I am writing to urge you to/(Please do everything in your power) to protect the imperiled plants and animals that live within the Oceano Dunes State Vehicular Recreation Area. The habitat conservation plan you're working on cannot include any decrease in protections for nesting birds for any reason. And the accompanying environmental review must provide a clear proposed action and a reasonable slate of alternatives to protect imperiled wildlife and the health of nearby communities.</p> <p>I oppose the current proposed action detailed in the federal register notice for several reasons. First, it calls for reducing protective fencing set aside for nesting birds in order to increase areas for off-road vehicles. This is unacceptable. Any increase in areas where vehicles can drive during the nesting season will harm nesting and breeding birds and shouldn't be part of the alternatives for a conservation plan.</p> <p>State Parks also needs to address air-quality issues caused by ORV use that are already harming the local community. Any expansion of recreation areas or use will worsen this problem.</p> <p>And finally, a state natural communities conservation plan is needed to ensure that any impacts to snowy plovers, least terns and other protected species are fully offset.</p> <p>Thank you for addressing these concerns as the planning process moves forward.</p>
ADDED TEXT TO FORM LETTER	
2	STOP MURDERING THESE BIRDS. STOP YOUR CRUELTY. STAND UP TO THE HORROR IN THE WHITEHOUSE.
3	Please stand up to protect our environment against the exhaust, dust, and noise pollution from off road vehicles on and around our beaches. In addition to harming the environment, it's destroying the habitat for not just these birds, but sea life in general.
4	As an Oceano resident, I want to ensure our small feathered residents are not put at risk by offroading on the Dunes.
5	<p>The Oceano Dunes State Vehicular Recreation Area and the imperiled animals and plants that inhabit this unique ecosystem need to be protected from further harassment, slaughter and destruction. You must create a Habitat Conservation Plan that increases protections of nesting shorebirds which includes safeguards under state law for all the area's rare animals and plants.</p> <p>It's shameful and unethical that you have not taken action years back to minimize or eliminate the damage to this unique ecosystems and its rare species. You have the duty to do everything in your power to protect habitats and species that are imperiled due to mismanagement and human abuse.</p> <p>Snowy plovers are one of the endangered shorebirds facing assault and death when they are run over by off-road vehicles (ORV). This is unacceptable and must stop immediately. ORV should not even be allowed in fragile habitats inhabited by endangered and/or threatened species. How can these birds breed, nest, feed and rest safely with this harassment and destruction?</p> <p>Your current proposal expands recreational areas and reduces protective fencing designated for nesting shorebirds to allow even more ORV. This is more assault to injury. The impact of more ORV will further increase the noise and air pollution of this fragile community.</p> <p>Furthermore, to ensure any impacts to endangered and/or threatened species are compensated, a State Natural Communities Conservation Plan needs to be implemented.</p> <p>I trust you will act with true leadership, vision conservation ethic to protect rare ecosystems and the plant and animal species that inhabit them.</p>
6	These uncivilized drivers are destroying our beaches. They also take advantage of many streets in our cities. They should be put in a cell where they can use all the energy they have thanks to a country that has food to put on our tables. Or fine them with time serving the communities. It is a shame that in California we have to defend our birds and their ecosystem from these useless individuals!

7	I am writing as a biologist & avid outdoorsperson to urge you to do everything in your power to protect the imperiled plants and animals that live within the Oceano Dunes State Vehicular Recreation Area. The habitat conservation plan you're working on cannot include any decrease in protections for nesting birds for any reason. And the accompanying environmental review must provide a clear proposed action and a reasonable slate of alternatives to protect imperiled wildlife and the health of nearby communities.
8	I do not think that the thrill of driving a vehicle on sand should supercede the needs of the shorebirds or that of the ecology as a whole.
9	I have enjoyed using the vehicle recreation area myself, and do believe it is a valuable thing to have nearby our homes (I am living in San Jose now, but previously lived in San Luis Obispo, and still enjoy visiting the central coast when I can). However, if it is endangering rare plants and animals, then that danger must be mitigated. Surely there are other areas where we can enjoy our vehicles without harming our precious wildlife.
10	By the way, I've ridden OHV's at Oceano Dunes. My son attended Cal Poly and spent plenty of time there. We're sympathetic to the use of the park for OHV use. But, it's the 21st century, we need to protect these species, and I think there's plenty of room for us all to get along.
11	My opinion is that this land is better served by conservation, rather than harmful recreation. I value the snowy plover and other shorebird and consider this finite resource to be of prime importance.
12	Do not turn California beaches into waste dumps! Protect our shores. Texas allows driving on beaches and that has destroyed the beaches.
13	<p>There are at risk plants and animals living within the Oceano Dunes State Vehicular Recreation Area, and I urge you to do all that you can to protect them.</p> <p>Your proposed habitat conservation plan should NOT reduce protections for nesting birds, including the endangered Snowy Plover, for any reason. Also, the accompanying environmental review should present a distinct action plan plus sensible alternatives to safeguard both imperiled wildlife and the health of communities nearby.</p> <p>Thus, I contest the current proposed action specified in the federal register notice for several reasons. First off, it calls for diminishing fencing set aside to protect nesting birds which would increase the area for off-road vehicles. In so doing, vehicles driven during the nesting season would harm nesting and breeding birds, and therefore, should not be part of any alternative conservation plan. Furthermore, any plan needs to confront air-quality problems caused by off-road vehicle use that are already affecting the health of nearby communities. Any enlargement of recreation areas or use will aggravate this problem.</p> <p>Lastly, a state natural communities conservation plan is required to guarantee that any impacts to Snowy Plovers, Least Terns and other protected species are fully mitigated.</p> <p>Thank you for weighing my comments as the planning process proceeds.</p>
14	As an of road enthusiast that also appreciates our delicate ecosystem, I am writing to urge you to do everything in your power to protect the imperiled plants and animals that live within the Oceano Dunes State Vehicular Recreation Area.
15	For better or worse our species has the power to determine the fate of all others. Thus you have the power to end the lives of God's creatures through your actions. I trust such decisions are made with full knowledge of their long term impact. One can't imagine anyone believing the rights of man's temporary pleasures should be held in higher regard than the protection of God's creatures. I sincerely hope your conscious guides your actions in this matter as one can never restore a life which has been destroyed. May your decisions always be thoughtful so you never suffer the miserable affliction of regret.
16	Thank you for addressing these concerns as the planning process moves forward. Momentary "fun" driving on the fragile dunes will never be worth losing these species that are severely impacted by these activities. Again, please help!
17	I drive 3 hours to go to this lovely beach about 3 times a year, and love watching the snow plovers. Please realize you will lose tourism.
18	When will man stop only thinking of themselves and how much money can be made from everything? Humankind destroys everything it touches. We need to wake up and preserve what we have left of our planet. It's the only one we have, but man acts like we have many more them!
19	For four decades and more I continue to bird, even at 88 years of age, Oso Flaco Lake, Oceano Camgrounds and Pismo Beach areas and am appalled at the steady increase of vehicular "recreation" with its pollution, yes, and concomitant destruction of precious fauna and flora.
20	Off road vehicles need to go elsewhere and certainly NOT where birds need habitat. The birds are having a tough time finding safe habitat anywhere with our growing population.

21	EVERY LIVING CREATURE, INCLUDING SNOWY PLOVERS AND ALL SHOREBIRDS ARE VITAL TO LIFE. Why should off-road vehicles have more rights to access on to these beaches than the Snowy Plovers who have nested there longer than the drivers of these vehicles? Maybe you could divert the ORV traffic to another beach or another area of the beach? Would that be possible? Or maybe you could prohibit ORV driving on this beach altogether. Yes, this would piss off the drivers, but the birds would be saved - and their lives are just as important or more than the polluting vehicles and possibly trash from the drivers
22	The bigger question is why are you facilitating destruction of a species, fouling air and land with out of control ORV riders who seem to carelessly disregard the damage they do? U.S. Fish & Wildlife departments are supposed to primarily PROTECT wildlife while restricting activities that will forever damage and/or destroy Oceano Dunes habitats?
23	Why isn't action being taken to prevent endangered nesting shorebirds from being trampled by off road vehicles?
24	Once these birds are killed, they are gone for good. If you do not stop idiots on off-road vehicles from killing them, then no one has the power to protect these birds. The Constitution does not give permission to kill off everything just for "fun." So do your job and protect the environment. Now here is the safe version of the standard letter.
25	Unfortunately, the current proposal reduces the protective fencing that creates a safe haven for nesting shorebirds, which could allow for even more ORV traffic on the beach. More vehicles will mean more dead birds and worse air quality for the local community. Wildlife officials must create this plan to increase protections for nesting shorebirds and include safeguards under state law for all the area's rare plants and animals.
26	Time to get your s&%t in action and stop the killing! We have waited too long for action at Oceano Dunes SVRA. #SavetheSnowyPlovers
27	Please address the killing of snowy plovers by reckless recreational vehicles destroying their habitat immediately. I begin to suspect that mankind will not be satisfied until humans are the only species surviving, which will lead to the extinction of H. sapiens.
28	There is absolutely NO REASON that ORV's should have precedence over nature on our public beaches!
29	PLEASE STOP THE ERADICATION OF SNOWY PLOVERS BY BEING CRUSHED UNDER ORV'S. YOU HAVE THE POWER TO PROTECT AND SAVE THEM, PLEASE DO SO NOW. THANK YOU!
30	As a resident of California's Central Coast, I have borne witness to far too much loss of our natural beach habitats.
31	My family and I care deeply about this issue!
32	Why must flora and fauna and their habitat continue to be sacrificed for the "fun" of an overpopulating species that has countless other ways to experience an adrenalin rush - hardly the way to experience the wonders of this natural landscape. The fact that that they regularly kill/injure each other speaks to the thoughtlessness of their behavior.
33	Protect our wildlife and ban ORV's that kill, destroy, and pollute. Step up and be part of the solution for preserving our natural resources now and for future generations.
34	I would have never thought I'd be writing to a California agency to BEG them to stop this but, there you are...I am shocked because you've done such a good job everywhere else that is still salvageable as habitat for these endangered birds.
35	There is no need for people to be driving on the beach. Vehicles leak oil, polluting the air and water and reduce the peaceful atmosphere most people and wildlife expect to find at the beach.
36	Your lack of interest in saving defenseless birds and their babies is shameful. Please rethink and adjust your so far terrible policies. People can off-road in plenty of other places.
37	We don't need dune buggies and people swarming this area! I know, I have been there, I have ridden dune buggies.
38	Your plan to reduce harm to the snowy plover's doesn't look very good. Surely you can do a better job! I have been to many beaches where there are warning signs and regulations to protect these birds. Why not you?
39	Allowing 4X4 vehicles run over rare and threatened birds on their nesting areas is insane. The idea of having an off-road area in a known nesting site is also insane. It is your responsibility to protect these birds and plants from the destructive actions of a bunch of testosterone driven idiots. It should be a no brainer that this area be closed during breeding season and protected plants should be cordoned off from these raging vehicles.
40	I have seen how New Jersey takes care of their rare snowy plovers, protects beaches and their habitat, and educates the public to understand the importance of doing so. California should be leading the way.
41	What is happening now is NOT okay. This must stop and the birds must be protected

42	Preservation of our habitat and our wildlife is a primary responsibility for humanity in our age. Allowing off-road vehicles to destroy the habitat of endangered animals is absolutely unacceptable. I
43	I oppose the increasing use of the dunes by selfish and short sighted off road vehicles on valuable coastal resources. I ride my dirt bike only on private race tracks that do not endanger our wildlife.
44	Here in Cambria the Western Snowy Plover is showing up by the dozens this winter for the first time in decades on Santa Rosa Creek Beach. Protecting them here is crucial. Protecting them at Oceano Dunes should show us how!
45	As you may know, this same thing happened in North Carolina/Cape Hatteras concerning endangered nesting plovers and OHV's. The Park Service put an end to it during plover's nesting season, which was not popular with the righteous ORV owners. However, the people wouldn't stay off the dunes so it had to be done. Dunes need to be protected anyway not only as habitat, but as first line of coastal protection in super-high tides. With so many entities competing for their "rights", it's time for a "rights hierarchy". Protecting wildlife and preventing flooding has a higher purpose than allowing a frequently drunken "yee-haa" good time to those who would tear through the dunes. Natural areas such as these should be off limits to these destructive, land-scarring, air-fouling, noise-polluting recreational vehicles anyway. Permit access for surf-fishing, but reconsider these recreational 4wd uses. With so little natural quiet space available to our densely populated coasts, it is assaulting to encounter more noise and pollution along our pristine coastline. Besides, there are so few dunescapes left in Coastal California. Relegate this activity to another (contained) location, please.
46	If anything there should be an INCREASE in protective fencing to protect the wildlife and prevent damage to this valuable resource. This would be more inline with the mandate of USFWS, 'to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.'
47	My husband and I have visited the wonderful beaches in this area. I was very impressed with Santa Barbara County rangers who care deeply about the Snowy Plover in their regional park. I believe you should follow their example. I urge you commit as they have to protect the imperiled plants and animals that live within the Oceano Dunes State Vehicular Recreation Area.
48	MORE wildlife protections, not Less. Actions & Alternatives required.
49	As a California wildlife biologist and former zoo keeper at the Los Angeles Zoo who has traveled extensively along California's beautiful central coast, I am appalled by the existence of the Oceano Dunes State Vehicular Recreation Area and further dismayed by plans to increase access of vehicles to fragile coastal dunes. Off-road vehicles are consumptive, destructive users of the coast. As climate change and an increase in coastal populations has put such environments at risk, we can no longer afford to let off-road vehicles tear up the dunes and kill wildlife merely for "fun." We now know that coastal dunes are fragile and home to snowy plovers and other endangered and declining species. We also recognize that there is demonstrable need for more pastoral, non-consumptive and non-destructive access to California's beautiful coast, particularly its unique dunes. The US Fish & Wildlife Service needs to implement stronger protections for nesting shorebirds, especially the snowy plovers, as well as declining coastal plant species. Catering to the loud complaints of ORV enthusiasts does not serve the larger public nor preserve the environment for future generations. The time has come to fully protect the imperiled plants and animals that live within the Oceano Dunes State Vehicular Recreation Area.
50	Protecting these birds is the right thing to do, letting the orv's to continue killing these birds all for the fun of off roading is negligent. Killing for the sake of entertainment is ridiculous!
51	Some of us are VERY tired of our amazing area being used as an amusement park for sand jockeys from other parts of the state who don't care about OUR environment.
52	MUST We ALLOW this?? Man is ever encroaching on our animal's territory. We need to have some boundries and strong protections in this 21st century. We are taking away their forests, the waterways, the oceans, now the beaches. PLEASE do the honorable thing and leave a legacy of beauty not one of noise and destruction. Have integrity and do the right thing and help keep man away from these important nesting areas. We don't need vehicles running up and down our beaches anyway.
53	It is really stupid to allow vehicles to drive on the beaches. These areas are for our use, and not vehicular.
54	My letter is to call in you to respect what came here first, and just wishes to survive, not destroy, pollute, or run over another living thing for fun & profit.

	In my growing up & education (mostly public), I thought that was what government; group of representatives, was supposed to do for us...look out for living things.
55	As the former Chair of the California Coastal Commission, I oppose the current proposed action detailed in the federal register notice for several reasons. First, it calls for reducing protective fencing set aside for nesting birds in order to increase areas for off-road vehicles. This is unacceptable. The cages are too small as it is. The birds are precocious and therefore the young fledglings get killed by the vehicles as the birds leave the caged in areas. The areas where the nests are should be completely off limits to ORVs during nesting and fledging season. This is the only way to prevent death of the birds before they can fly. Your statistics show that the birds nest and fledge but few live to make it past that point, proving the need for limits on the ORV areas.
56	I have been going to Oceano all my long life. Surely we can find a way to protect the birds and plants and let the dune buggies have some space too? The dunes aren't popular only with the ORVers - Safe habitat is a life or death issue for the birds and plants.
57	I've watched as pristine desert lands are stripped of life for the sake of a small group of people wanting to drive their off road vehicles up and down ravines and hillsides. While fragile life forms are eliminated from the area. It's profoundly sad and disturbing. Fortunately, the protected areas are respected and patrolled for violations, with the approval of the vast majority of mature and sane people. Sometimes there just are not any do-overs and once these fragile areas are violated, they may never rebound and become essentially lifeless areas.
58	If there ever was a canary in a cage scenario, it's the disappearance of the plover. Death of the plover means death of our beaches. We simply must protect them from destruction by developers trying to make a buck at the expense of Nature.
59	I object to people with off-road vehicles inflicting harm and getting preferential consideration! I am worried about adequate protections for the imperiled plants and animals that live within the Oceano Dunes State Vehicular Recreation Area.
60	I say people can ride vehicles everywhere and need to be kept OUT OF HABITATS. TOO MANY ANIMALS are disappearing and they are priceless and irreplaceable
61	The Northern Rhino in Africa is going extinct. While you don't erect fences or drag you feet in regard to the Snowy plovers, they too are moving towards extinction while ORV traffic is allowed to pollute the air and kill the plovers. This issue is very important and must be addressed ASAP.
62	When will we put the needs of other species before our recreational activities.
63	Although I used to enjoy the dunes myself, I never knew that protections for wildlife were not in place.
64	Protect and preserve. Whether you are impacted or not, these birds are and it is our job to save them as well as their habitat. Losing one species can upset an entire eco system. Every one of us, animals, birds, reptiles, humans, play a part and the damage already done by humans is severe. Keep the earth balanced by helping those who cannot help themselves.
Other	Other comments: Commenters emphasize they are Californian, taxpayers, love plovers, former resident of Pismo, current residents, listing their background as biologists, or Audubon/SNPL/CLTE volunteers; stop the murder/carnage, love State Parks, this matter is of personal concern, , in disbelief ORVs are allowed on the beach; too many of our State's species are in peril of extinction; abbreviated expletives, do the right thing; these wildlife and plants need our protection

Oceano Dunes District
Habitat Conservation Plan EIR

Appendix B: HCP Avoidance and Minimization Measures

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Oceano Dunes District HCP EIR

Appendix B: HCP Avoidance and Minimization Measures

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
Park Visitor Activities: Motorized recreation (CA-1)	
Potential Effects: Adults/juveniles/chicks struck by vehicles; Breeding/foraging/roosting disturbance; Chicks separated from adult(s) and inadequately attended or exposed to predation/increment weather; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Chicks/eggs abandoned when adults are disturbed, killed, or injured; Eggs crushed	
Avoidance Minimization Measures:	
AMM 1	CDPR will continue to create educational content on the Oceano Dunes SVRA and Pismo State Beach websites that includes life history information and measures being taken to protect all HCP covered species found at the parks. Information can be updated as needed and visitors can find out what the parks are doing and what they can do to protect the covered species. Covered species information will continue to be included as part of ongoing interpretative programs as well.
AMM 2	Signs explaining SNPL natural history and protection measures in place in the HCP area will continue to be posted for information and education of visitors in the HCP area. Interpretive panels at beach access points (e.g., Sand Highway, Oso Flaco Lake, Pier Avenue, and Grand Avenue) and signs identifying closed areas will continue to be erected to increase public awareness of threats to nesting SNPL and to inform the public of the park's management efforts to protect special-status species. CDPR will also continue to provide a low wattage radio station with a repeated recording of park information, including information about protection of sensitive species. The radio station plays 7 days a week, 24 hours a day and provides updated information on measures taken to protect SNPL. Information on SNPL will also continue to be posted on the Oceano Dunes SVRA and Pismo State Beach websites.
AMM 3	CDPR will continue to enforce resource protection regulations. All enclosed and symbolically fenced areas will continue to be posted with signs in English and Spanish. State Park rangers will continue to have the responsibility to enforce park regulations enacted to protect SNPL, including issuing citations for incidents of trespass into the area closed for nesting. In addition, resource staff monitors will continue to contact visitors who violate park regulations and, where appropriate, contact rangers who will issue a citation.
AMM 4	Posted speed limits will continue to be enforced throughout the HCP area.
AMM 5	CDPR will continue to fence off the Southern Enclosure and North Oso Flaco during the breeding season (March 1 to September 30) to limit vehicle and human disturbance to SNPL nesting areas (and to protect SNPL from terrestrial predators).
AMM 6	A buffer zone a minimum of 100 feet that prohibits camping or parking vehicles will continue to be established outside and around nest enclosures.
AMM 7	Habitat enhancement will continue to be avoided within 100 feet of the fence that borders the open riding area to discourage recreation near nesting that may cause disturbance to breeding birds.
AMM 8	Daily monitoring will continue to take place during and immediately after the SNPL breeding season (when enclosure fencing is removed) to enable better identification of potential human use-related threats to SNPL and to summon law enforcement assistance, if needed, to prevent or eliminate any human use related threats to the species.
AMM 9	If a SNPL is found injured or dead, USFWS will continue to be contacted within 3 working days of finding the bird.
AMM 10	Any SNPL breeding activity in the riding area (e.g., tracks, scrapes, or pairs observed) will continue to be monitored closely. These areas will continue to be marked and rechecked during the day and one person will continue to be assigned each morning to recheck any potential breeding areas. All SNPL tracks outside the seasonal enclosures will continue to be followed to check for potential nests. Any nest found will continue to be protected with a large single-nest (i.e., 100-foot radius) enclosure to protect nests from people and predators, as determined to be necessary. If feasible and necessary, a westerly travel corridor will be erected to provide safe foraging for chicks.
AMM 11	If a SNPL nest is established within the open riding area, but within 500 feet of the existing seasonal enclosure, fencing will continue to be erected to enlarge the enclosure to encompass the nest site (if topography allows and if safe public traffic patterns are available). Fencing will continue to be placed a minimum of 100 feet from the nest site.
AMM 12	When two or more nests in the open riding area are located within 500 feet of each other and are 500 feet or more away from the seasonal enclosure, they will continue to be encompassed into a new large seasonal enclosure if topography allows. Seasonal enclosures so erected include fencing that extends to the surf line, if chick travel corridors establish that need, so as to provide a secure travel corridor for foraging activity for SNPL chicks. Fencing for such new seasonal enclosures will continue to be maintained a minimum distance of 100 feet from the nest site.
AMM 13	If an SNPL nest is initiated inside the Southern Enclosure and close to the enclosure fence bordering the riding area, CDPR staff will continue to install additional fencing (i.e., "bumpout") to maintain a perimeter of a minimum of 100 feet from the open riding and camping area to the nest. These bumpouts will continue to be monitored regularly. If an incubating bird is disturbed by normal recreational activity, the bumpout will be increased in size, as needed. All nests are monitored for disturbance, and any nest that is disturbed by regular recreation activity may receive a bumpout. This additional fencing will continue to remain in place during the period when nests are active or chicks are found in this area. Once chicks move out of the area or reach fledgling age, the bumpouts will be removed.

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
AMM 14	Circular and/or 10-foot-by-10-foot nest enclosures will continue to be used, if deemed necessary by staff, for SNPL nest protection. These enclosures are constructed using 2-inch by 4-inch wire no-climb fence, and 0.5-inch by 0.5-inch mesh netting is placed on top. The enclosures are secured with metal posts. When appropriate, they are buried 8 inches deep.
AMM 15	Mini enclosures measuring approximately 3 feet by 3 feet by 3 feet will continue to be used in the HCP area. These are constructed with 2-inch by 4-inch wire non-climb fence with a top of the same material. When appropriate, they are buried 4–8 inches deep. CDPR may use additional mini-enclosures, experimenting with different size, orientation, and/or material as new information becomes available on mini-enclosures from other sites.
AMM 16	At least one CDPR vehicle or trailer will continue to be available throughout the SNPL breeding season to carry all tools and equipment necessary to immediately construct a single-nest enclosure or bumpout.
AMM 17	Prior to a known nest hatching outside a seasonal enclosure and within an area open to motor vehicles (e.g., open riding area), monitors will continue to oversee the erection of signs and/or symbolic fencing to provide a safe passage until the brood reaches a non-vehicle use area of Oceano Dunes SVRA. Qualified monitors will continue to attempt to follow the broods if a brood is observed leaving the single-nest or smaller enclosures, to identify threats to brood movement or safety, and to obtain assistance as necessary from Oceano Dunes SVRA patrol staff.
AMM 18	Should broods engage in foraging activity in the wrack line outside the seasonal enclosures, vehicle traffic flow will continue to be diverted or regulated to allow safe movement of the brood.
AMM 19	Monitors will continue to search for SNPL chicks in the riding area daily. During the chick-rearing period, one person will be assigned each morning to survey the area surrounding enclosures in the open riding area for chicks that have wandered out of protected fenced areas during the night. Monitors will continue to take appropriate action to direct chicks back inside the fenced areas, as described in section Error! Reference source not found.
AMM 20	CDPR will continue to place temporary signs in areas where SNPL are known to congregate to alert drivers of their presence and to emphasize a 15-mph speed limit. If possible, increased enforcement of speed limits will occur in areas where large numbers of SNPL are roosting.
AMM 21	Weekly monitoring for the location of SNPL within the HCP area will continue to occur during the non-breeding season (October 1 through February 29), as staff levels and weather conditions allow. Monitoring will be increased if necessary (e.g., during storm events).
AMM 22	When, despite CDPR's efforts ¹ to protect nests and/or move chicks back into the safety of the seasonal enclosure, chicks and eggs are still at risk of being injured or killed by covered activities not related to covered species management (e.g., motorized recreation or new proposed activities), CDPR may capture up to 12 eggs (i.e., 4 nests) and/or 12 chicks (i.e., 4 broods) for captive rearing each year. In all cases, the need for captive care is determined by a qualified Environmental Scientist and is used selectively. It is also dependent on an approved facility having the capacity to accept the eggs and/or chicks. If CDPR has captured 8 eggs or 8 chicks for captive rearing during one breeding season pursuant to this AMM, CDPR will contact the USFWS and discuss whether modified or additional AMMs (e.g., expanding the enclosure along the shoreline to provide additional protected foraging habitat, increasing monitoring, and/or increasing signage) are appropriate to minimize risk of additional injury or mortality and ensure no more than 12 eggs and 12 chicks are captured for captive rearing ² . Because this measure involves capture, which is considered take under FESA, it is included within CA-12b
AMM 23	During the non-breeding season, if determined to be necessary to protect wintering SNPL, CDPR staff will temporarily close the beach within the HCP area, including the Arroyo Grande Creek crossing and the Grand Avenue park entrance, to motor vehicles during storm events with anticipated high tides and/or large surf until such conditions or hazards no longer exist. Beach conditions will be regularly monitored, and vehicle use will be allowed again only after CDPR staff has determined that it can occur without causing harm to SNPL, public safety is no longer an issue, and resource protection measures are no longer necessary.
AMM 24	CDPR peace officers will continue to provide focused enforcement of HCP area regulations (e.g., 15-mph speed limits). CDPR peace officers will continue to respond to requests by monitors for assistance with SNPL protection and security. Enforcement of laws affecting safety of SNPL will continue to be the highest non-emergency Law Enforcement priority.
AMM 25	During anticipated high visitor-use periods, such as Memorial Day Weekend, Labor Day Weekend, July 4 Weekend (or as determined by historic visitor attendance records), monitoring staff will continue to be on site for extended hours to monitor within the open riding area and identify threats to all life stages of SNPL from public recreational activity.
AMM 26	During non-holiday weekends (i.e., Friday and Saturday), a minimum of two CDPR peace officers will continue to be on duty and available from 0600 through 2400 each day to enforce regulations (e.g., 15-mph speed limit, dog leash laws, litter). During non-holiday weekdays (i.e., Sunday through Thursday), a minimum of two CDPR peace officers will continue to be on duty from 0700 through 2000 each day to enforce regulations.

¹ At times, based on Senior Environmental Scientist professional discretion, CDPR may determine that SNPL eggs and/or chicks should be collected and transferred to an approved wildlife facility without an attempt to protect them on-site because protecting eggs and/or directing chicks back to the enclosure will not eliminate the threat of covered activities.

² Capture associated with this AMM is a new covered activity proposed under the HCP, which is different than ongoing capture associated with natural resources management activities. This AMM addresses capture when eggs or chicks are threatened by non-covered species management activities, such as motorized recreation.

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
AMM 27	During holiday periods, one monitor will continue to be assigned to ensure that no unauthorized entry is made into the north end of the Southern Enclosure during both daylight and evening hours.
AMM 28	During major holiday periods, CDPR peace officers will continue to be on duty 24 hour/day. From 0700 to 2000, a minimum of three ranger/peace officers will continue to be on duty. From 2000 to 0200, a minimum of two ranger/peace officers will continue to be on duty. During mid-day periods, when visitor attendance is highest, as many as four ranger/peace officers will continue to be on duty. Rangers/peace officers will enforce all regulations (e.g., 15-mph speed limit, dog leash laws, litter) in the HCP area.
AMM 29	CDPR will continue to use an adaptive management approach, where information and experience from previous breeding seasons is used to develop additional appropriate AMMs in subsequent seasons to minimize or eliminate impacts to SNPL from covered activities.
AMM 30	CDPR will continue to implement management measures and modify protocols in accordance with ongoing adaptive management and based on recommendations in annual monitoring reports.
AMM 31	Oceano Dunes SVRA will continue to participate in the Region 5 working group for SNPL recovery.
Potential Effects: Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash associated with recreational activity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 32	Trash dumpsters will continue to be provided near the OHV staging area near Post 2. The location of the trash dumpsters will be changed, as necessary, to avoid disturbance to any nearby active SNPL nests.
AMM 33	CDPR will continue to use trash dumpsters/receptacles designed to prevent access by predators such as gulls. CDPR will continue to explore options to reduce the movement of trash from the dumpsters and reduce predator presence at the dumpster sites.
AMM 34	CDPR will continue to remove or modify signs, fence posts, and other man-made features to eliminate perches for predators in areas where they could impact SNPL.
AMM 35	As appropriate and dictated by field conditions, CDPR will continue to have the option to install single-nest enclosures on SNPL nests in South Oso Flaco or in other areas where they are deemed vulnerable to predators.
AMM 36	Fencing will continue to be buried, as feasible, to limit terrestrial predators from undermining the fence.
AMM 37	In coordination with USFWS, the predator management plan will continue to be reviewed and updated annually, if necessary, to identify appropriate responses to predators.
AMM 38	When additional options for managing predators are needed, selective live-trapping and relocation of avian predators will continue to be conducted by authorized staff or subcontractor, and selective live-trapping and relocation or lethal removal of mammalian and avian predators will be conducted by USDA Wildlife Services (or other authorized subcontractor).
AMM 39	CDPR staff will continue to remove animal carcasses in or adjacent to nesting and brood-rearing habitat.
AMM 40	Where feasible, CDPR staff will continue to harass predators to flush them from sensitive areas. Hazing techniques used include firing a bird whistler and approaching predators where appropriate. CDPR will continue to coordinate closely with predator specialists regarding the location of known or potential nests and brood activity, prior to the specialists conducting work.
AMM 41	All visitors will continue to be informed that they are to deposit their trash in dumpsters/receptacles provided. All campers will continue to be offered plastic garbage bags. All park staff will continue to carry trash bags in each vehicle and make them available to visitors for removing trash and litter from visitor use areas.
AMM 42	CDPR will continue to manually remove litter and garbage from beaches within existing budget and staff limitations.
Potential Effects: Breeding/foraging/roosting habitat quality reduced; Chicks, eggs, adults, juveniles potentially exposed to predation and/or inclement weather by altered habitat	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 43	CDPR will continue to place woodchips, large woody material, beach wrack, and native plants throughout the seasonal enclosures to serve as natural shelter. Woodchips will continue to be spread in patches in the 6, 7, and 8 enclosures in areas of barren sand and over thinning woodchip patches remaining from the previous year(s).
AMM 44	CDPR staff will continue to collect wrack in the open riding area and disperse it in the Southern Enclosure. In addition to providing cover, wrack on the shoreline provides a food resource supporting invertebrates, which in turn are prey for SNPL chicks, juveniles, and adults.
AMM 45	Talitrids (beach hoppers) will continue to be collected from outside the vehicle use area north of Grand Avenue or from South Oso Flaco. Staff will continue to inoculate the wrack addition areas of the Southern Enclosure shoreline with talitrids in order to establish a breeding population and increase SNPL food resources.
AMM 46	The Superintendent may consider implementing additional habitat enhancement measures if Environmental Scientists determine such measures may aid in meeting the criteria laid out in biological objectives for SNPL (section Error! Reference source not found.). If implemented, the value of any additional habitat enhancement measure to nesting SNPL and CLTE will be studied to evaluate the measure's effectiveness at improving reproductive success and to determine whether and how the measure should be implemented in future seasons.
Park Visitor Activities: Camping (CA-2)	
Potential Effects: Similar to motorized recreation activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
Park Visitor Activities: Pedestrian activities (CA-3)	
Potential Effects: Breeding/foraging/roosting disturbance; Chicks and eggs picked up by visitors; Chicks/eggs abandoned when adults are disturbed, injured, or killed; Chicks separated from adult(s) and inadequately fed or exposed to predation/increment weather; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 47	If an SNPL nest is established within 150 feet of a restroom facility, permanent restrooms buildings will continue to be closed to public use and enclosure fencing will continue to surround and isolate the restroom to prevent public use. In addition, chemical toilets will continue to be relocated to a minimum distance of 330 feet from any SNPL nest site.
AMM 48	CDPR will continue to use symbolic fencing, consisting of a single strand of rope strung between posts with signage, at South Oso Flaco to protect upper beach and dune habitat for nesting.
AMM 49	In instances where pedestrian activity is observed disturbing SNPL, CDPR will continue to ask visitors to relocate farther away from nests or broods, and symbolic fencing at South Oso Flaco will continue to be adjusted as needed.
AMM 50	Symbolic fencing will continue to be erected at the terminus end of the boardwalk trail at the beach to direct visitors to the wet sand area of the beach and away from potential SNPL nesting and chick-rearing areas.
AMM 51	During daylight hours on major holiday periods, one CDPR peace officer will continue to be assigned to patrol the beach. Duties include patrolling outside the nesting enclosure areas to ensure that no entry is made into the enclosures.
Potential Effects: Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash associated with pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Bicycling and golfing (CA-4)	
Potential Effects: Similar to pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Fishing (CA-5)	
Potential Effects: Similar to pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Potential Effects: Adults/juveniles/chicks potentially entangled in discarded fishing line/hooks; Chicks, eggs, adults, juveniles potentially exposed to predation by discarded bait	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 52	Public outreach to fisherman in the Oso Flaco Lake area will continue to be conducted by CDPR staff regarding SNPL life history and AMMs.
AMM 53	Anglers will continue to be encouraged to properly dispose of fishing lines, hooks, and bait at various locations within the park where trash receptacles are located.
Park Visitor Activities: Dog walking (CA-6)	
Potential Effects: Similar to pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 54	Dogs within the HCP area will continue to be required to be on a leash no longer than 6 feet at all times and within the owner's complete control.
AMM 55	Dogs, other than service dogs, will continue to be banned in the Oso Flaco Area.
AMM 56	Waste bag locations will continue to be provided in the HCP area.
AMM 57	CDPR will continue to enforce dog leash and dog waste regulations, especially in areas where SNPL could be impacted. Resource staff monitors and/or park rangers will continue to contact visitors violating park regulations and, where appropriate, rangers will continue to issue a citation.
Park Visitor Activities: Equestrian recreation (CA-7)	
Potential Effects: Similar to pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 58	Horses will continue to be banned in the Oso Flaco Area.
Park Visitor Activities: Boating/surfing (CA-8)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Aerial/wind driven activities (CA-9)	
Potential Effects: Foraging/breeding/roosting disturbance	
Avoidance Minimization Measures:	

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
AMM 59	Pursuant to Superintendent's Order (section Error! Reference source not found.), CDPR will continue to prohibit kite flying and kiteboard launching and landing south of the Pier Avenue ramp during the SNPL breeding season (March 1 through September 30).
AMM 60	Open water kite surfing, as well as launching and landing, will continue to be prohibited south of Post 6 during the SNPL breeding season (March 1 through September 30).
Park Visitor Activities: Holidays (CA-10)	
Potential Effects: Effects for all covered activities on holidays are not expected to be different from those on non-holidays	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 61	Fireworks will continue to be prohibited in the HCP area.
AMM 62	On July 4, CDPR Visitor Service Staff or CDPR Volunteers will continue to be assigned to the large Southern Enclosure to help stop the use of fireworks over the area.
Park Visitor Activities: Special events (CA-11)	
Potential Effects: Effects based on the specific event activity(ies) permitted (see section 2.2.1.11)	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 63	All permits authorizing special events will continue to include AMMs to reduce disturbance to SNPL. Specific AMM recommendations will be based on past experience and dependent on the event location, timing, and potential to impact covered species.
AMM 64	CDPR will continue to monitor special events to ensure participants follow SNPL protective measures.
AMM 65	All UAS operators will follow the current CDPR policies regarding UAS use.
AMM 66	Specific AMMs for UAS use will be included in the permit that all UAS operators must obtain from CDPR. For example, UAS will not be allowed south of Post 5 during the breeding season and will be limited year-round along the shoreline. In addition, a USFWS-approved monitor will accompany non-CDPR UAS operators at any time of year if it is determined there is potential to impact covered species. Stable flight paths are preferred to minimize the UAS being perceived as a predator.
Natural Resources Management: SNPL fencing, monitoring, and management (CA-12a and 12b)	
Potential Effects: Chicks crushed by vehicle; Breeding/foraging/roosting disturbance; Chicks separated from adult(s) and inadequately fed or exposed to predation/inclement weather; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Chicks/eggs abandoned when adults are disturbed, injured, or killed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 67	Seasonal enclosure and symbolic fencing will continue to be installed and completed by the March 1 start of the SNPL breeding season.
AMM 68	Monitors will continue to be those individuals approved by the USFWS and/or listed on appropriate permits for the covered activities.
AMM 69	Single-nest or smaller enclosures will continue to be erected when at least two eggs have been laid, for nests in the non-motorized area, to help reduce abandonment threat.
AMM 70	Fence maintenance and bumpout installation will continue to be timed to avoid high wind periods and other periods deemed critical for chick or nest survival, like extreme temperatures.
AMM 71	Monitors will continue to escort maintenance vehicles driving through the closed shoreline, as necessary. All CDPR staff driving within the closed shoreline area will continue to be trained on how to operate a vehicle on the shoreline when SNPL broods are present to avoid collision or other harm, e.g., scanning in front of vehicle, driving where chicks are less likely to occur, avoiding wrack, and keeping speeds at or below 5 mph.
AMM 72	Monitors will continue to conduct surveys prior to conducting fence maintenance activities. If nesting SNPL could be impacted by activities, monitors will postpone maintenance, if appropriate. Monitors will remain on site during fence maintenance/ installation conducted by hand to monitor nearby nests and minimize disruption to SNPL.
AMM 73	If any chicks are flushed out of the enclosure, monitors will continue to follow and protect chicks until they move back inside the enclosure as described in section Error! Reference source not found.
AMM 74	Camera training will continue to be given by staff who are permitted by USFWS to use nest monitoring cameras. Training will continue to occur outside the nesting area using fake nests on which the trainee can practice. Training will continue to include reading the instruction manual of each camera system, practicing efficient camera installation, and proper placement and concealing of cameras. After the initial training, the trainee will continue to accompany the permitted staff during camera installation on two or more active nests, as well as lead the camera installation while under the guidance of the permitted staff. Cameras will continue to only be placed if the wind speed is below 15 mph, the sand temperature is below 83°F, or if it is not raining.
AMM 75	Camera set-up will continue to be delayed if there has been a recent sighting of a predator.
AMM 76	Monitors will continue to evaluate whether a nest is a good candidate for predator monitoring prior to installing still or video cameras. Still or video cameras will not be placed in areas where they are readily visible to the public.
AMM 77	Cameras will continue to be installed when the nest has a complete clutch when possible. In some instances, as determined by the Senior Environmental Scientist, a camera needs to be installed prior to the nest having a complete clutch. In these instances, the camera will continue to be installed with minimal disturbance to SNPL, and a CDPR Environmental Scientist will continue to remain on-site to ensure the adult returns to the nest.

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
AMM 78	Trail cameras will continue to be placed a minimum of 10 feet away from the selected nest. Time spent near the nest and total equipment set-up will continue to be limited to less than fifteen minutes.
AMM 79	Monitors will continue to monitor the nest after cameras are deployed to ensure the bird returns to the nest. If the bird does not return within 20 minutes, monitors will continue to remove the cameras immediately and cameras will not be replaced at that nest.
AMM 80	Monitors will continue to check nests with cameras daily, using binoculars or a spotting scope to ensure the adult is present and not disturbed by the camera. Monitors will continue to remove the cameras immediately if there is evidence that the placement and/or operation of the camera is jeopardizing the safety of individual nests, eggs, and young. Monitors will continue to check nests with cameras daily using binoculars or a spotting scope to ensure the adult is present and not disturbed by the camera. Monitors will continue to remove the cameras immediately if there is evidence that the placement and/or operation of the camera is jeopardizing the safety of individual nests, eggs, and young.
Potential Effects: Adult and chick mortality/injury during banding; Chicks/eggs crushed by vehicle or monitor; Chicks flushed into the open riding area; Chicks injured or killed due to adult aggression from brood movement caused by monitoring activities; Adults killed or injured by striking protective fencing; Adults, juveniles, chicks, eggs depredated at single-nest exclosures	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 81	CDPR will continue to use a master bander for the SNPL breeding season. The master bander will continue to be responsible for the banding of all SNPL chicks, and if determined necessary, banding of SNPL adults. The master bander will continue to work in consultation with and under the direction of the Senior Environmental Scientist. The banding of newly hatched SNPL chicks will continue to follow protocols approved by USFWS. The master bander will continue to report all banding data and records per guidelines established by the USFWS.
AMM 82	To minimize the risk of additional injury or mortality associated with leg bands, monitors will continue to capture birds that show signs of leg injury due to bands as soon as possible and remove the bands.
AMM 83	Monitors will continue to only enter the seasonal exclosures during appropriate weather conditions (e.g., low to no wind, no rain, outside periods of extreme temperatures). Monitors will also continue to survey the area for potential predators prior to entering the seasonal exclosures and will not enter the enclosure until potential predators are absent from the area.
AMM 84	Monitors will continue to be aware of the location of nests, broods, and adults when monitoring within the seasonal exclosures and along the shoreline, and all efforts will continue to be made to minimize disturbance to reduce the likelihood of adults moving off the nest, broods moving into the territory of another nest, and/or chicks being separated from attending adults.
AMM 85	Monitors will continue to visually check the area under and surrounding any vehicle that has been idle near the seasonal enclosure and in the open riding area to ensure SNPL individuals are not present underneath the vehicle.
AMM 86	The top of the Southern Exclosure fencing will continue to be lined with a strip of thicker plastic fencing (orange silt construction fencing cut into approximately 1-foot sections), which will cover most of the western and northern fenced areas to increase the fence visibility to flying birds. If staff resources are available, some of the eastern fenceline and bumpout fencing will also be lined with this strip.
AMM 87	Monitors will continue to inspect the integrity of exclosures regularly.
AMM 88	Single-nest exclosures will continue to be monitored closely to identify if predators are keying in on them.
AMM 89	Monitors will continue to closely survey the east fence of the Southern Exclosure when banding or other monitoring activities are taking place on foot inside the fenced area during the chick-rearing period. They will continue to take appropriate action to coax any SNPL chicks that move out of the enclosure back into the enclosure and will ascertain if they remain there after the monitoring activities in the enclosure have ended.
AMM 90	CDPR will continue to salvage eggs and chicks as part of the ongoing covered species management program, as determined to be necessary by a qualified biologist and in coordination with the USFWS, to be raised in captivity by an approved wildlife facility. Chicks will continue to be raised in a manner that does not imprint on humans and released back into the wild when fledged. Captive care will continue to only be used selectively and not as a substitute for responding to the primary causes of elevated egg or chick abandonment rates.
Natural Resources Management: Tidewater goby and salmonid surveys (CA-13)	
Potential Effects: Chicks/eggs crushed by vehicle or monitor; Breeding/foraging/roosting disturbance	
Avoidance Minimization Measures:	
AMM 91	Daily SNPL monitoring during the SNPL breeding season will continue to include areas where fisheries surveys would occur. Fisheries surveys will continue to be adjusted if daily SNPL monitoring determines that SNPL breeding would be affected, including by postponing surveys within 300 feet of an SNPL nest.
AMM 92	Fisheries survey staff will continue to include personnel experienced with conducting fisheries surveys within SNPL habitat and may include permitted SNPL monitors.
Natural Resources Management: CRLF surveys (CA-14)	
Potential Effects: Chicks/eggs crushed by vehicle or monitor; Breeding/foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
Natural Resources Management: Listed plant mgmt. activities (CA-15)	
Potential Effects: Chicks/eggs crushed by vehicle or monitor; Breeding/foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 93	If surveys are necessary during the breeding season and in a known or potential nesting area, one or two experienced biologists will continue to conduct listed plant surveys. Established protocols for the surveys require that any biologist conducting the work be a skilled botanist with experience in identifying the target plant species or be accompanied by a botanist. The biologist must also be a skilled SNPL monitor included on the List of Authorized Individuals for the HCP area 10(a)(1)(A) Recovery Permit or approved by the USFWS at least 30 days prior to the start of activities or must be accompanied by a biologist with these qualifications.
AMM 94	Prior to conducting botanical surveys, the team will continue to review records of all known SNPL nesting sites in the survey area. No surveys are conducted within 150 feet of known nesting sites until the nest fates are determined (i.e., hatch or fail), and the brood and attending adult are known to have left the area. No surveys or walking within sight of nests occurs for nests that are close to hatch or newly hatched.
AMM 95	Botanical surveys may be conducted in areas without known nests; however, the team will continue to follow existing nest search protocols to identify new nests, breeding behavior, and the presence of adults tending broods.
AMM 96	If new nests, breeding behavior, or adults tending broods are observed in an area during surveys, the team will continue to immediately leave the area until the nest fates are determined or breeding/brooding activity is no longer occurring in the area.
AMM 97	Botanical surveys will continue to take the minimum time necessary for data collection to avoid disturbance to breeding birds in the area. Botanical survey will continue to take no longer than 15 minutes at each site within the breeding area.
AMM 98	All botanical surveys will continue to be conducted under similar constraints as nest search surveys including during appropriate weather conditions, wind conditions, times when predator activity is not occurring, and other precautions per SNPL monitoring protocol in the HCP area.
Natural Resources Management: Habitat restoration program (CA-16)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Natural Resources Management: Invasive plant and animal control (CA-17)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 99	Invasive plant or animal control will continue to be conducted when SNPL are not observed to be present.
Natural Resources Management: Habitat Monitoring System (HMS) implementation (CA-18)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Natural Resources Management: Water quality monitoring projects (CA-19)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: General Facilities Maintenance (CA-21)	
Potential Effects: Breeding/foraging/roosting disturbance; Chicks/eggs abandoned when adults are disturbed, injured, or killed; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Adults/juveniles/chicks struck by vehicles; Eggs crushed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 100	CDPR will continue to train park staff and "visiting rangers" annually, or as needed, to ensure that staff can do their jobs with minimal impact to SNPL. At a minimum, staff will continue to receive information about basic SNPL biology, listing status, and relevant park rules and regulations and how to respond to observed violations of park rules and regulations that protect SNPL.
AMM 101	All CDPR staff will continue to observe closures, speed limits, and other restrictions aimed at protecting SNPL and CLTE, unless emergency conditions warrant otherwise.
AMM 102	CDPR monitors will continue to conduct surveys to ascertain the presence of SNPL nests, adults, and chicks within and adjacent to potential maintenance areas, if such activities must be carried out during the breeding season (March 1 through September 30) in and adjacent to areas where SNPL are potentially nesting, foraging, or roosting. If CDPR monitors find that the activities may impact, disturb, or result in take of adult birds, chicks, or eggs, the activities will be delayed until the monitor determines SNPL will not be impacted.
AMM 103	CDPR monitors will continue to evaluate the potential for maintenance activities that occur during the non-breeding season (October 1 through February 29) to impact or disturb non-breeding SNPL or to modify SNPL breeding habitat. Activities will continue to be modified, as necessary, to minimize disturbance or impacts to breeding habitat.
AMM 104	Mechanical trash removal will not occur in areas where any SNPL are present.

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
AMM 105	Mechanical trash removal will only occur above the highest high tide, avoid all wrack/surf cast kelp, avoid all live vegetation, and avoid lagoons and flowing creeks.
AMM 106	Equipment will observe all speed limits and will not exceed 10 mph.
AMM 107	Mechanical trash removal will not be conducted within 500 feet of any known nesting area.
AMM 108	Natural resources staff will inspect and approve the area subject to mechanical trash removal prior to each deployment. Natural resources staff will remain on site or be immediately available for monitoring purposes.
AMM 109	In conjunction with mechanical trash removal, CDPR will implement a study to establish baseline conditions of invertebrate populations, including talitrids, and to determine the impact of mechanical trash removal on these populations. The study will, at a minimum, compare invertebrate abundance in mechanical trash removal areas to baseline conditions prior to the start of mechanical trash removal to areas where mechanical trash removal is absent. If CDPR finds a significant decline in invertebrate numbers in mechanical trash removal areas, additional measures will be implemented (e.g., habitat enhancement measures, reduction in frequency of mechanical trash removal, and/or reduction in mechanical trash removal locations).
Potential Effects: Limited potential breeding habitat reduced by the footprint of vault toilets	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Trash Control (CA-22)	
Potential Effects: Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Wind fencing installation, maintenance, and removal (CA-23)	
Potential Effects: Foraging and roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Sand ramp and other vehicular access maintenance (CA-24)	
Potential Effects: Foraging and roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 110	During the breeding season, the sand ramps will continue to be inspected a minimum of once per day to identify SNPL individuals and nests. This will continue to occur during the daily survey. During the non-breeding season, the sand ramps will continue to be regularly inspected for roosting activity. No work occurs if birds are roosting within 150 feet of the work area until the birds leave the area on their own accord.
Park Maintenance: Perimeter and vegetation island fence installation, maintenance, and removal (CA-27)	
Potential Effects: Foraging and roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Cable fence maintenance and replacement (CA-28)	
Potential Effects: Foraging and roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Heavy equipment response in all areas of SVRA of Oceano Dunes District (CA-29)	
Potential Effects: Similar to general facilities maintenance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Minor grading (less than 50 cubic yards) (CA-30) ³	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Boardwalk and other pedestrian access maintenance (CA-31)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Visitor Services: Ranger, life guard, and park aide patrols (CA-32)	
Potential Effects: Similar to general facilities maintenance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	

³ AMMs to reduce the effects of grading to maintain the seasonal enclosure are included in CA-12a: Installation and Maintenance of Western Snowy Plover and California Least Tern Protection Fence. AMMs to reduce the effects of grading to maintain the boundary fence are included in CA-28: Cable Fence Maintenance and Replacement.

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL
Visitor Services: Emergency response (CA-33)
Potential Effects: Similar to general facilities maintenance
Avoidance Minimization Measures: All AMMs apply, as appropriate.
AMM 111 Emergency responders will continue to be informed of the locations of areas that are sensitive (e.g., seasonal exclosures, shoreline foraging/brooding areas), to the extent feasible. If possible, qualified biologists will continue to escort emergency vehicles into and out of areas that are sensitive.
AMM 112 Locations of non-breeding flocks of SNPL will continue to be identified and appropriate signage displayed to advise all visitors and emergency responders of the location of sensitive resource areas.
Visitor Services: Access by non-CDPR vehicles (CA-34)
Potential Effects: Adults/juveniles/chicks struck by vehicles; Foraging/roosting disturbance; Chicks/eggs abandoned when adults are disturbed, killed, or injured; Chicks separated from adult(s) and inadequately fed or exposed to predation/inclement weather; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash
Avoidance Minimization Measures: All AMMs apply, as appropriate.
Visitor Services: Beach Concessions (CA-36)
Potential Effects: Similar to access by non-CDPR vehicles
Avoidance Minimization Measures: All AMMs apply, as appropriate.
AMM 113 A focused training program will continue to be provided for all concessionaires and OHV rental employees each year. The training program will consist of, at a minimum, a description of SNPL and its life history and park rules and regulations protecting SNPL. Concessionaires and OHV rental employees will continue to be provided with information handouts consisting of photographs and covered species information. These information handouts will continue to be provided to customers and other members of the public to encourage them to recognize and avoid covered species.
Other HCP Covered Activities: Motorized Vehicle Crossing of Creeks (CA-40)
Potential Effects: Adults/juveniles/chicks struck by vehicles; Nesting/foraging/roosting disturbance
Avoidance Minimization Measures: All AMMs apply, as appropriate.
Other HCP Covered Activities: Pismo Creek estuary seasonal (floating) bridge (CA-41)
Potential Effects: Foraging/roosting disturbance
Avoidance Minimization Measures: All AMMs apply, as appropriate.
AMM 114 If, in the opinion of the Senior Environmental Scientist or monitors, visitor activities are significantly disrupting SNPL foraging and/or roosting behavior, the bridge will be closed to public use until the birds have left the area.
Other HCP Covered Activities: Replacement of the Safety and Education Center (CA-43)
Potential Effects: Chicks/eggs crushed by vehicle; Foraging/roosting disturbance
Avoidance Minimization Measures: All AMMs apply, as appropriate.
Other HCP Covered Activities: Dust control activities (CA-44)
Potential Effects: Adults/juveniles/chicks struck by vehicles; Breeding/foraging/roosting disturbance; Eggs crushed; Chicks/eggs abandoned when adults are disturbed, killed, or injured; Chicks separated from adult(s) and inadequately fed or exposed to predation/inclement weather; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Adults, juveniles, chicks, eggs more susceptible to predation due to increased vegetation; Breeding/foraging/roosting habitat altered
Avoidance Minimization Measures: All AMMs apply, as appropriate.
Other HCP Covered Activities: Cultural Resources Management (CA-45)
Potential Effects: Breeding/foraging/roosting disturbance
Avoidance Minimization Measures: All AMMs apply, as appropriate.
Other HCP Covered Activities: Special projects (CA-49)
Potential Effects: Breeding/foraging/roosting disturbance; Breeding habitat reduced by footprint of small project
Avoidance Minimization Measures: All AMMs apply, as appropriate.
Other HCP Covered Activities: Reduction of the Boneyard Exclosure (CA-50)
Potential Effects: Reduction in protected nesting habitat
Avoidance Minimization Measures: All AMMs apply, as appropriate.

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL	
Other HCP Covered Activities: Use of pesticides (CA-51)	
Potential Effects: Breeding/foraging/roosting disturbance; Exposure from contact with contaminated prey or vegetation; Exposure from contact with residues, inhalation of vapors	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 115	When pesticide application must occur near SNPL breeding habitat, work will continue to be conducted between October 1 and February 28 to avoid the breeding season. A qualified biologist will continue to conduct a survey for SNPL 24 hours prior to the application and instruct the work crew on their identification and biology. If SNPL is observed, all work will be stopped immediately until the CDPR biologist arrives and assesses the situation to determine if the work can proceed.
AMM 116	Pesticides will continue to be applied when wind speed is below 10 mph at the perimeter of the application site as measured by an anemometer on the upwind side.
AMM 117	Pesticide application will continue to be postponed if soil moisture is at field capacity and a storm event, forecasted by the National Oceanic and Atmospheric Administration (NOAA) or National Weather Service (NWS), is to occur within 48 hours following application; or a storm event likely to produce runoff from the treated area is forecasted by NOAA/NWS to occur within 48 hours following the application.
AMM 118	CDPR will continue to ensure that all workers are trained in the safe and effective use of pesticides in sensitive habitats.
AMM 119	CDPR will continue to ensure that trained resource personnel are present at all phases of the work to ensure that pesticide application activities do not result in impacts to covered species.
AMM 120	If pesticides are spilled, they will continue to be prevented from entering any water bodies to the extent practicable. CDPR staff and contractors will continue to be trained to contain any spilled material and are familiar with the use of absorbent materials. Spills will continue to be cleaned up according to label instructions, and all equipment used to remove spills will continue to be properly contained and disposed of or decontaminated, as appropriate. Applicators will continue to report spills as required by CDPR policy and in a manner consistent with local, state, and federal requirements.
AMM 121	Post-treatment, CDPR will continue to initiate monitoring, which typically consists of mapping, photo documentation, regular inspections, and depending on location and species, some formalized monitoring resulting in several years' worth of data and subsequent reporting.
AMM 122	CDPR will continue to take the following steps when using herbicide: <ul style="list-style-type: none"> • Prior to treatment, CDPR's PCA or qualified staff will continue to evaluate sites within the HCP area for invasive species removal. Weed populations will continue to be targeted based on site and weather conditions, historic weed growth, or other information. • CDPR will continue to determine the appropriate method for treating a target area (e.g., manual removal, aerial application, backpack sprayer, truck mounted sprayer). If the application can be made without negatively impacting water quality or covered species, then an application will continue to be made. • All pesticide applications will continue to be made according to the product label in accordance with regulations of the EPA, California Environmental Protection Agency (CalEPA), California Division of Occupational Safety and Health (Cal OSHA), DPR, and the local Agricultural Commissioner. CDPR's PCA and DPR-licensed Qualified Applicator License (QAL) holders will continue to regularly monitor updates and amendments to the label so that applications are in accordance with label directions.
Other HCP Covered Activities: CDPR UAS use for park activities (CA-52)⁴	
Potential Effects: Breeding/foraging/roosting disturbance	
<i>Year-Round</i>	
AMM 123	UAS will be flown with remote control and a built-in screen that shows battery life. The UAS will be equipped with software or other safeguard to ensure it will alert the operator when it reaches a minimum safe amount of battery life required for a return flight.
AMM 124	UAS operators will attend a formal training and be certified as a Pilot in Command prior to conducting solo flights.
AMM 125	UAS operators will have an established flight plan with a specific purpose determined following all Federal Aviation Administration (FAA) regulations.
AMM 126	UAS will be kept in view of the operator at all times.
AMM 127	UAS operators will not conduct flights in the HCP area without approval from the Senior Environmental Scientist.
<i>Breeding Season</i>	
AMM 128	All flights within 328 feet of SNPL nesting or brood-rearing habitat will require a USFWS-approved monitor to pilot or assist with flight logistics and monitoring, regardless if birds are confirmed in the area prior to flight.
AMM 129	Prior to flying the UAS into or near (within 328 feet of) nesting or chick-rearing areas, the permittee will follow all existing monitoring guidelines that have been established with USFWS.
AMM 130	UAS will not enter or fly within 328 feet of the SNPL nesting areas if the wind speed is above 15 mph or strong enough to move sand (or will be before or after completion of set up and exit from the enclosure), the sand temperature is 83°F, or if it is raining.

⁴ AMMs for UAS use may be modified based on best available science and new information on the impacts of drone use on wildlife.

Table B-1: Avoidance and Minimization Measures (AMMs) for SNPL

AMM 131	UAS flights will be initiated at least 328 feet from the closest known SNPL nest. The take-off and landing area will be clearly marked. If possible, take-off and landing areas will be out of direct sight from known nests.
AMM 132	UAS will only be deployed when a qualified biologist is confident the activity will not jeopardize the safety of SNPL individuals, nests, eggs, and young.
AMM 133	Prior to every UAS flight, a qualified biologist will scan the area for SNPL. If no birds are observed, the UAS flight can commence with monitoring, as appropriate. If a SNPL is observed in the area, it must be monitored by a qualified biologist during the remainder of the flight. If significant disturbance to SNPL is observed, the biologist may recommend increasing the altitude of the drone (but still remaining below 400 feet to follow FAA guidelines) and/or guiding the drone to a safer area.
AMM 134	The UAS will be kept at least 100 feet above the ground at all times to reduce disturbance to nesting birds and below 400 feet to follow FAA guidelines.
AMM 135	The flight plan will not include erratic flight patterns that could be interpreted as an avian predator by SNPL.
<i>Non-breeding Season</i>	
AMM 136	UAS will only be deployed when a qualified biologist is confident that the activity will not jeopardize the safety of SNPL individuals.
AMM 137	Prior to every UAS flight, a qualified biologist will scan the area for SNPL. If no birds are observed, the UAS flight can commence with monitoring, as appropriate. If an SNPL is observed in the area, it must be monitored by a qualified biologist during the remainder of the flight. If significant disturbance to SNPL is observed, the biologist may recommend increasing the altitude of the drone (but still remain below 400 feet to follow FAA guidelines) and/or guiding the drone to a safer area.
AMM 138	Take-off and landing areas will be clearly marked in the field and should be out of sight from known individuals.
AMM 139	If SNPL are present, the UAS will fly at least 100 feet above ground at all times to reduce disturbance to SNPL and will be kept at below 400 feet to follow FAA guidelines.
AMM 140	The flight plan will not include erratic flight patterns that could be interpreted as an avian predator by SNPL.

Table B-2: Avoidance and Minimization Measures for CLTE	
Park Visitor Activities: Motorized recreation (CA-1)	
Potential Effects: Adults/juveniles/chicks struck by vehicles; Breeding/roosting disturbance; Chicks separated from adult(s); Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Chicks/eggs abandoned when adults are disturbed, killed, or injured; Eggs crushed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 1	CDPR will continue to create educational content on the Oceano Dunes SVRA and Pismo State Beach websites that includes life history information and measures being taken to protect all HCP covered species found at the parks. Information can be updated as needed and visitors can find out what the parks are doing and what they can do to protect the covered species. Covered species information will continue to be included as part of ongoing interpretative programs as well.
AMM 2	Signs explaining CLTE natural history and protection measures in place in the HCP area will continue to be posted for information and education of visitors in the HCP area. Interpretive panels at beach access points (e.g., Sand Highway, Oso Flaco Lake, Pier Avenue, and Grand Avenue) and signs identifying closed areas will continue to be erected to increase public awareness of threats to nesting CLTE and to inform the public of the park's management efforts to protect special-status species. CDPR will also continue to provide a low wattage radio station with a repeated recording of park information, including information about protection of sensitive species. The radio station will play 7 days a week, 24 hours a day and provides updated information on measures taken to protect CLTE. Information on CLTE will also continue to be posted on the Oceano Dunes SVRA and Pismo State Beach websites.
AMM 3	CDPR will continue to enforce resource protection regulations. All enclosed areas will continue to be posted with signs in English and Spanish. State Park rangers will continue to have the responsibility to enforce park regulations enacted to protect CLTE, including issuing citations for incidents of trespass into the area closed for nesting. In addition, resource staff monitors will continue to contact visitors violating park regulations and, where appropriate, contact rangers who will continue to issue a citation.
AMM 4	Posted speed limits will continue to be enforced throughout the HCP area.
AMM 5	CDPR will continue to fence off the Southern Enclosure and North Oso Flaco during the breeding season (March 1 to September 30) to limit vehicle and human disturbance to CLTE nesting areas (and to protect CLTE from terrestrial predators).
AMM 6	Habitat enhancement will continue to be avoided within 100 feet of the fence that borders the open riding area to discourage recreation near nesting that may cause disturbance to breeding birds.
AMM 7	Daily monitoring will continue to take place during the CLTE breeding season to enable better identification of potential human use related threats to CLTE and to summon law enforcement assistance, if needed, to prevent or eliminate any human use related threats to the species.
AMM 8	If a CLTE is found injured or dead, USFWS and/or CDFW will be contacted within 30 minutes of finding the bird.
AMM 9	The open riding area and other potential habitat outside the seasonal enclosures will continue to be inspected a minimum of once per day to identify CLTE individuals and nests. Any CLTE breeding activity in these areas (e.g., tracks, scrapes, pairs observed, or nesting flight behavior) will continue to be monitored closely. These areas will continue to be marked and rechecked during the day and one person will be assigned each morning to recheck any potential breeding areas. All CLTE tracks outside the seasonal enclosures will continue to be followed to check for potential nests. Any nest found will continue to be immediately protected with a large single-nest (i.e., 330-foot radius) enclosure to protect nests from people and predators. If feasible, a travel corridor will be erected to provide a safe passage for chicks to the existing seasonal enclosure.
AMM 10	If a CLTE nest is established within the open riding area, but within 500 feet of the existing seasonal enclosure, fencing will continue to be erected to enlarge the enclosure so as to encompass the nest site (if topography allows and if safe public traffic patterns are available). Fencing will continue to be placed at a minimum of 330 feet away from the nest site.
AMM 11	When two or more nests in the open riding area are located within 500 feet of each other and are 500 feet or more away from the seasonal enclosure, they will continue to be encompassed into a new large seasonal enclosure if topography allows. Fencing for such new seasonal enclosures will continue to be maintained a minimum distance of 330 feet from the nest site.
AMM 12	If a CLTE nest is initiated inside the Southern Enclosure and close to the enclosure fence bordering the riding area, CDPR staff will continue to install additional fencing (i.e., "bumpout") to maintain a perimeter of a minimum of 330 feet from the open riding and camping area to the nest. The public is excluded from these bumpouts, but permitted monitors still enter the buffer area as needed for monitoring. These bumpouts will continue to be monitored regularly. If an incubating bird is disturbed by normal recreational activity, the bumpout will be increased in size, as needed. All nests are monitored for disturbance, and any nest that is disturbed by regular recreation activity may receive a bumpout. This additional fencing will continue to remain in place during the period when nests are active or chicks are found in this area. Once chicks move out of the area or reach fledge age, the bumpouts will be removed.
AMM 13	At least one CDPR vehicle or trailer will continue to be available throughout the CLTE breeding season to carry all tools and equipment necessary to immediately construct a single-nest enclosure or bumpout.
AMM 14	A 330-foot minimum buffer from recreation activities will continue to be established around all CLTE nests. This distance will be increased if any take (i.e., injury, harassment, or CLTE reacting negatively to normal recreational activities) of CLTE is observed.
AMM 15	If CLTE chicks are observed traveling outside of a single-nest enclosure, CDPR monitors will continue to increase the enclosure in size up to a 600-foot radius. Silt fencing will continue to be used to reduce CLTE travel outside the enclosure. CDPR will continue to coordinate with USFWS regarding the setback distances if the recommended setback distances cannot be achieved.
AMM 16	CDPR monitors will continue to monitor the location of the CLTE night roost each night as viewing conditions allow. CDPR has a protocol in place to protect the night roost if it is found in an area where birds would be vulnerable from recreation activity, including

Table B-2: Avoidance and Minimization Measures for CLTE	
	closing off the area with fencing and implementing a 330-foot buffer around the night roost location. Fencing will continue to be added as deemed necessary by the Senior Environmental Scientist or other qualified biologist and fencing will continue to be removed once the night roost is no longer present. This protocol will continue to be implemented if this situation occurs.
AMM 17	CDPR peace officers will continue to provide focused enforcement of HCP area regulations (e.g., posted speed limits). CDPR peace officers will continue to respond to requests by monitors for assistance with CLTE protection and security. Enforcement of laws affecting safety of CLTE will continue to be the highest non-emergency Law Enforcement priority.
AMM 18	During anticipated high visitor-use periods, such as Memorial Day Weekend, Labor Day Weekend, July 4 Weekend (or as determined by historic visitor attendance records), monitoring staff will continue to be on site for extended hours to monitor within the open riding area and identify threats to all life stages of CLTE from public recreational activity.
AMM 19	During non-holiday weekends (i.e., Friday and Saturday), a minimum of two CDPR peace officers will continue to be on duty and available from 0600 through 2400 each day to enforce regulations (e.g., 15-mph speed limit, dog leash laws, litter). During non-holiday weekdays (i.e., Sunday through Thursday), a minimum of two CDPR peace officers will continue to be on duty from 0700 through 2000 each day to enforce regulations.
AMM 20	During holiday periods, one monitor will continue to be assigned to ensure that no unauthorized entry is made into the north end of the Southern Enclosure during both daylight and evening hours.
AMM 21	During major holiday periods, CDPR peace officers will continue to be on duty 24 hour/day. From 0700 to 2000, a minimum of three ranger/peace officers will be on duty. From 2000 to 0200, a minimum of two ranger/peace officers will continue to be on duty. During mid-day periods, when visitor attendance is highest, as many as four ranger/peace officers will continue to be on duty. Rangers/peace officers will continue to enforce all regulations (e.g., 15-mph speed limit, dog leash laws, litter) in the HCP area.
AMM 22	CDPR will continue to use an adaptive management approach, where information and experience from previous breeding seasons is used to develop appropriate AMMs in subsequent seasons to minimize or eliminate impacts to CLTE from covered activities.
AMM 23	CDPR will continue to implement management measures and modify protocols in accordance with ongoing adaptive management and based on recommendations in annual monitoring reports (section Error! Reference source not found.).
Potential Effects: Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash associated with recreational activity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 24	Trash dumpsters will continue to be provided near the OHV staging area near Post 2. The location of the trash dumpsters will be changed, as necessary, to avoid disturbance to any nearby active CLTE nests.
AMM 25	CDPR will continue to use trash dumpsters/receptacles designed to prevent access by predators such as gulls. CDPR will continue to explore options to reduce the movement of trash from the dumpsters and reduce predator presence at the dumpster sites.
AMM 26	CDPR will continue to remove or modify signs, fence posts, and other human-made features to eliminate perches for predators in areas where they could impact CLTE.
AMM 27	In coordination with USFWS, the predator management plan will continue to be reviewed and updated annually, if necessary, to identify appropriate responses to predators.
AMM 28	When additional options for managing predators are needed, selective live-trapping and relocation of avian predators will continue to be conducted by authorized staff or subcontractors, and selective live-trapping and relocation or lethal removal of mammalian and avian predators will continue to be conducted by USDA Wildlife Services (or other authorized subcontractor).
AMM 29	CDPR staff will continue to remove animal carcasses in or adjacent to nesting and chick-rearing habitat.
AMM 30	Where feasible, CDPR staff will continue to harass predators to flush them from sensitive areas. Hazing techniques used include firing a bird whistler and approaching predators where appropriate. CDPR will continue to coordinate closely with predator specialists regarding the location of known or potential nests and chick activity, prior to the specialists conducting work.
AMM 31	All visitors will continue to be informed that they must deposit their trash in dumpsters/receptacles provided. All campers will be offered plastic garbage bags. All park staff will continue to carry trash bags in each vehicle and make them available to visitors for removing trash and litter from visitor use areas.
AMM 32	CDPR will continue to manually remove litter and garbage from beaches.
AMM 33	Enclosure fencing will continue to be buried, as feasible, to limit terrestrial predators from undermining the fence.
Potential Effects: Breeding/foraging/roosting habitat quality reduced; Chicks, eggs, adults, juveniles potentially exposed to predation and/or inclement weather by altered habitat	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 34	CDPR will continue to place woodchips, large woody material, beach wrack, and native plants throughout the seasonal enclosures to serve as natural shelter. Woodchips will be spread in patches in the 6, 7, and 8 enclosures in areas of barren sand and over thinning woodchip patches remaining from the previous year(s).
AMM 35	CDPR staff will continue to collect wrack in the open riding area and disperse it in the Southern Enclosure.
AMM 36	Driftwood will continue to be placed throughout the Southern Enclosure to serve as natural shelter for CLTE chicks. Tern shelters are also be used, as necessary and feasible.
AMM 37	The Superintendent may consider implementing additional habitat enhancement measures if Environmental Scientists determine such measures may aid in meeting the criteria laid out in biological objectives for CLTE (section Error! Reference source not found.). If implemented, the value of any additional habitat enhancement measure to nesting SNPL and CLTE will be studied to evaluate the measure's effectiveness at improving reproductive success and to determine whether and how the measure should be implemented in future seasons.

Table B-2: Avoidance and Minimization Measures for CLTE	
Park Visitor Activities: Camping (CA-2)	
Potential Effects: Similar to motorized recreation activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Pedestrian activities (CA-3)	
Potential Effects: Breeding/foraging/roosting disturbance; Chicks and eggs picked up by visitors; Chicks/eggs abandoned when adults are disturbed, injured, or killed; Chicks separated from adult(s) and inadequately fed; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 38	If a CLTE nest is established within 330 feet of a restroom facility, permanent restrooms buildings will continue to be closed to public use and enclosure fencing will continue to surround and isolate the restroom to prevent public use. In addition, chemical toilets will continue to be relocated to a minimum distance of 330 feet from any CLTE nest site.
AMM 39	If, in the opinion of the Senior Environmental Scientist or monitors, visitor activities are significantly disrupting CLTE behavior, the footbridge hand railing at Oso Flaco Lake will continue to be closed to public use, or types or public use on the boardwalk will continue to be temporarily prohibited until CLTE have left the lake area.
AMM 40	During daylight hours on major holiday periods, one CDPR peace officer will continue to be assigned to patrol the beach. Duties include patrolling outside the nesting enclosure areas to ensure that no entry is made into the enclosures.
Potential Effects: Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash associated with recreational activity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Bicycling and golfing (CA-4)	
Potential Effects: Similar to pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Fishing (CA-5)	
Potential Effects: Similar to pedestrian activities, although disturbance can be for extended periods given the stationary nature of fishing	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Potential Effects: Adults/juveniles/chicks potentially entangled in discarded fishing line/hooks; Chicks, eggs, adults, juveniles potentially exposed to predation by discarded bait	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 41	Public outreach to fisherman in the Oso Flaco Lake area will continue to be conducted by CDPR staff regarding CLTE life history and AMMs.
AMM 42	Anglers will continue to be encouraged to properly dispose of fishing lines, hooks, and bait at various locations within the park where trash receptacles are located.
Park Visitor Activities: Dog walking (CA-6)	
Potential Effects: Similar to pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 43	Dogs within the HCP area will continue to be required to be on a leash no longer than 6 feet at all times and within the owner's complete control.
AMM 44	Dogs, other than service dogs, will continue to be banned in the Oso Flaco area.
AMM 45	Waste bag locations will continue to be provided in the HCP area to encourage pet owners to pick up dog waste.
AMM 46	CDPR will continue to enforce dog leash and dog waste regulations, especially in areas where they could impact CLTE. Resource staff monitors and/or park rangers will continue to contact visitors violating park regulations and, where appropriate, rangers will continue to issue a citation.
Park Visitor Activities: Equestrian recreation (CA-7)	
Potential Effects: Same as pedestrian activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 47	Horses will continue to be banned in the Oso Flaco area.
Park Visitor Activities: Boating/surfing (CA-8)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Aerial/wind driven activities (CA-9)	
Potential Effects: Foraging/breeding/roosting disturbance	
AMM 48	Pursuant to Superintendent's Order (section Error! Reference source not found.), CDPR will continue to prohibit kite flying and kiteboard launching and landing south of the Pier Avenue ramp during the SNPL and CLTE breeding season (March 1 through September 30).
AMM 49	Open water kite surfing, as well as launching and landing, will continue to be prohibited south of Post 6 during the CLTE breeding season (March 1 through September 30).

Table B-2: Avoidance and Minimization Measures for CLTE	
Park Visitor Activities: Holidays (CA-10)	
Potential Effects: Effects for all covered activities on holidays are not expected to be different from those on non-holidays	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 50	Fireworks will continue to be prohibited in the HCP area.
AMM 51	On July 4, State Park Visitor Service Staff or State Park Volunteers will continue to be assigned to the large Seasonal Exclusion to help prevent the use of fireworks over the area.
Park Visitor Activities: Special events (CA-11)	
Potential Effects: Effects based on the specific event activity(ies) permitted (see section Error! Reference source not found.)	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 52	All permits authorizing special events will continue to include AMMs to reduce disturbance to CLTE. Specific AMM recommendations will be based on past experience and dependent on the event location, timing, and potential to impact covered species.
AMM 53	CDPR will continue to monitor special events to ensure participants follow CLTE protective measures.
AMM 54	All UAS operators will follow the current CDPR policies regarding UAS use.
AMM 55	Specific AMMs for UAS use will be included in the permit that all UAS operators must obtain from CDPR. For example, UAS will not be allowed south of Post 5 during the breeding season and will be limited year-round along the shoreline. In addition, a USFWS-approved monitor will accompany non-CDPR UAS operators at any time of year if it is determined there is potential to impact covered species. Stable flight paths are preferred to minimize the UAS being perceived as a predator.
Natural Resources Management: CLTE fencing, monitoring, and management (CA-12a and 12b)	
Potential Effects: Chicks crushed by vehicle; Breeding/foraging/roosting disturbance; Chicks separated from adult(s) and inadequately fed; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Chicks/eggs abandoned when adults are disturbed, injured, or killed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 56	Seasonal exclusions and symbolic fencing will continue to be installed prior to the March 1 start of the CLTE breeding season.
AMM 57	Monitors will continue to be those individuals approved by the USFWS and listed on appropriate permits for the covered activities.
AMM 58	Single-nest exclusions (330-foot radius) will continue to be erected as close to initiation of incubation as possible to help reduce abandonment threat.
AMM 59	Fence maintenance and bumpout installation will continue to be timed to avoid high wind periods and other periods deemed critical for chick or nest survival like extreme temperatures.
AMM 60	Monitors will continue to escort maintenance vehicles driving through the closed shoreline, as necessary.
AMM 61	Monitors will continue to conduct surveys prior to conducting fence maintenance activities. If nesting CLTE could be impacted by activities, monitors will postpone maintenance, if appropriate. Monitors will continue to remain on site during fence maintenance/ installation activities conducted by hand to monitor nearby nests and minimize disruption to CLTE.
AMM 62	Monitors will continue to remain on site during fence installation to attempt to reduce disturbance that will result in chicks leaving the enclosure. If any chicks are flushed toward the enclosure boundary or out of the enclosure, monitors will continue to follow and protect chicks to keep them in the enclosure and/or until they move back inside the enclosure.
AMM 63	Camera training will continue to be given by staff who are permitted by USFWS to use nest monitoring cameras. Training will continue to occur outside the nesting area using fake nests on which the trainee can practice. Training will continue to include reading the instruction manual of each camera system, practicing efficient camera installation, and proper placement and concealing of cameras. After the initial training, the trainee will continue to accompany the permitted staff during camera installation on two or more active nests, as well as lead the camera installation while under the guidance of the permitted staff.
AMM 64	Cameras will continue to only be placed if the wind speed is below 15 mph, the sand temperature is below 83°F, or if it is not raining.
AMM 65	Camera set-up will continue to be delayed if there has been a recent sighting of a predator.
AMM 66	Monitors will continue to evaluate whether a nest is a good candidate for predator monitoring prior to installing still or video cameras. Still or video cameras will not be placed in areas where they are readily visible to the public.
AMM 67	Cameras will continue to be installed when the nest has a complete clutch.
AMM 68	Trail cameras will continue to be placed a minimum of 10 feet away from the selected nest. Time spent near the nest and total equipment set-up will continue to be limited to less than 5 minutes.
AMM 69	Monitors will continue to monitor the nest after cameras are deployed to ensure the bird returns to the nest. If the bird does not return within 20 minutes, monitors will continue to remove the cameras immediately and cameras will not be replaced at that nest.
AMM 70	Monitors will continue to check nests with cameras daily using binoculars or a spotting scope to ensure the adult is present and not disturbed by the camera. Monitors will continue to remove the cameras immediately if there is evidence that the placement and/or operation of the camera is jeopardizing the safety of individual nests, eggs, and young.
Potential Effects: Chick mortality/injury during banding; Chicks/eggs crushed by vehicle or monitor; Chicks flushed into the open riding area; Adults killed or injured by striking protective fencing	
AMM 71	CDPR will continue to use a master bander for the CLTE breeding season. The master bander will continue to be responsible for the banding of all CLTE chicks. The master bander will continue to work in consultation with and under the direction of the Senior Environmental Scientist. The banding of newly hatched CLTE chicks will continue to follow protocols approved by USFWS and CDFW. The master bander will continue to report all banding data and records per guidelines established by the USFWS.

Table B-2: Avoidance and Minimization Measures for CLTE	
AMM 72	Monitors will continue to only enter the seasonal enclosures during appropriate weather conditions (e.g., low to no wind, no rain, outside periods of extreme temperatures). Monitors will also continue to survey the area for potential predators prior to entering the seasonal enclosures and will not enter the enclosure until potential predators are absent from the area.
AMM 73	Monitors will continue to be aware of the location of nests, chicks, and adults when monitoring within the seasonal enclosures and along the shoreline and all efforts will continue to be made to minimize disturbance to reduce the likelihood of adults moving off the nest, chicks moving into the territory of another nest, chicks moving into the open riding area, and/or chicks being separated from attending adults. If any chicks are flushed toward the enclosure boundary or out of the enclosure, monitors will continue to follow and protect chicks to keep them in the enclosure and/or until they move back inside the enclosure.
AMM 74	Monitors will continue to visually check the area under and surrounding any vehicle that has been idle near the seasonal enclosure and in the open riding area to ensure CLTE individuals are not present underneath the vehicle.
AMM 75	The top of the Southern Enclosure fencing will continue to be lined with a strip of thicker plastic fencing (orange silt construction fencing cut into approximately 1-foot sections), which will cover most of the western and northern fenced areas to increase the fence visibility to flying birds. If staff resources are available, some of the eastern fence line and bumpout fencing will also be lined with this strip.
AMM 76	Monitors will continue to inspect the integrity of the enclosures regularly.
AMM 77	Monitors will continue to closely survey the east fence of the Southern Enclosure when banding or other monitoring activities are taking place on foot inside the fenced area. Any CLTE chicks that move outside of the enclosure fence will continue to be monitored until they are safely within the enclosure fence and no longer subject to disturbance.
Natural Resources Management: Tidewater goby and salmonid surveys (CA-13)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 78	Daily CLTE monitoring during the CLTE breeding season will continue to include areas where fisheries surveys would occur. Fisheries surveys will continue to be adjusted if daily CLTE monitoring determines CLTE foraging and/or breeding would be affected, including by postponing surveys within 330 feet of a CLTE nest.
AMM 79	Fisheries survey staff will continue to include personnel experienced with conducting fisheries surveys within CLTE habitat and may include permitted CLTE monitors.
Natural Resources Management: CRLF surveys (CA-14)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 80	A qualified biologist will continue to survey for foraging or roosting CLTE prior to activities. If foraging or roosting CLTE are observed, activities will be delayed until the bird(s) are no longer in the area.
Natural Resources Management: Listed plant mgmt. activities (CA-15)	
Potential Effects: Chicks/eggs crushed by vehicle or monitor; Breeding/foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 81	When surveys are necessary during the breeding season and in a known or potential nesting area, one or two experienced biologists will continue to conduct listed plant surveys. Established protocols for the surveys require that any biologist conducting the work be a skilled botanist with experience in identifying the target plant species or be accompanied by a botanist. The biologist must also be a skilled CLTE monitor included on the List of Authorized Individuals for the HCP area 10(a)(1)(A) Recovery Permit or approved by the USFWS at least 30 days prior to the start of activities or be accompanied by a biologist with these qualifications.
AMM 82	Prior to conducting botanical surveys, the team will review records of all known CLTE nesting sites in the survey area. No surveys are conducted within 330 feet of known nesting sites until the nest fates are determined (i.e., hatch or fail), and the attending adult is known to have left the area. No surveys or walking within sight of nests occurs for nests that are close to hatch or newly hatched.
AMM 83	Botanical surveys may be conducted in areas without known nests; however, the team will continue to follow existing nest search protocols to identify new nests, breeding behavior, and the presence of adults tending chicks.
AMM 84	If new nests, breeding behavior, or adults tending chicks are observed in an area during surveys, the team will continue to immediately leave the area until the nest fates are determined or breeding/ chick-rearing activity is no longer occurring in the area.
AMM 85	Botanical surveys will continue to take the minimum time necessary for data collection to avoid disturbance to breeding birds in the area. Botanical survey will continue to take no longer than 15 minutes at each site with a known population.
AMM 86	All botanical surveys will continue to be conducted under similar constraints as nest search surveys including during appropriate weather conditions, wind conditions, times when predator activity is not occurring, and other precautions per CLTE monitoring protocol in the HCP area.
Natural Resources Management: Habitat restoration program (CA-16)	
Potential Effects: Roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	

Table B-2: Avoidance and Minimization Measures for CLTE	
Natural Resources Management: Invasive plant and animal control (CA-17)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: AMM 87 Invasive plant or animal control will continue to be conducted when CLTE are not observed to be present.	
Natural Resources Management: Habitat Monitoring System (HMS) implementation (CA-18)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Natural Resources Management: Water quality monitoring projects (CA-19)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: General facilities maintenance (CA-21)	
Potential Effects: Breeding/foraging/roosting disturbance; Chicks/eggs abandoned when adults are disturbed, injured, or killed; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Adults/juveniles/chicks struck by vehicles; Eggs crushed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 88	CDPR will continue to train park staff and "visiting rangers" annually, or as needed, to ensure that staff are able to do their jobs with minimal impact to CLTE. At a minimum, staff will continue to receive information about basic CLTE biology, listing status, and relevant park rules and regulations and how to respond to observed violations of park rules and regulations that protect CLTE.
AMM 89	All CDPR staff will continue to observe closures, speed limits, and other restrictions aimed at protecting CLTE, unless emergency conditions warrant otherwise.
AMM 90	CDPR staff will continue to conduct surveys to ascertain the presence of CLTE nests, adults, and chicks within and adjacent to potential maintenance areas, if such activities must be carried out during the breeding season (March 1 through September 30) in and adjacent to areas where CLTE are potentially nesting, foraging, or roosting. If CDPR staff finds that the activities may impact, disturb, or result in take of adult birds, chicks, or eggs, the activities will continue to be delayed until CDPR staff determines CLTE will not be impacted.
AMM 91	Mechanical trash removal will not occur in areas where any CLTE are present.
AMM 92	Mechanical trash removal will only occur above the highest high tide, avoid all wrack/surf cast kelp, avoid all live vegetation, and avoid lagoons and flowing creeks.
AMM 93	Equipment will observe all speed limits and will not exceed 10 mph.
AMM 94	Mechanical trash removal will not be conducted within 500 feet of any known nesting area.
AMM 95	Natural resources staff will inspect and approve the area subject to mechanical trash removal prior to each deployment. Natural resources staff will remain on site or be immediately available for monitoring purposes.
Potential Effects: Limited potential breeding habitat reduced by the footprint of vault toilets	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Trash control (CA-22)	
Potential Effects: Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Wind fencing installation, maintenance, and removal (CA-23)	
Potential Effects: Roosting/breeding disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Sand ramp and other vehicular access maintenance (CA-24)	
Potential Effects: Roosting/breeding disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 96	During the breeding season, the sand ramps will continue to be inspected a minimum of once per day to identify CLTE nests. This will continue to occur during the daily survey.
Park Maintenance: Routine riparian maintenance (CA-26)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 97	CLTE will continue to be protected from harm during maintenance activities conducted at the Oceano (Meadow Creek) Lagoon, Pismo Lake, and Oso Flaco Lake through monitoring of the treatment activity by qualified biologists. If any activities are scheduled when CLTE are known to be present (generally between April 15 and September 15) qualified biologists will continue to be on site during activities taking place at these locations. If CLTE are not foraging nearby or biologists observing CLTE foraging activity determine that

Table B-2: Avoidance and Minimization Measures for CLTE	
CLTE will not be disturbed by the activities, it may proceed as planned. However, if CLTE are present and have the potential to be disturbed, the biologist will continue to direct activities to stop within 250 feet of the bird until it leaves on its own accord.	
Park Maintenance: Perimeter and vegetation island fence installation, maintenance, and removal (CA-27)	
Potential Effects: Foraging/roosting disturbance; Nest disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Cable fence maintenance and replacement (CA-28)	
Potential Effects: Roosting disturbance; Nest disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Heavy equipment response in all areas of SVRA of Oceano Dunes District (CA-29)	
Potential Effects: Similar to general facilities maintenance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Minor grading (less than 50 cubic yards) (CA-30) ⁵	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Boardwalk and other pedestrian access maintenance (CA-31)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Visitor Services: Ranger, life guard, and park aide patrols (CA-32)	
Potential Effects: Similar to general facilities maintenance activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Visitor Services: Emergency response (CA-33)	
Potential Effects: Similar to general facilities maintenance activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 98	Emergency responders will continue to be informed of the locations of areas that are sensitive (e.g., seasonal enclosures, shoreline foraging areas), to the extent feasible. If possible, qualified biologists will escort emergency vehicles into and out of areas that are sensitive.
Visitor Services: Access by non-CDPR vehicles (CA-34)	
Potential Effects: Adults/juveniles/chicks struck by vehicles; Foraging/roosting disturbance; Chicks/eggs abandoned when adults are disturbed, killed, or injured; Chicks separated from adult(s) and inadequately fed; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Chicks, eggs, adults, juveniles potentially exposed to predation by increased trash	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Visitor Services: Beach concessions (CA-36)	
Potential Effects: Similar to access by non-CDPR vehicles	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 99	A focused training program will continue to be provided for all concessionaires and OHV rental employees each year. The training program will consist of, at a minimum, a description of CLTE life history and park rules and regulations protecting CLTE. Concessionaires and OHV rental employees will continue to be provided with information handouts consisting of photographs and covered species information. These information handouts will continue to be provided to customers and other members of the public to encourage them to recognize and avoid covered species.
Visitor Services: Natural history and interpretation programs (CA-39)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 100	CDPR will continue to hold large group natural history and interpretation programs at Oso Flaco Lake when CLTE are not present or modify the program by observing CLTE behavior to avoid significant disturbance.

⁵ AMMs to reduce the effects of grading to maintain the seasonal enclosure are included in CA-12a: Installation and Maintenance of NPL and CLTE Protection Fence. AMMs to reduce the effects of grading to maintain the boundary fence are included in CA-28: Cable Fence Maintenance and Replacement.

Table B-2: Avoidance and Minimization Measures for CLTE	
Other HCP Covered Activities: Motorized vehicle crossing of creeks (CA-40)	
Potential Effects: Adults/juveniles/chicks struck by vehicles; Roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Pismo Creek estuary seasonal (floating) bridge (CA-41)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 101 If, in the opinion of the Senior Environmental Scientist or monitors, visitor activities are significantly disrupting CLTE foraging and/or roosting behavior, the bridge will be closed to public use until the birds have left the area.	
Other HCP Covered Activities: Dust control activities (CA-44)	
Potential Effects: Adults/juveniles/chicks struck by vehicles; Breeding/foraging/roosting disturbance; Eggs crushed; Chicks/eggs abandoned when adults are disturbed, killed, or injured; Chicks separated from adult(s) and inadequately fed; Eggs buried by sand, exposed to predation, or not properly incubated when adults are disturbed; Adults, juveniles, chicks, eggs more susceptible to predation due to increased vegetation; Breeding/foraging/roosting habitat altered	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Cultural resources management (CA-45)	
Potential Effects: Breeding/foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Oso Flaco Lake boardwalk replacement (CA-48)	
Potential Effects: Foraging/roosting disturbance	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 102 As feasible, boardwalk construction activities will be scheduled when CLTE are unlikely to be present (generally mid-September to mid-April).	
AMM 103 If boardwalk replacement activities are scheduled when CLTE are known to be present, qualified biologists will monitor construction activities. If CLTE are not foraging nearby or biologists observing CLTE foraging activity determine that CLTE will not be disturbed by the activities, work may proceed as planned. However, if CLTE is present and has the potential to be disturbed, the biologist will continue to direct activities within 250 feet of the CLTE to stop until it leaves on its own accord.	
Other HCP Covered Activities: Special projects (CA-49)	
Potential Effects: Breeding/foraging/roosting disturbance; Breeding habitat reduced by footprint of small project	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Reduction of the Boneyard Exclosure (CA-50)	
Potential Effects: Reduction in protected nesting habitat	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Use of pesticides (CA-51)	
Potential Effects: Breeding/foraging/roosting disturbance; Exposure from contact with contaminated prey or vegetation; Exposure from contact with residues, inhalation of vapors	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 104 When pesticide application must occur near CLTE breeding habitat, work will continue to be conducted between October 1 and February 28 to avoid the breeding season.	
AMM 105 Pesticides will continue to be applied when wind speeds are below 10 mph at the perimeter of the application site as measured by an anemometer on the upwind side.	
AMM 106 Pesticide application will continue to be postponed if soil moisture is at field capacity and a storm event, forecasted by the National Oceanic and Atmospheric Administration (NOAA) or National Weather Service (NWS), is to occur within 48 hours following application; or a storm event likely to produce runoff from the treated area is forecasted by NOAA/NWS to occur within 48 hours following the application.	
AMM 107 CDPR will continue to ensure that all workers are trained in the safe and effective use of pesticides in sensitive habitats.	
AMM 108 CDPR will continue to ensure that trained resource personnel are present at all phases of the work to ensure that pesticide application activities do not result in impacts to covered species.	
AMM 109 If pesticides are spilled, they will continue to be prevented from entering any water bodies to the extent practicable. CDPR staff and contractors will continue to be trained to contain any spilled material and are familiar with the use of absorbent materials. Spills will continue to be cleaned up according to label instructions, and all equipment used to remove spills will be properly contained and disposed of or decontaminated, as appropriate. Applicators will continue to report spills as required by CDPR policy and in a manner consistent with local, state, and federal requirements.	

Table B-2: Avoidance and Minimization Measures for CLTE	
AMM 110	Post-treatment, CDPR will continue to initiate monitoring, which typically consists of mapping, photo documentation, regular inspections, and depending on location and species, some formalized monitoring resulting in several years' worth of data and subsequent reporting.
AMM 111	CDPR will continue to take the following steps when using herbicide: <ul style="list-style-type: none"> • Prior to treatment, CDPR's PCA or qualified staff will continue to evaluate sites within the HCP area for invasive species removal. Weed populations will continue to be targeted based on site and weather conditions, historic weed growth, or other information. • CDPR will continue to determine the appropriate method for treating a target area (e.g., manual removal, aerial application, backpack sprayer, truck mounted sprayer). If the application can be made without negatively impacting water quality or covered species, then an application will continue to be made. • All herbicide applications will continue to be made according to the product label in accordance with regulations of the EPA, CalEPA, Cal OSHA, DPR, and the local Agricultural Commissioner. CDPR's PCA and DPR-licensed Qualified Applicator License (QAL) holders will continue to regularly monitor updates and amendments to the label so that applications are in accordance with label directions.
Other HCP Covered Activities: CDPR UAS use for park activities (CA-52)	
Potential Effects: Breeding/foraging/roosting disturbance	
Avoidance Minimization Measures:	
AMM 112	UAS will be flown with remote control and a built-in screen that shows battery life. The UAS will be equipped with software or other safeguard to ensure it will alert the operator when it reaches a minimum safe amount of battery life required for a return flight.
AMM 113	UAS operators will attend a formal training and be certified as a Pilot in Command prior to conducting solo flights.
AMM 114	UAS operators will have an established flight plan with a specific purpose determined following all Federal Aviation Administration (FAA) regulations.
AMM 115	UAS will be kept in view of the operator at all times.
AMM 116	UAS operators will not conduct flights in the HCP area without approval from the Senior Environmental Scientist.
AMM 117	All flights within 328 feet of CLTE nesting or chick-rearing habitat will require a USFWS-approved monitor to pilot or assist with flight logistics and monitoring, regardless if birds are confirmed in the area prior to flight.
AMM 118	Prior to flying the UAS into or near (within 328 feet of) nesting or chick-rearing areas, the permittee will follow all existing monitoring guidelines that have been established with USFWS.
AMM 119	UAS will not enter or fly within 328 feet of the CLTE nesting areas if the wind speed is above 15 mph or strong enough to move sand (or will be before or after completion of set up and exit from the enclosure), the sand temperature is 83°F, or if it is raining.
AMM 120	UAS flights will be initiated at least 328 feet from the closest known CLTE nest. The take-off and landing area will be clearly marked. If possible, take-off and landing areas will be out of direct sight from known nests.
AMM 121	UAS will only be deployed when a qualified biologist is confident the activity will not jeopardize the safety of CLTE individuals, nests, eggs, and young.
AMM 122	Prior to every UAS flight, a qualified biologist will scan the area for CLTE. If no birds are observed, the UAS flight can commence with monitoring, as appropriate. If a CLTE is observed in the area, it must be monitored by a qualified biologist during the remainder of the flight. If significant disturbance to CLTE is observed, the biologist may recommend increasing the altitude of the drone (but still remain below 400 feet to follow FAA guidelines) and/or guiding the drone to a safer area.
AMM 123	When CLTE are present in the area of interest, the UAS will fly at the highest possible altitude to collect the necessary data. If any CLTE show an inclination to mob, the UAS will be directed upward (but still below the FAA ceiling of 400 feet) and quickly away from the incoming CLTE. Until a qualified biologist deems the UAS is not a threat to their colony the flight will be aborted.
AMM 124	The UAS will be kept at least 100 feet above the ground at all times to reduce disturbance to nesting birds and below 400 feet to follow FAA guidelines.
AMM 125	The flight plan will not include erratic flight patterns that could be interpreted as an avian predator by CLTE.

Table B-3: Avoidance and Minimization Measures for CRLF	
Park Visitor Activities: Motorized recreation (CA-1)	
Potential Effects: Dispersing individuals struck by vehicles	
AMM 1	CDPR will continue to provide educational content on the Oceano Dunes SVRA and Pismo State Beach websites which include life history information and measures being taken to protect all HCP covered species found at the parks. Information can be updated as needed and visitors can find out what the parks are doing and what they can do to protect the covered species. Covered species information will be included as part of ongoing interpretative programs as well.
AMM 2	Posted speed limits will continue to be enforced throughout the HCP area.
AMM 3	CDPR will continue to implement management measures and modify protocols in accordance with ongoing adaptive management and based on recommendations in annual monitoring reports (section Error! Reference source not found.).
Potential Effects: Dispersing individuals exposed to increased predation due to trash	
Avoidance Minimization Measures:	
AMM 4	Trash dumpsters will continue to be provided throughout the HCP area. Trash receptacles are designed to prevent access by potential predators. CDPR will continue to explore options to reduce the movement of trash from the dumpsters and reduce predator presence at the dumpster sites.
AMM 5	All visitors will continue to be informed they are to deposit their trash in dumpsters/ receptacles provided. All campers are offered plastic garbage bags. Maintenance staff will continue to carry trash bags in each vehicle and make them available to visitors for removing trash and litter from visitor use areas.
AMM 6	As staff levels and funding allow, CDPR will continue to manually remove litter and garbage from aquatic areas that could support CRLF.
AMM 7	Qualified CDPR staff and consultants working under CDPR's tidewater goby 10(a)(1)(A) Recovery Permit (or approved by USFWS) will continue to euthanize invasive species (e.g., mosquitofish, largemouth bass, and crayfish) encountered during surveys for tidewater goby. Removing invasive predators from tidewater goby habitat will also benefit CRLF. Tidewater goby and CRLF habitats overlap in Arroyo Grande Creek.
AMM 8	CDPR will continue to monitor populations of invasive predators during fisheries surveys and CRLF surveys. If removing invasive predators incidentally during fisheries surveys does not sufficiently control these species, then additional removals may be deemed necessary.
AMM 9	If staff biologists encounter invasive predator species during activities, those species will continue to be removed by qualified biologists at that time.
Park Visitor Activities: Pedestrian activities (CA-3)	
Potential Effects: Individuals exposed to increased turbidity	
Avoidance Minimization Measures:	
AMM 10	CDPR will continue to monitor the Carpenter Creek and Pismo Creek pedestrian crossings for CRLF. If CRLF are observed in or near locations where pedestrians are known to cross and deemed vulnerable to pedestrian activity as determined by a CDPR Environmental Scientist, CDPR will continue to post signs closing crossings and/or encourage use of other paths in the HCP area, depending on the intensity of disturbance.
Park Visitor Activities: Equestrian recreation (CA-7)	
Potential Effects: Individuals exposed to increased turbidity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Holidays (CA-10)	
Potential Effects: Effects for all covered activities on holidays are not expected to be different from those on non-holidays	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Special events (CA-11)	
Potential Effects: Effects based on the specific event activity(ies) permitted, but similar to motorized recreation (CA-1), camping (CA-2), and pedestrian activities (CA-3)	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 11	All permits authorizing special events will continue to include AMMs to reduce disturbance to CRLF. Specific AMM recommendations will be based on past experience and dependent on the event location, timing, and potential to impact covered species.
Natural Resources Management: Tidewater goby and salmonid survey (CA-13)	
Potential Effects: Individuals disturbed/injured/captured; Egg masses damaged	
Avoidance Minimization Measures:	

Table B-3: Avoidance and Minimization Measures for CRLF	
AMM 12	A visual survey for CRLF and CRLF egg masses will continue to be conducted prior to sampling in areas where CRLF may be present. If CRLF are present, surveys will continue to be postponed until the CRLF has left the area or appropriate AMMs are in place. If egg masses are present, sampling will continue to be postponed until the eggs have hatched or the survey will continue to be conducted to avoid all egg masses.
AMM 13	If CRLF are incidentally captured during surveys, they will continue to be checked for injury and released immediately at the capture site. This information will continue to be included in the annual report to USFWS. A CNDDDB form will also continue to be completed for any CRLF observations.
AMM 14	If CRLF are injured or killed during surveys it will be reported to the USFWS as part of the annual report (section Error! Reference source not found.).
Potential Effects: Individuals exposed to increased risk of disease	
Avoidance Minimization Measures:	
AMM 15	Surveyors will continue to follow the USFWS Recommended Equipment Decontamination Procedures, which provides guidance for disinfecting equipment and clothing after entering a pond and before entering an aquatic resource.
Natural Resources Management: CRLF surveys and associated management (CA-14)	
Potential Effects: Individuals disturbed/injured/captured; Egg masses damaged; Individuals exposed to increase risk of spread of disease	
Avoidance Minimization Measures:	
AMM 16	A USFWS-approved biologist will continue to conduct CRLF surveys in accordance with the USFWS Revised Guidance on Site Assessments and Field Surveys for the CRLF.
AMM 17	CDPR will continue to eradicate or reduce the cover, biomass, and distribution of non-native invasive plants to enhance CRLF habitat. Routine vegetation management will continue to occur at Oso Flaco Natural Area, Oceano (Meadow Creek) Lagoon and Lagoon Trail, Meadow Creek, and Pismo Lake spillway. Other areas where vegetation management may occur include Arroyo Grande Creek and Lagoon and dune lakes and wetlands. Vegetation management also includes removal of emergent vegetation and debris, as necessary to improve potential CRLF habitat.
Natural Resources Management: Listed plant management activities (CA-15)	
Potential Effects: Individuals exposed to increased turbidity	
Avoidance Minimization Measures:	
AMM 18	Any time a work activity will need to be conducted on the bed, banks or channel of an aquatic habitat with the potential to support CRLF, appropriate steps will continue to be taken to minimize turbidity from activities. If possible, activities will continue to be conducted from outside the wetted area or from stream banks or other upland areas. If activity is necessary in wetted areas, work will continue to be limited to the maximum necessary to achieve desired outcome and care will be taken to reduce turbidity, especially during critical periods like when egg masses are present or tadpoles are present in the water.
Potential Effects: Individuals and/or egg masses disturbed	
Avoidance Minimization Measures:	
AMM 19	Immediately prior to the start of listed plant management activities near potentially occupied CRLF habitat, a qualified biologist will continue to conduct surveys for CRLF up to 100 feet outside the project boundaries.
AMM 20	If a CRLF is found within 100 feet of plant management activities in CRLF habitat, activities will continue to be delayed until the individual has moved from the area on its own accord or until appropriate AMMs are in place. AMMs can include such measures as relocation, exclusion fencing, and/or biological monitoring during activities.
Natural Resources Management: Invasive plant and animal control (CA-17)	
Potential Effects: Individuals exposed to increased turbidity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Potential Effects: Individuals and or egg masses disturbed/injured/captured	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Potential Effects: Individuals benefited by decreased predation risk	
Avoidance Minimization Measures:	
AMM 21	CDPR will continue to discourage the release of mosquitofish into any known or potential CRLF breeding habitat.
Natural Resources Management: Water quality monitoring projects (CA-19)	
Potential Effects: Individuals exposed to increased turbidity; Individuals and/or egg masses disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Campground maintenance (CA-20)	
Potential Effects: Dispersing individuals crushed/injured	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	

Table B-3: Avoidance and Minimization Measures for CRLF	
AMM 22	Where appropriate and necessary, before any activities occur, a qualified biologist will continue to conduct a training session for all maintenance personnel. The training, at a minimum, covers CRLF life history and work constraints.
AMM 23	Non-emergency activities with potential to crush CRLF will continue to be suspended during heavy precipitation events (i.e., at least 0.5 inch of precipitation in a 24-hour period) near potentially occupied CRLF habitat.
Park Maintenance: Routine riparian maintenance (CA-26)	
Potential Effects: Individuals and egg masses crushed/injured/disturbed	
Avoidance Minimization Measures:	
AMM 24	Culvert maintenance will continue to be conducted during periods when egg masses or larvae are unlikely to occur in the project area (e.g., low flow period), to the extent feasible.
AMM 25	A USFWS-approved biologist will continue to conduct focused surveys of the work sites 2 weeks before the onset of activities in or near ponded or flowing water. If CRLF adults, tadpoles, or eggs are found, work will not commence until AMMs are in place. If any CRLF are found, a CNDDDB report will continue to be submitted
AMM 26	A USFWS-approved CRLF monitor will continue to be on site during maintenance. If CRLF is detected within the project area, work will continue to stop until the animal is no longer present or until appropriate AMMs are in place. AMMS can include such measures as relocation, exclusion fencing with additional monitoring to prevent take along fenceline, and/or biological monitoring during maintenance activities.
AMM 27	CRLF life-stages found in the work area will be relocated upon determination by the USFWS-approved biologist that an appropriate relocation site exists and relocation is the preferred avoidance method. The biologist will be allowed sufficient time to move CRLF from the work site before activities begin. Only USFWS-approved biologists will participate in activities associated with capturing, handling, and monitoring CRLF. The biologists will follow safe-handling practices as outlined in the Declining Amphibians Population Task Force Code of Practice (Error! Reference source not found.).
AMM 28	Heavy equipment will continue to not be placed in the water body during operation of any culvert maintenance. Back-hoe work will continue to be restricted to the roadside or upper bank and only the bucket is placed in the water body.
AMM 29	CDPR staff will continue to limit the amount of disturbance to vegetation, banks, and streambed. Work and entrance into the work area will continue to be restricted to established areas.
AMM 30	All refueling, maintenance, and staging of equipment and vehicles will continue to occur at least 60 feet from riparian habitat or water bodies in a location where a spill will not drain directly toward aquatic habitat.
AMM 31	All vehicles and equipment will continue to be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Prior to the start of maintenance activities, all equipment will continue to be inspected for leaks.
AMM 32	A spill plan will continue to be in place for prompt and effective response to an accidental spill. The spill plan will continue to include, at a minimum, immediately notifying the biologist of any hazardous spills and immediately cleaning up spills. All Park staff will continue to be informed of the importance of preventing spills and appropriate measures to take when a spill happens.
AMM 33	All equipment and vehicles under-carriages will continue to be inspected periodically. Equipment that has been parked for more than 15 minutes near potentially occupied CRLF habitat will continue to be re-inspected prior to moving.
Potential Effects: Individuals exposed to increased predation	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 34	After removal of emergent vegetation in the stream channel, disturbed areas with the potential to pond water will continue to be smoothed with a rake to avoid creation of potential habitat for CRLF predators, including bull frogs and crayfish.
Potential Effects: Individuals exposed to increased turbidity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Potential Effects: Individuals exposed to increase risk of spread of disease	
Avoidance Minimization Measures: . All AMMs apply, as appropriate.	
Potential Effects: Temporary disturbance of approximately 0.3 acre of wetlands	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Boardwalk and other pedestrian access maintenance (CA-31)	
Potential Effects: Individuals disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 35	Crews will continue to use hand tools to trim all vegetation.
Visitor Services: Emergency response (CA-33)	
Potential Effects: Individuals struck by vehicles; Breeding and/or dispersal habitat damaged; Individuals exposed to increased turbidity	
Avoidance Minimization Measures: All AMMs apply, as feasible and appropriate.	
Visitor Services: Pismo Beach Golf Course operations (CA-37)	

Table B-3: Avoidance and Minimization Measures for CRLF	
Potential Effects: Dispersing individuals injured/crushed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Motorized vehicle crossing of Carpenter Creek (CA-40)	
Potential Effects: Individuals struck by vehicles; Individuals disturbed; Individuals exposed to increased turbidity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 36	During times when there is ponded water at either Pismo Creek or Carpenter Creek estuaries, staff will continue to periodically review conditions and identify any issues that may result from vehicle crossings in this area. If, in the opinion of approved biologists, a vehicle crossing would present a threat to any life stages of CRLF, staff will continue to close this access until conditions have changed.
Other HCP Covered Activities: Dust control activities (CA-44)	
Potential Effects: Aestivating and/or dispersing individuals crushed/injured/disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Cultural resources management (CA-45)	
Potential Effects: Aestivating and/or dispersing individuals crushed/injured/disturbed	
All AMMs apply, as appropriate.	
AMM 37	Should an aestivating CRLF be found during excavation associated with cultural resource activities, all work will stop and will not begin again until the frog is no longer present. If activities need to proceed, the USFWS will be contacted and consulted on appropriate AMMs. AMMS can include such measures as relocation, exclusion fencing, and/or biological monitoring during activities.
Other HCP Covered Activities: CDPR management of agricultural lands (CA-46)	
Potential Effects: Aestivating and/or dispersing individuals crushed/injured/disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Oso Flaco Lake boardwalk replacement (CA-48)	
Potential Effects: Same as riparian maintenance activities	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 38	Boardwalk replacement will be constructed during a period when egg masses are unlikely to occur in the project area. A USFWS-approved biologist will survey the work site 2 weeks before the onset of activities. If CRLF adults, tadpoles, or eggs are found, work will not commence until avoidance measures are in place.
AMM 39	Any CRLF life-stages found in the project work area may be relocated upon determination by the USFWS-approved biologist that an appropriate relocation site exists and relocation is the preferred avoidance method. The approved biologist will be allowed sufficient time to move CRLF from the work site before work activities begin. Only USFWS-approved biologists will participate in activities associated with the capture, handling, and monitoring of CRLF.
AMM 40	Before any project activities occur, a USFWS-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of the CRLF and its habitat, the importance of the CRLF and its habitat, the general measures that are being implemented to conserve the CRLF as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided a qualified person is on hand to answer any questions.
AMM 41	A USFWS-approved biologist will be present at the work site until the removal of all CRLF, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee will designate a person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist will ensure that this individual receives training outlined in AMM 34 and in the identification of CRLF. The monitor and the USFWS-approved biologist will have the authority to halt any action that might result in impacts that exceed the levels anticipated by the USFWS.
Other HCP Covered Activities: Special projects (CA-49)	
Potential Effects: Individuals exposed to increased turbidity; Water quality decreased; Permanent and/or temporary loss of breeding or upland habitat; Individuals crushed/injured	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Use of pesticides (CA-51)	
Potential Effects: Disturbance of habitat; Exposure from contact with contaminated prey or vegetation; Exposure from contact with residues, inhalation of vapors	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 42	When pesticide application must occur near CRLF breeding habitat, a qualified biologist will continue to conduct a survey for CRLF 24 hours prior to the application and will continue to instruct the work crew on their identification and biology. If CRLF is observed, all work will continue to cease immediately until the CDPR biologist arrives and assesses the situation to determine if the work can proceed.

Table B-3: Avoidance and Minimization Measures for CRLF	
AMM 43	Pesticides will continue to be applied at wind speeds below 10 mph at the perimeter of the application site as measured by an anemometer on the upwind side.
AMM 44	Pesticide application will be postponed if soil moisture is at field capacity and a storm event, forecasted by the National Oceanic and Atmospheric Administration (NOAA) or National Weather Service (NWS), is to occur within 48 hours following application; or a storm event likely to produce runoff from the treated area is forecasted by NOAA/NWS to occur within 48 hours following the application.
AMM 45	CDPR will continue to ensure that all workers are trained in the safe and effective use of pesticides in sensitive habitats.
AMM 46	CDPR will continue to ensure that trained resource personnel are present at all phases of the work to ensure that pesticide application activities do not result in impacts to covered species.
AMM 47	If pesticides are spilled, they will continue to be prevented from entering any water bodies to the extent practicable. CDPR staff and contractors will continue to be trained to contain any spilled material and are familiar with the use of absorbent materials. Spills will continue to be cleaned according to label instructions, and all equipment used to remove spills will be properly contained and disposed of or decontaminated, as appropriate. Applicators will continue to report spills as required by CDPR policy and in a manner consistent with local, state, and federal requirements.
AMM 48	Post-treatment, CDPR will continue to initiate monitoring, which typically consists of mapping, photo documentation, regular inspections, and depending on location and species, some formalized monitoring resulting in several years' worth of data and subsequent reporting.
AMM 49	CDPR will continue to take the following steps when using herbicides: <ul style="list-style-type: none"> • Prior to treatment, CDPR's PCA or qualified staff will continue to evaluate sites within the HCP area for invasive species removal. Weed populations will continue to be targeted based on site and weather conditions, historic weed growth, or other information. • CDPR will continue to determine the appropriate method for treating a target area (e.g., manual removal, aerial application, backpack sprayer, truck mounted sprayer). If the application can be made without negatively impacting water quality or covered species, then an application will continue to be made • All herbicide applications will continue to be made according to the product label in accordance with regulations of the EPA, CalEPA, Cal OSHA, DPR, and the local Agricultural Commissioner. CDPR's PCA and DPR-licensed Qualified Applicator License (QAL) holders will continue to regularly monitor updates and amendments to the label so that applications are in accordance with label directions.

Table B-4: Avoidance and Minimization Measures for Tidewater Goby	
Park Visitor Activities: Motorized recreation (CA-1)	
Potential Effects: Individuals disturbed/crushed/injured	
Avoidance Minimization Measures:	
AMM 1	CDPR will continue to provide educational content on the Oceano Dunes SVRA and Pismo State Beach websites which include life history information and measures being taken to protect all HCP covered species found at the parks. Information is updated as needed and visitors can find out what the parks are doing and what they can do to protect the covered species. Covered species information will continue to be included as part of ongoing interpretative programs as well.
AMM 2	The Arroyo Grande Creek Lagoon and areas west of the lagoon where waters have pooled will continue to be posted closed to motor vehicle access.
AMM 3	Pursuant to Superintendent's Order, visitors will continue to be prohibited from crossing Arroyo Grande Creek in any other manner than by crossing the creek as close to the ocean waterline as possible and parallel to the ocean waterline. Driving upstream or downstream in the creek channel or in any other manner in the creek channel will continue to be prohibited.
AMM 4	Crossing of Arroyo Grande Creek by motor vehicles will continue to be regulated by park Visitor Services and Ranger staff daily during periods of high stream flow and during periods of high stream flow in combination with high tides. Creek crossings may be restricted or closed at any time, depending on these conditions. Rangers will continue to take enforcement action, where appropriate.
AMM 5	Specific guidelines for closure of Arroyo Grande Creek to vehicular crossings by the public will continue to be implemented.
AMM 6	As necessary, after major flows or other natural events that change the physical habitat characteristics of the lagoons, CDPR staff will continue to realign the area closed to motor vehicles to prevent vehicle access into areas that could support tidewater goby.
Park Visitor Activities: Pedestrian activities (CA-3)	
Potential Effects: Individuals disturbed; Burrows collapsed; Individuals exposed to increased turbidity; Individuals exposed to increased predation; Foraging activities and reproductive success reduced	
Avoidance Minimization Measures:	
AMM 7	The ponded areas of Arroyo Grande Creek will continue to be closed to the public.
AMM 8	CDPR will continue to monitor the Carpenter Creek and Pismo Creek crossings for tidewater goby. If tidewater gobies are observed in or near locations where pedestrians are known to cross, CDPR will continue to post signs closing these areas to pedestrians and encourage use of other paths in the HCP area.
AMM 9	CDPR will continue to pursue installing the seasonal floating bridge (CA-41) across the Pismo Creek estuary if it is found to be beneficial and feasible.
Park Visitor Activities: Dog walking (CA-6)	
Potential Effects: Individuals disturbed; Individuals exposed to increased turbidity; Water quality decreased by depositing waste and/or trampling vegetation; Individuals exposed to increased predation; Foraging activities and reproductive success reduced	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 10	Dogs will continue to be required to be on a leash no longer than 6 feet at all times and within complete control of its owner within the HCP area.
AMM 11	Waste bags will continue to be provided in the HCP area to encourage pet owners to pick up dog waste.
AMM 12	CDPR will continue to manually remove litter and garbage from tidewater goby habitat.
Park Visitor Activities: Equestrian recreation (CA-7)	
Potential Effects: Individuals disturbed/injured; Burrows collapsed; Individuals exposed to increased turbidity; Water quality decreased due to depositing waste and/or trampling vegetation; Foraging activities and reproductive success reduced	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Visitor Activities: Holidays (CA-10)	
Potential Effects: Effects for all covered activities on holidays are not expected to be different from those on non-holidays	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 13	During anticipated high visitor use periods as determined by historic visitor-attendance records (e.g., Memorial Day Weekend, July 4 Weekend, Labor Day Weekend) monitoring and law enforcement staff will continue to provide frequent observations of the vehicle/pedestrian crossing areas at Arroyo Grande Creek, Carpenter Creek, and Pismo Creek.
Park Visitor Activities: Special events (CA-11)	
Potential Effects: Effects based on the specific event activity(ies) permitted	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 14	All permits authorizing special events will continue to include AMMs to reduce disturbance to tidewater goby. Specific AMM recommendations will be based on past experience and dependent on the event location, timing, and potential to impact covered species.

Table B-4: Avoidance and Minimization Measures for Tidewater Goby	
Natural Resources Management: Tidewater goby and salmonid surveys (CA-13)	
Potential Effects: Individuals exposed to increased turbidity; Individuals and egg burrows disturbed; Individuals captured/injured/killed	
Avoidance Minimization Measures:	
AMM 15	A USFWS- and/or NOAA Fisheries-approved biologist will continue to conduct the surveys.
AMM 16	Surveys will continue to be conducted in accordance with the survey guidelines in Appendix F of the tidewater goby recovery plan for the species (USFWS 2005) or in accordance with any subsequent revisions the USFWS or NOAA may develop during the permit term.
AMM 17	The USFWS- and/or NOAA Fisheries-approved biologist will continue to use minnow traps, dipnets, seine nets, and hoop nests that do not have woven mesh larger than 2 to 4 millimeters in width.
AMM 18	Disturbance and damage to burrows, eggs, and young will continue to be minimized through the use of the smallest seines and lightest seine weights practicable.
AMM 19	Any tidewater gobies exhibiting signs of stress will continue to be immediately released at the capture location.
AMM 20	Dipnetting and seining will continue to be limited to no more than 40 percent of the project area, excluding stream channels, unless the surveys are to be conducted during the breeding season (generally April through mid-June). Seining during the breeding season will continue to be limited to affect no more than 20 percent of the habitat.
AMM 21	Prior to activities that may involve handling tidewater gobies, the surveyor will continue to ensure that hands are free of sunscreens, lotion, nicotine, and insect repellent.
AMM 22	No electrofishing will continue to occur in tidewater goby habitat. If electrofishing is authorized for salmonid surveys, and tidewater gobies are subsequently found in an area they were previously not known to occur, electrofishing will continue to cease immediately.
AMM 23	To prevent the introduction of new invasive animal and plant species, all CDPR staff and/or contractors will continue to be required to ensure that work boots, vehicles, and equipment that will enter the water have been cleaned. See CRLF AMM 11.
AMM 24	CDPR will continue to conduct fishery monitoring surveys to follow, document, and report on the likely future recolonization of restored wetted areas by several aquatic species, including tidewater goby. This information will continue to be provided to resource agencies and used to contribute to the recovery of tidewater goby.
AMM 25	Qualified CDPR staff and consultants working under CDPR's tidewater goby 10(a)(1)(A) Recovery Permit (or approved by USFWS) will continue to euthanize invasive species (e.g., mosquitofish, largemouth bass, and crayfish) encountered during surveys for tidewater goby.
AMM 26	If staff biologists encounter non-native predator species during activities, those species will continue to be removed by qualified biologists at that time.
Natural Resources Management: CRLF surveys (CA-14)	
Potential Effects: Egg burrows disturbed; Individuals captured/injured/killed; Individuals exposed to increased turbidity	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 27	When possible and appropriate, eyeshine surveys for CRLF will continue to be conducted to minimize disturbance to tidewater gobies and tidewater goby habitat.
AMM 28	CRLF dipnet surveys, if conducted in the HCP area, will be conducted in a manner that minimizes disturbance to aquatic habitat that could overlap with tidewater goby habitat.
Natural Resources Management: Invasive plant and animal control (CA-17)	
Potential Effects: Individuals exposed to increased turbidity; Individuals disturbed/injured	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 29	To prevent erosion and sedimentation, vegetation removal and bank disturbance will continue to be kept to the minimum amount necessary to complete the task.
AMM 30	Activities within tidewater goby habitat will continue to be avoided, if possible, or kept to a minimum. If activities require that personnel work in the water, only one person will enter the water while the remaining personnel conduct work from land.
AMM 31	Precautions will continue to be taken to avoid damage to non-target vegetation.
Natural Resources Management: Water quality monitoring projects (CA-19)	
Potential Effects: Individuals exposed to increased turbidity; Individuals disturbed/injured	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 32	CDPR will continue to work with public agencies, landowners, and stakeholders to secure a sustained water inflow into the estuary, focused on sustainable groundwater use and maintenance of instream flows in the lower mile of Arroyo Grande Creek.
AMM 33	CDPR will continue to work with the County on their operations and maintenance of the Sand Canyon Flapgate to minimize impacts to goby from sediment, invasive aquatic species, and other similar threats.
Park Maintenance: Routine riparian maintenance (CA-26)	
Potential Effects: Individuals exposed to increased turbidity; Individuals/egg burrows disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	

Table B-4: Avoidance and Minimization Measures for Tidewater Goby	
AMM 34	Prior to the onset of activities that could affect tidewater goby habitat, qualified biologists will continue to conduct a training session for all personnel. At a minimum, the training will include a description of tidewater goby and its habitat and AMMs that should be implemented. The training session will be repeated for any new personnel at the work site.
AMM 35	If activities are proposed near occupied tidewater goby habitat, as feasible, CDPR staff will continue to limit project activities in the channel and along stream banks to the drier period of the year (generally May 1 to December 1) or when the stream is not actively flowing, or at its lowest flow, and when there is no measurable rain forecasted within 48 hours of work activities.
AMM 36	If work near occupied tidewater goby habitat is proposed, non-erodible filter screens will continue to be placed at the inlet and outflow of the culvert and filter screens and/or wattles will continue to be placed around the work area during activities to minimize sediment from entering the water.
AMM 37	Activities and entrance into the work area will continue to be restricted to established areas.
AMM 38	A USFWS-approved biologist will continue to conduct a pre-activity survey for tidewater goby in occupied tidewater goby habitat prior to commencing activities. If tidewater goby is observed in the work area or water is present in the work area and it cannot be determined if tidewater goby is present, the Environmental Scientist will continue to determine the appropriate measures taken to protect the tidewater goby population. These measures could include, but are not limited to, establishing fencing or otherwise demarcating a barrier between the work site and the tidewater goby population and/or relocation by a USFWS-approved biologist.
AMM 39	Heavy equipment will not be placed in the water body during operation of any culvert maintenance. Back-hoe work will continue to be restricted to the roadside or upper bank and only the bucket will be placed in the water body.
AMM 40	All refueling, maintenance, and staging of equipment and vehicles will continue to occur at least 60 feet from riparian habitat or water bodies in a location where a spill will not drain directly toward aquatic habitat.
AMM 41	Appropriate spill containment and clean-up materials will continue to be stored on site during activities. A spill plan will continue to be in place for prompt and effective response to an accidental spill. All Park staff will continue to be informed of the importance of preventing spills and appropriate measures to take when a spill happens.
Park Maintenance: Minor grading (less than 50 cubic yards) (CA-30)	
Potential Effects: Individuals exposed to increased turbidity; Individuals disturbed/crushed/injured	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 42 Heavy equipment will continue to not be placed in the water body during operation of any minor grading.	
Visitor Services: Ranger, lifeguard, and park aide patrols (CA-32)	
Potential Effects: Individuals disturbed/crushed/injured; Water quality decreased	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Visitor Services: Emergency response (CA-33)	
Potential Effects: Habitat damaged; Individuals exposed to increased turbidity	
Avoidance Minimization Measures: All AMMs apply, as feasible and applicable.	
Visitor Services: Motorized vehicle crossing of Pismo/Carpenter and Arroyo Grande Creeks (CA-40)	
Potential Effects: Individuals disturbed/crushed/injured; Water quality decreased	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 43	During times when there is ponded water at either Pismo Creek or Carpenter Creek estuaries, staff will continue to periodically review conditions and identify any issues that may result from vehicle crossings in this area. If, in the opinion of approved biologists, a vehicle crossing would present a threat to any life stages of tidewater goby, staff will continue to close this access until conditions have improved.
AMM 44	CDPR staff that may drive through these crossings will continue to receive training regarding tidewater goby. The training will continue to include a description of tidewater goby and its habitat and AMMs that continue to be implemented.
Visitor Services: Pismo Creek estuary seasonal (floating) bridge (CA-41)	
Potential Effects: Individuals disturbed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 45	To allow movement of all fish species as well as an exchange of fresh and saltwater, the interlocking pieces of the bridge will be constructed to create wide openings under the bridge. Openings will be designed as wide as possible while maintaining structural integrity to ensure water flow even when the bridge sits on the bed of the estuary during low flows.
AMM 46	If water levels are so low that the bridge is not allowing the free movement of fish in the estuary, the bridge will be removed until there is sufficient water to allow the bridge to float.
Visitor Services: Use of pesticides (CA-51)	
Potential Effects: Habitat disturbance; Exposure from contact with contaminated prey or vegetation; Exposure from contact with residues, inhalation of vapors	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	

Table B-4: Avoidance and Minimization Measures for Tidewater Goby	
AMM 47	When pesticide application must occur near tidewater goby habitat, a qualified biologist will continue to conduct a survey for tidewater goby 24 hours prior to the application and will continue to instruct the work crew on their identification and biology. If tidewater goby is observed, all work will continue to cease immediately until the CDPR biologist arrives and assesses the situation to determine if the work can proceed.
AMM 48	Herbicides used in tidewater goby habitat will continue to be limited to those designed for aquatic applications as specified in the APAP, and will continue to be applied directly to Elymus, Ammophila and Arundo on a low or receding tide when water is not present, so residual amounts that may reach the water on the returning tide are small and rapidly diluted.
AMM 49	Pesticides will continue to be applied at wind speeds below 10 mph at the perimeter of the application site as measured by an anemometer on the upwind side.
AMM 50	Pesticide application will continue to be postponed if soil moisture is at field capacity and a storm event, forecasted by the National Oceanic and Atmospheric Administration (NOAA) or National Weather Service (NWS), is to occur within 48 hours following application; or a storm event likely to produce runoff from the treated area is forecasted by NOAA/NWS to occur within 48 hours following the application.
AMM 51	CDPR will continue to ensure that all workers are trained in the safe and effective use of herbicides in sensitive habitats.
AMM 52	CDPR will continue to ensure that trained resource personnel are present at all phases of the work to ensure that herbicide application activities do not result in impacts to covered species.
AMM 53	If pesticides are spilled, they will be prevented from entering any water bodies to the extent practicable. CDPR staff and contractors will continue to be trained to contain any spilled material and will be familiar with the use of absorbent materials. Spills will be cleaned up according to label instructions, and all equipment used to remove spills will be properly contained and disposed of or decontaminated, as appropriate. Applicators will continue to report spills as required by CDPR policy and in a manner consistent with local, state, and federal requirements.
AMM 54	Post-treatment, CDPR will continue to initiate monitoring, which typically consists of mapping, photo documentation, regular inspections, and depending on location and species, some formalized monitoring resulting in several years' worth of data and subsequent reporting.
AMM 55	CDPR will continue to take the following steps when using herbicide: <ul style="list-style-type: none"> • Prior to treatment, CDPR's PCA or qualified staff will continue to evaluate sites within the HCP area for invasive species removal. Weed populations will continue to be targeted based on site and weather conditions, historic weed growth, or other information. • CDPR will continue to determine the appropriate method for treating a target area (e.g., manual removal, aerial application, backpack sprayer, truck mounted sprayer). If the application can be made without negatively impacting water quality or covered species, then an application will continue to be made. • All herbicide applications will continue to be made according to the product label in accordance with regulations of the EPA, CalEPA, Cal OSHA, DPR, and the local Agricultural Commissioner. CDPR's PCA and DPR-licensed Qualified Applicator License (QAL) holders will continue to regularly monitor updates and amendments to the label so that applications are in accordance with label directions. All herbicide applications will continue to be made according to the product label in accordance with regulations of the EPA, CalEPA, Cal OSHA, DPR, and the local Agricultural Commissioner. CDPR's PCA and DPR-licensed Qualified Applicator License (QAL) holders will continue to regularly monitor updates and amendments to the label so that applications are in accordance with label directions.

Table B-5: Avoidance and Minimization Measures for Plants	
Park Visitor Activities: Pedestrian activities (CA-3)	
Potential Effects: Beach spectaclepod, surf thistle, and La Graciosa thistle trampled	
Avoidance Minimization Measures:	
AMM 1	CDPR will continue to provide educational content on the Oceano Dunes SVRA and Pismo State Beach websites including life history information and measures being taken to protect all HCP covered species found at the parks. Information can be updated as needed and visitors can find out what the parks are doing and what they can do to protect the covered species. Covered species information will continue to be included as part of ongoing interpretative programs as well.
AMM 2	In areas where the public is allowed in occupied habitat, plants will continue to be fenced to deter pedestrians from entering the sensitive areas. If a population is found where there is heavy public activity like the Dune Preserve or Grand Dunes areas, fencing and signage will continue to be installed.
AMM 3	Informal trails in and adjacent to listed plant species habitats will continue to be closed and restored to original conditions.
AMM 4	Habitat restoration will continue to be conducted to benefit beach spectaclepod, surf thistle, and La Graciosa thistle.
AMM 5	A program of selective propagation of specific listed plant species to augment existing populations and adjacent unoccupied habitats will be developed if monitoring shows CDPR or public activities negatively impacting individuals or populations.
AMM 6	CDPR will continue to implement management measures and modify protocols in accordance with ongoing adaptive management and based on recommendations in annual monitoring reports (section Error! Reference source not found.).
Natural Resources Management: Listed plant mgmt. activities (monitoring, propagation, and habitat enhancement) (CA-15)	
Potential Effects: Plants trampled/crushed	
Avoidance Minimization Measures:	
AMM 7	Staff with specific training in the identification of listed plant species will continue to survey areas with known populations. Surveys will continue to be conducted annually or as necessary based on the level of management needed.
AMM 8	Prior to the onset of activities that could affect listed plant habitat, a qualified biologist will continue to conduct a training session for all personnel. At a minimum, the training will continue to include a description of relevant plants and their habitat and AMMs that should be implemented. The training session will continue to be repeated for any new personnel.
AMM 9	Staff will continue to be urged to limit time in occupied habitat to reduce the potential for trampling listed plants. CDPR staff will continue to limit the amount of disturbance to vegetation to the minimum necessary to complete the project. Work and entrance into the work area will continue to be restricted to established areas.
AMM 10	Water quality monitoring and improvement projects will continue to be conducted to benefit marsh sandwort and Gambel's watercress.
Potential Effects: Plants burned during prescribed fire activities for listed species management	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 11	Prior to initiating a prescribed burn, populations of listed plant species will continue to be clearly marked on the ground, and non-native vegetation will be pulled by hand to establish a fire line of mineral soil around all known populations of listed plant species. The fire line will continue to be the minimum necessary to protect known listed plant populations.
AMM 12	Fire personnel, pesticide applicators, and restoration crews will continue to receive training prior to construction activities. The training will continue to include information regarding identification of listed plant species, the life history of listed species, instructions to avoid damage to listed species, and the need to remain out of the restricted areas and within the work areas and access routes.
AMM 13	Heavy equipment, including fire engines and pumper trucks, will continue to be located outside of sensitive habitat. Locations for the placement and staging of heavy equipment are always clearly marked on a map, as well as on the ground.
AMM 14	A trained botanist will continue to be present during fire activities. The monitor will have the authority and responsibility to stop work if unanticipated damage to listed plant species occurs.
Natural Resources Management: Invasive plant and animal control (CA-17)	
Potential Effects: Plants trampled/crushed; Plants burned during prescribed fire activities during non-listed species management; Plants sprayed during herbicide application	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 15	Prior to conducting treatment, the project area will continue to be surveyed by a trained botanist for listed plant species. Every effort will be made to locate populations of listed plant species, identify their location on a map, and clearly mark their locations on the ground before work crews and equipment are allowed in the treatment area.
AMM 16	Only workers with specific training in the identification of listed plant species will continue to work in areas with known populations.
AMM 17	If listed species are found within 100 feet of surface-disturbing activities, they will continue to be avoided by a marked and/or fenced buffer of 25 feet within the project area or other distance as identified by the qualified botanist. Fencing and/or flagging will be removed at the completion of activities.
AMM 18	If plants are found during pre-activity surveys and cannot be avoided, plants will continue to be salvaged and relocated.

Table B-5: Avoidance and Minimization Measures for Plants	
AMM 19	Non-native vegetation will continue to be cleared by hand and/or with herbicide, using experienced herbicide applicators, within and near listed plant populations. Herbicide application will typically be used sparingly and will be done under the close supervision of an experienced botanist.
AMM 20	Attention will be given to access corridors, treatment sites that include on-the-ground activities, and previously known populations of listed plants.
AMM 21	Trained resource personnel will continue to be present at all phases of the work to ensure that activities will not result in damage to listed species.
AMM 22	Records will continue to be kept of all invasive plant and animal control management activities. These records will continue to include an assessment of the target invasive plant population, treatment employed, location of area treated, supervisor of treatment, date of treatment, amount of pesticides used and weather condition during treatment.
Park Maintenance: Routine riparian maintenance (CA-26)	
Potential Effects: La Graciosa thistle, Gambel's watercress, and marsh sandwort damaged	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 23	When necessary and appropriate, a qualified botanist will continue to conduct pre-activity surveys to confirm absence of marsh sandwort, La Graciosa thistle, and Gambel's watercress prior to commencing ground-disturbing activities in potential habitat areas. If the plants are found during pre-activity surveys, including any Gambel's watercress hybrids, the botanist will flag the area inform all workers of the need to stay out of flagged area.
Park Maintenance: Heavy equipment response in all areas of SVRA of Oceano Dunes District (CA-29)	
Potential Effects: Plants trampled/crushed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Minor grading (CA-30)	
Potential Effects: Plants trampled/crushed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Park Maintenance: Boardwalk and other pedestrian access maintenance (CA-31)	
Potential Effects: Plants trampled/crushed; Plants uprooted/removed; Temporary loss of habitat	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Visitor Services: Emergency response (CA-33)	
Potential Effects: Plants trampled/crushed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Riding in 40 Acres (CA-42)	
Potential Effects: Loss or degradation of potentially suitable habitat	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 24	All trails and other areas open to vehicles will be sited with adequate buffers from any occurrences of listed plants.
Other HCP Covered Activities: Cultural resources management (CA-45)	
Potential Effects: Plants uprooted/damaged/removed	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 25	Plant populations will continue to be restored if a cultural resource project disturbs or destroys a plant population.
Other HCP Covered Activities: Special projects (CA-49)	
Potential Effects: Permanent and/or temporary loss of potentially suitable habitat	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
Other HCP Covered Activities: Use of pesticides (CA-51)	
Potential Effects: Habitat disturbance; Exposure to contaminated water and residues; Direct exposure to chemicals	
Avoidance Minimization Measures: All AMMs apply, as appropriate.	
AMM 26	CDPR will continue to ensure that formal surveys are conducted for the covered plant species prior to work commencing on the project site. Surveys will continue to be conducted by trained botanists and field assistants. Since population numbers are relatively low, surveys focus on determining the location, distribution, and abundance of covered species. CDPR will continue to ensure that all covered species locations are flagged to alert workers of their presence. Authorized staging areas and access routes will continue to be flagged. All equipment and labor crews will continue to remain in staging areas staging areas or on the designated access routes to reduce the potential for impacts to covered plant species and their habitat.
AMM 27	After treatments are initiated, additional surveys will continue to be conducted to identify new populations of covered plants. Regular monitoring of the treatment area will continue to determine the effects of the treatments on the existing populations and their habitat.

Table B-5: Avoidance and Minimization Measures for Plants	
AMM 28	Pesticides will continue to be applied at wind speeds below 10 mph at the perimeter of the application site as measured by an anemometer on the upwind side.
AMM 29	Pesticide application will continue to be postponed if soil moisture is at field capacity and a storm event, forecasted by the National Oceanic and Atmospheric Administration (NOAA) or National Weather Service (NWS), is to occur within 48 hours following application; or a storm event likely to produce runoff from the treated area is forecasted by NOAA/NWS to occur within 48 hours following the application.
AMM 30	CDPR will continue to avoid occupied covered plant habitat, as feasible. If covered plant habitat must be impacted, CDPR will continue to establish a buffer zone of no less than 15 feet (but typically 25 feet) around individual covered plant species identified during surveys, as feasible. Only hand-weeding will continue to be permitted in these buffer zones. If a buffer cannot be implemented, CDPR will continue to take appropriate precautions, as determined by the Senior Environmental Scientist. Precautions can include timing the herbicide activities so that they occur prior to the covered plant blooming period, using a monocot focused herbicide, and/or having an experienced herbicide applicator conduct the activities under the direction of a qualified botanist.
AMM 31	CDPR will continue to only allow trained, skilled botanists to enter areas where covered plant species occur during treatments.
AMM 32	CDPR will continue to ensure that pesticide applications near known populations of the covered plant species are conducted under the direction of a qualified biological monitor.
AMM 33	CDPR will continue to ensure that all workers are trained to identify covered plant species that may occur at project site prior to work commencing on site. CDPR will continue to instruct workers how to avoid inadvertent adverse impacts to these species.
AMM 34	CDPR will continue to ensure that all workers are trained in the safe and effective use of herbicides in sensitive habitats.
AMM 35	CDPR will continue to ensure that trained resource personnel are present at all phases of the work to ensure that herbicide application activities do not result in impacts to covered species.
AMM 36	If herbicides are spilled, they will be prevented from entering any water bodies to the extent practicable. CDPR staff and contractors will continue to be trained to contain any spilled material and are familiar with the use of absorbent materials. Spills will continue to be cleaned according to label instructions, and all equipment used to remove spills will be properly contained and disposed of or decontaminated, as appropriate. Applicators will continue to report spills as required by CDPR policy and in a manner consistent with local, state, and federal requirements.
AMM 37	Post-treatment, CDPR will continue to initiate monitoring, which typically consists of mapping, photo documentation, regular inspections, and depending on location and species, some formalized monitoring resulting in several years' worth of data and subsequent reporting.
AMM 38	CDPR will continue to take the following steps when using herbicide: <ul style="list-style-type: none"> ● Prior to treatment, CDPR's PCA or qualified staff will continue to evaluate sites within the HCP area for invasive species removal. Weed populations will continue to be targeted based on site and weather conditions, historic weed growth, or other information. ● CDPR will continue to determine the appropriate method for treating a target area (e.g., manual removal, aerial application, backpack sprayer, truck mounted sprayer). If the application can be made without negatively impacting water quality or covered species, then an application will continue to be made ● All herbicide applications will continue to be made according to the product label in accordance with regulations of the EPA, CalEPA, Cal OSHA, DPR, and the local Agricultural Commissioner. CDPR's PCA and DPR-licensed Qualified Applicator License (QAL) holders will continue to regularly monitor updates and amendments to the label so that applications are in accordance with label directions.

Oceano Dunes District
Habitat Conservation Plan EIR

Appendix C: Special-Status Species in HCP Area

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Oceano Dunes District HCP EIR

Appendix C: Special-Status Species in HCP Area

Special-Status Animal Species List

The following table includes special-status animal species, listing status, range in California, habitat, and potential for special-status species occur in the HCP area based on information from U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), California Department of Parks and Recreation (CDPR) survey and monitoring reports, California Natural Diversity Database (CNDDDB), and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. A total of 65 animal species were determined to have some potential to occur within the HCP area. Of these 65 species, 52 species have been recorded within the HCP area and/or have moderate or high potential to occur within the HCP area.

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
<i>Invertebrates</i>					
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools.	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	<u>None</u> - No suitable habitat and no records from area.	1, 2, 3
Kern primrose sphinx moth <i>Euproserpinus euterpe</i>	FT	Found in the Walker Basin, Kern County, and several other scattered locations (Carrizo Plain in San Luis Obispo County and Cuyama Valley in Santa Barbara County).	Host plant is evening primrose (<i>Camissonia contorta epilobioides</i>). Found in valley & foothill grassland.	<u>None</u> - No suitable habitat and no records from area. In San Luis Obispo County, this species is only known to occur within the Carrizo Plain.	1, 3
monarch butterfly <i>Danaus plexippus</i>	FC	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Roosts located in wind-protected tree groves (e.g., eucalyptus [<i>Eucalyptus</i> sp.], Monterey pine [<i>Pinus radiata</i>], Monterey cypress [<i>Cupressus macrocarpa</i>]), with nectar and water sources nearby.	<u>Present</u> - Known to overwinter in Pismo State Beach adjacent to the North Beach Campground. May roost elsewhere, within eucalyptus groves and Monterey cypress forest. Other areas containing these trees include the Oceano Campground and the vegetated islands; however, these areas may not provide enough wind	2, 3, 4

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Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
				cover to provide suitable winter roosts.	
Fish					
steelhead - south/central California coast ESU <i>Oncorhynchus mykiss irideus</i>	FT	Coastal river basins from the Russian River south to Soquel and Aptos Creek, and the drainages of San Francisco and San Pablo Bays, including the Napa River.	Hatches in fresh water, lives adult life in the ocean, and returns to natal stream or river to spawn; spawning and rearing habitat consists of perennial streams with clear, cool to cold, fast flowing water with a high dissolved oxygen content and abundant gravels and riffles.	<u>Present</u> - Known to occur in Pismo Creek and Arroyo Grande Creek from CDPR fish surveys and CNDDDB records. This species is localized to these creek systems and their confluences with the Pacific Ocean.	1, 2, 3, 4
Arroyo chub <i>Gila orcuttii</i>	CSSC	Native to streams from Malibu Creek to San Luis Rey River Basin; introduced into streams in Santa Clara, Ventura and Santa Ynez.	Slow water stream sections with mud or sand bottoms; feeds heavily on aquatic vegetation and associated invertebrates.	<u>Low</u> - The only known occurrences within five miles were introduced into the Santa Maria River. In addition, this species has not been documented in the HCP area during previous CDPR surveys from 2004-2018.	3
tidewater goby¹ <i>Eucyclogobius newberryi</i>	FE, CSSC	Occurs in brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River in Del Norte County.	Found in shallow lagoons and lower stream reaches in brackish to fresh water; they need fairly still but not stagnant water and high oxygen levels.	<u>Present</u> - Known to occur in Arroyo Grande Creek, Pismo Creek, Carpenter Creek, Oso Flaco Creek, and Pismo Creek from CDPR surveys and CNDDDB records. Suitable habitat in area includes Arroyo Grande Creek and Lagoon, Pismo Creek and Lagoon, Carpenter Creek, Oceano (Meadow Creek) Lagoon, and Oso Flaco Creek.	1, 2, 4

¹ Species listed in bold are Covered Species in the Oceano Dunes District HCP.

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
Amphibians/Reptiles					
California tiger salamander <i>Ambystoma californianse</i>	FT, ST, CSSC	Endemic, found in isolated populations the Central Valley and Central Coast ranges.	Requires both breeding and aestivation habitat. Breeding habitat consists of low-elevation (typically below 1,900 feet) vernal pools, vernal pool complexes, and seasonal ponds in grassland, oak savannah, and coastal scrub communities. They spend the dry season in upland habitats within one mile of the breeding ponds in small mammal burrows.	<u>None</u> - No suitable habitat and no records from area.	1, 3
California red-legged frog <i>Rana draytonii</i>	FT, CSSC	Historically, this species was found along the coast and Coast Ranges from Mendocino County in northern California south to northern Baja California, and inland east through the northern Sacramento Valley into the foothills of the Sierra Nevada mountains, south to Tulare county, and possibly Kern county. Currently occurs along the northern and southern coast ranges, and in isolated areas in the Sierra Nevada foothills.	Inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	<u>Present</u> - Observed during CDPR surveys in Arroyo Grande Creek and in the Oso Flaco Lake complex, including Oso Flaco Lake and Little Oso Flaco Lake. Potentially observation in Carpenter Creek. Also found nearby in Jack Lake, Finger Lake, Snake Lake, Little Oso Flaco Creek, and Lettuce Lake.	1, 2, 4
coast range newt <i>Taricha torosa</i>	CSSC	Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats and will migrate over one kilometer to breed in ponds, reservoirs and slow-moving streams.	<u>Present</u> - This species has been infrequently observed in the HCP area. Suitable habitat for this species is limited to aquatic habitat and areas near aquatic habitat.	3
blunt-nosed leopard lizard <i>Gambelia silus</i>	FE	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief.	Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	<u>None</u> - No suitable habitat and no records from area. In San Luis Obispo County, this species is only known to occur within the Carrizo Plain.	1, 3

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
Coast (California) horned lizard <i>Phrynosoma coronatum</i>	CSSC	Historically, found along the Pacific coast from the Baja California border west of the deserts and the Sierra Nevada, north to the Bay Area, and inland as far north as Shasta Reservoir, and south into Baja California. Ranges up onto the Kern Plateau east of the crest of the Sierra Nevada. Current range is more fragmented.	Chaparral, grasslands, coniferous forests in fine, loose soils. Prefers friable, rocky, or shallow sandy soils for burial; open areas for sunning; bushes for cover; and an abundant supply of ants and other insects.	<u>Present</u> - Documented in 2006 along the access road to Little Oso Flaco Lake. This species may utilize a variety of habitat locations within the HCP area including the vegetation islands and the western interface of sand and silver dune lupine-mock heather scrub habitat.	2, 3, 4
silvery legless lizard <i>Anniella pulchra</i>	CSSC	Occurs from the southern edge of the San Joaquin River in northern Contra Costa County south to northwestern Baja California Del Norte just south of Colonia Guerrero. Five lineages; Lineage D occurs in project area.	Dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and riparian habitats with moist, sandy soils.	<u>Present</u> - Observed in the HCP area in vegetation islands, designated campgrounds, and at Oso Flaco Lake. Also observed nearby at Little Oso Flaco Lake, Jack Lake, and near Lettuce Lake. Similar coastal dune scrub and riparian habitat near freshwater within the HCP area may also be used by this species.	2, 3, 4
two-striped garter snake <i>Thamnophis hammondi</i>	CSSC	Coastal California from vicinity of Salinas to northwest Baja California, from sea level to about 7,000 feet.	Highly aquatic, found in or near permanent fresh water, often along streams with rocky beds and riparian growth.	<u>Present</u> - This species has been infrequently observed in the HCP area. Observed at Oso Flaco Lake. Also observed in September 2016 within the Chevron property just south of the HCP area. Suitable habitat present within aquatic habitat in the HCP area.	3, 4
Western spadefoot <i>Spea hammondi</i>	CSSC	Ranges from near Redding south throughout the Great Valley and its associated foothills, through the	Prefers open areas with sandy or gravelly soils, in mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy	<u>Present</u> - Documented at Oso Flaco Lake in 2000 and within the Eucalyptus South vegetation island in	3, 4

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Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		South Coast Ranges into coastal southern California south of the Transverse mountains and west of the Peninsular mountains, into northwest Baja California.	washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal pools without predators are required for breeding.	2011. Other ephemeral water sources within the HCP area may be used by this species for breeding and vegetation islands and open sand areas may be used during dispersal and winter.	
western pond turtle <i>Emys marmorata</i>	CSSC	From Oregon border of Del Norte and Siskiyou Counties south along the coast to San Francisco Bay, inland through the Sacramento Valley and on western slope of Sierra Nevada.	Ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests.	<u>Present</u> - Known to occur in Oso Flaco Lake, Oceano Lagoon, and Arroyo Grande Creek from CDPR surveys and CNDDDB records. Other freshwater habitat within the HCP area may be used.	2, 3, 4
Birds					
brant <i>Branta bernicla</i>	CSSC (wintering and staging)	Winters along entire California coast.	Requires well-protected, shallow marine waters with inter-tidal eel grass beds, primarily within bays and estuaries; primary food is eel grass. Winters in sheltered bays, behind sand spits, in large embayments and near mouths of estuaries.	<u>Present</u> <u>(Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range. This species has been observed at in the HCP area. Suitable wintering habitat includes Pismo Lagoon, Oceano Lagoon, and other tidal areas.	3, 4
redhead <i>Aythya americana</i>	CSSC (nesting)	Year-round resident in central valley, winter resident elsewhere in wetland habitats. Breeds in wetland habitats in northeastern California, the Central Valley, the southern deserts.	Nests on marshy lakes and ponds, winters in large flocks on sheltered bays and lakes.	<u>Present</u> <u>(Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range. This species has been observed within the HCP area at Oso Flaco Lake. Suitable resting and foraging habitat includes large water bodies like Pismo Lagoon, Oso	3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
				Flaco Lake, and Oceano Lagoon.	
common loon <i>Gavia immer</i>	CSSC (nesting)	Migratory in California. In their winter range along ocean coasts. Nesting locations at certain large lakes and reservoirs in interior of state, primarily in northeastern plateau region.	Bodies of water regularly frequented are extensive, fairly deep, and produce quantities of large fish.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - The HCP area is outside the known breeding range. This species has been observed in the HCP area. Suitable roosting and foraging habitat include Pismo Lagoon, Oso Flaco Lake, and Oceano Lagoon.	3
wood stork <i>Mycteria americana</i>	CSSC	Migrant in southern California, vagrant elsewhere. Small breeding population known to nest at the southern end of the Salton Sea in California.	Freshwater and saltwater sloughs, shallow ponds and marshes. Near the Salton Sea, wood storks forage in shallow bays, marshy backwaters, canals, and drains. Along the coast, wood storks are found mainly in coastal estuaries, but also ponds and lakes inland from the ocean.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - The HCP area is outside the known breeding range. This species has only been observed at Oso Flaco Lake in 2011. Suitable roosting and foraging habitat includes Oso Flaco Lake, Pismo Lagoon, and Oceano Lagoon.	3, 4
double-crested cormorant <i>Phalacrocorax auritus</i>	SWL (nesting colony)	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Year-round resident along the California coast and Central Valley from the San Francisco Bay Area south to the border with Mexico; and a summer resident in the northeast corner of California.	Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins. Occupies diverse aquatic habitats in all seasons. Often perch on exposed sites such as rocks or sandbars, pilings, ship wrecks, high-tension wires, or trees near fishing sites.	<u>Present (Wintering/Migration)</u> , <u>Low (Nesting)</u> - This species is not known to nest in the HCP area. This species has been observed in the HCP area. Foraging, roosting, and loafing habitats are located anywhere near water bodies.	3
American white pelican <i>Pelecanus erythrorhynchos</i>	CSSC (nesting colony)	Year-round resident along the Coast and Central Valley from the San Francisco Bay Area south to the border with Mexico; and a summer	White pelicans nest on the ground in colonies on earthen, sandy or rocky, islands, peninsulas or tule mats. They forage in shallow inland waters or	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range. This species has	3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		resident in the northeast corner of California. Occurs as migrating or nonbreeding populations throughout California, except for breeding grounds located in the Klamath basin.	shallow coastal marine waters. Sand bars are important for loafing and roosting.	been observed foraging in the HCP area and is frequently observed at Oso Flaco Lake. Suitable foraging and roosting habitat in the HCP area includes the beach, Pismo Creek, Pismo Lake, Meadow Creek, Oceano Lagoon, Arroyo Grande Creek, Oso Flaco Lakes, and Oso Flaco Creek.	
California brown pelican <i>Pelecanus occidentalis californicus</i>	CFP (nesting colony and communal roosts)	Year-round nonbreeding resident from central coast down to the Mexico border, with year-round breeding grounds offshore located approximately from Point Conception to Capitán.	Colonial nester on coastal islands just outside the surf line; breeds on rocky or low, brushy slopes of undisturbed islands in the Channel Islands and Mexico. Rests on water or inaccessible rocks (either offshore or on mainland), but also uses sandbars, pilings, jetties, breakwaters, mangrove islets, and offshore rocks and islands.	<u>Present (Wintering/Migration), None (Nesting)</u> - HCP area is outside the known breeding range. This species has been observed in the HCP area, including along the beach and at Oso Flaco Lake. Suitable roosting and loafing habitat includes the beach, Pismo Lake, and Oso Flaco Lake.	3, 4
least bittern <i>Ixobrychus exilis</i>	CSSC, BCC (nesting)	Year-round resident in southern California, summer resident in the Central Valley. Breeds in northeastern California, the central coast, the Central Valley, the southern coast, and the southern deserts.	Colonial nester in fresh and brackish marshlands and borders of ponds and reservoirs, with tall, dense emergent vegetation and clumps of woody plants over deep water for ample cover; nests usually placed low in tules, over water.	<u>Present (Nesting/Wintering/Migration)</u> - Has been observed as recently as December 2016 at Oso Flaco Lake and has been confirmed to breed at Oso Flaco Lake as recently as May 2016. Suitable breeding/nesting habitat may include dense emergent vegetation around Oso Flaco Lake and Pismo Lake.	3, 4
California condor <i>Gymnogyps californianus</i>	FE	Reintroduced to mountains of southern and central California,	Require vast expanses of open savannah, grasslands, and foothill	<u>Low (Wintering/Migration), None (Nesting)</u> - The	1, 3

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Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		Arizona, Utah, and Baja California.	chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	HCP area is outside the known breeding range. Determined to be a rare migrant in the HCP area.	
osprey <i>Pandion haliaetus</i>	SWL (nesting)	Breeds in northern California and winters along the central and southern coast.	Occurs at ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	<u>Present (Wintering/Migration), None (Nesting)</u> - The HCP area is outside the known breeding range. Ospreys have been observed foraging and perching within the HCP area, including Oso Flaco Lake. Suitable overwintering habitat includes trees around Oso Flaco Lake, Oceano Lagoon, Pismo Lake, Pismo Creek, Arroyo Grande Creek, and Oso Flaco Creek.	2
white-tailed kite <i>Elanus leucurus</i>	CFP	Found year-round in lowland areas west of Sierra Nevada from head of Sacramento Valley south, including coastal valleys and foothills, to western San Diego County at Mexico border.	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging.	<u>Present (Foraging, Wintering), Moderate (Nesting)</u> - Observed in the HCP area, including at Oso Flaco Lake, as recently as November 2016. Suitable nesting and wintering habitat includes North Beach campground, Le Sage Rivera Golf Course, Oceano Campground, and isolated stands of Monterey pine forest, beach pine, and coast live oak woodland located throughout the HCP area.	3, 4
golden eagle <i>Aquila chrysaetos</i>	CFP	Found year-round throughout the foothills and mountains of	Occupied habitats include shrublands, grasslands, desert, mixed	<u>Present (Wintering/Migration), Low (Nesting)</u> - Not	3, 4

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Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		California, and as nonbreeding populations throughout the Central and Imperial Valleys.	woodlands, and coniferous forests. Usually found in mountainous areas, but may also nest in wetland, riparian, and estuarine habitats at lower elevations. Nests on cliffs and escarpments or in tall trees overlooking open country; forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals.	known to nest within the HCP area. One golden eagle was observed flying within the HCP area in December 2015 at Oso Flaco Lake. Suitable nesting and perching habitat includes North Beach campground, Le Sage Rivera Golf Course, Oceano Campground, and isolated stands of Monterey pine forest, beach pine, and coast live oak woodland located throughout the HCP area. The open beach and agricultural areas provide suitable foraging habitat.	
Northern harrier <i>Circus cyaneus</i>	CSSC	Found year-round throughout lowland/coastal California; has been recorded in fall at high elevations. Nonbreeding elsewhere in California.	Grasslands, meadows, marshes, and seasonal and agricultural wetlands.	<u>Present (Nesting/Wintering)</u> - Regularly observed in HCP area, although only known to be a rare breeder in the Oso Flaco Lake area. Suitable nesting habitat includes Oso Flaco Lake, Oceano Lagoon, and Pismo Lake.	3, 4
sharp-shinned hawk <i>Accipiter striatus</i>	SWL (nesting)	Occurs throughout California and beyond: year-round resident in northern California; winter resident in central and southern California.	Breeds in deciduous, coniferous, and mixed pine-hardwood forests and pine plantations. During the nonbreeding season they hunt small birds and mammals along forest edges, rural farm sites, and sometimes at backyard bird feeders.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - The HCP area is outside the known breeding range. This species has been infrequently observed in the HCP area. Suitable foraging habitat may exist throughout the Oso Flaco Lake area due to its proximity to agricultural areas.	3

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Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
				Monterey pine forest, Torrey pine forest, beach pine forest, and coast live oak woodland near the Oceano Campground may also provide suitable habitat for roosting and foraging.	
Swainson's hawk <i>Buteo swainsoni</i>	ST, BCC (nesting)	Breeds in central and eastern California in the summer.	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	<u>Low (Migration), None (Nesting/Wintering)</u> -Determined to have a low chance of occurrence because the HCP area is outside this species current known range. This species was recorded on eBird as being observed one time in the HCP area in 2010 at Oceano Campground; therefore, it may occur as a rare migrant in the area.	3
California black rail <i>Laterallus jamaicensis</i> ssp. <i>coturniculus</i>	ST, CFP, BCC	This endemic subspecies of the black rail (<i>Laterallus jamaicensis</i>) occurs in the San Francisco Bay region, parts of the Central Valley and at the southeastern border of the State.	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. It needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	<u>Present (Nesting/Wintering)</u> -Historically observed nesting at Oso Flaco Lake in the HCP area; however, they have not been observed in the area since 1991. Suitable foraging and nesting habitat may include Oso Flaco Lake and Pismo Lake.	2, 3, 4
Ridgeway's rail <i>Rallus longirostris</i> <i>obsoletus</i>	FE SE, CFP	Found year-round along California coastal saline emergent wetlands.	Coastal wetlands and brackish waters.	<u>None</u> - The HCP area is outside the known range for this species. No suitable habitat and no records from area.	1, 3
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT, CSSC	Pacific population of western snowy plover occurs along the entire the Pacific Ocean on the	Occurs on sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy,	<u>Present (Nesting/Wintering)</u> -Known to nest and winter in the HCP	1, 2, 4

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Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		North American mainland coast, peninsula offshore islands, interior bays, estuaries, and rivers.	gravelly or friable soils for nesting. Nests typically found on flat, open areas of the back beach or backdunes where vegetation is sparse or non-existent.	area. Nesting and foraging habitat are located along the open sandy beach above the high tide line and within the foredunes.	
long-billed curlew <i>Numenius americanus</i>	SWL, BCC (nesting)	Breeds in upland shortgrass prairies and wet meadows in northeastern California; winters along the coast.	Habitats on gravelly soils and gently rolling terrain are favored. Overwintering habitat along the coast includes nearly all marine habitats: beaches, rocky coasts, mudflats, coastal estuaries, and river/stream deltas.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - The HCP area is outside the known breeding range for this species. Suitable foraging and roosting habitat are located throughout HCP area along the beach.	2
marbled murrelet <i>Brachyramphus marmoratus</i>	FT, SE	Nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nonbreeding and year-round populations are located offshore from the Oregon border to Point Conception.	Spend majority of life on the ocean but come inland to nest. Nests in old-growth redwood dominated forests, up to six miles inland, often in Douglas fir. In California, nests are typically found in coastal redwood (<i>Sequoia sempervirens</i>) and Douglas-fir (<i>Pseudotsuga menziesii</i>) forests.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - The HCP area is outside this species known breeding range. This species has been observed just off shore and in near shore areas as recently as November 2010. Suitable foraging habitat within HCP area is located off-shore in the HCP area.	1, 3, 4
California gull <i>Larus californicus</i>	SWL (nesting colony)	Breeds in central eastern California, winters along central coast.	Occurs in littoral waters, sandy beaches, waters and shorelines of bays, tidal mud-flats, marshes, lakes, etc. Colonial nester on islets in large interior lakes, either fresh or strongly alkaline.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - The HCP area is outside the known breeding range for this species. May use a wide range of habitats within HCP area for foraging and roosting.	2
California least tern <i>Sterna antillarum browni</i>	FE, SE, CFP	Nests along the Pacific Coast from San Francisco Bay south to Northern Baja California.	Colonial breeder on bare or sparsely vegetated flat substrates, sandy beaches, alkali flats, landfills or paved areas.	<u>Present (Nesting)</u> , <u>None (Wintering)</u> - Known to nest in the HCP area along the open, sandy beach	1, 2, 4

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Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
			Nesting colonies are typically located on broad dune-backed sandy beaches or small sandspits where vegetation is either sparse or altogether absent.	above the high tide line. Most commonly observed foraging over the ocean, though they are regularly observed foraging at Oso Flaco Lake and Pismo Lake, as well as at the small lagoon that forms at the mouth of Pismo Creek.	
black tern <i>Chidonias niger</i>	CSSC (nesting colony)	Breeds in central eastern California, primarily in Modoc Plateau region, with some breeding in the Sacramento and San Joaquin valleys. Winters along central coast.	Freshwater lakes, ponds, marshes and flooded agricultural fields; at coastal lagoons or estuaries during migration. Colonial nester on islets in large interior lakes, either fresh or strongly alkaline.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range for this species. This species has been observed in the HCP area at Oso Flaco Lake as recently as 2009. May use a wide range of habitats within the HCP area for foraging and roosting habitat.	3, 4
elegant tern <i>Thalasseus elegans</i>	SWL (nesting colony)	Only 3 known breeding colonies: San Diego Bay, Los Angeles Harbor and Bolsa Chica Ecological Reserve.	Nests on open, sandy, undisturbed beaches and on salt-evaporating pond dikes (San Diego) in association with Caspian tern. Prefers coastal waters, bays, harbors, lagoons, and estuaries while roosting on migration routes.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range for this species. Migrants may use the ocean shore and the banks of Pismo, Oceano, and Arroyo Grande Lagoons within the HCP area for roosting and/or foraging.	2
black skimmer <i>Rynchops niger</i>	CSSC, BCC (nesting colony)	Year-round resident in LA, Orange, and San Diego Counties; winters commonly from coastal Santa Barbara south to San Diego. Breeds in isolated pockets, including: South San	Nests on isolated and/or undisturbed gravel bars, low islets and sandy beaches, in unvegetated sites; colonies usually less than 200 pairs. Wintering birds will utilize beaches above the	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range. This species has been observed in the HCP area at the Arroyo	3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		Francisco Bay, the north and south portions of the Salton Sea, and 4 small known colonies on the coast from Santa Barbara to San Diego.	tide or mudflats within estuaries.	Grande Creek mouth as recently as August 1992. May use the beaches and estuary areas throughout the HCP area as migrating and wintering habitat.	
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT, SE, BCC (nesting)	Breeds at isolated locations in central and southern California, from the Sacramento Valley south to northern Mexico.	Nests in open woodland with low, dense, scrub cover, often along waterways. Along the broad, lower flood bottoms of large river systems; nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles or wild grape.	<u>Present (Migration), None (Nesting/Wintering)</u> - The HCP area is outside the current known breeding range and wintering range for this species. Observed at Oso Flaco Lake in 1999 and at Oceano Lagoon in 2010. This species is likely only a rare migrant in the HCP area.	2, 3, 4
Western burrowing owl <i>Athene cunicularia</i>	CSSC, BCC	Lowlands throughout California, including Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast.	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows.	<u>Present (Wintering/Migration), Low (Nesting)</u> - Known to utilize the HCP area during the winter and migration, but not known to breed within the area. Has been observed at Oso Flaco Lake, Phillips 66 Leasehold, near the chemical toilets on the beach, near the Grand Avenue entrance, and at Oceano Lagoon. May use a variety of habitats within the HCP area but is constricted to areas with low or no vegetation and available small-mammal burrows or organic debris (e.g., driftwood).	2, 3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
Vaux's swift <i>Chaetura vauxi</i>	CSSC (nesting)	A summer (breeding) migrant in northern California and coastal California from the Oregon border to Monterey County, and in the Sierra Nevada from the Oregon border to northern Kern County.	Colonial breeding habitat is tied closely with redwood forests. Nests in snags and hollow trees in redwood and Douglas fir forests. May occasionally use manmade structures for nesting and/or roosting—primarily chimneys (mimicking tree snags/hollows).	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range. This species has been observed in the HCP area at Oso Flaco Lake as recently as May 2015; however, it is likely a rare migrant in the HCP area.	3, 4
black swift <i>Cypseloides niger</i>	CSSC, BCC (nesting)	This species occurs in California as a summer resident and its breeding range is patchily distributed throughout the State excluding the Central Valley and much of the coast.	Nests colonially behind or beside permanent or semi-permanent waterfalls, on perpendicular cliffs near water and in sea caves.	<u>Present (Wintering/Migration)</u> , <u>None (Nesting)</u> - HCP area is outside the known breeding range for this species. This species has been observed in the HCP area at Oso Flaco Lake as recently as 2016; however, it is likely a rare migrant in the HCP area.	3, 4
American peregrine falcon <i>Falco peregrines ssp. anatum</i>	CFP	Year-round resident throughout California.	Nests on cliffs or man-made structures such as buildings and bridges; feeds on birds.	<u>Present (Foraging/Wintering)</u> , <u>Low (Nesting)</u> - Regularly observed in flight and hunting in the HCP area. Not known to nest in the area. May use a variety of habitats within the HCP area for foraging and suitable nesting habitat is present within the trees and other tall structures in the HCP area.	3, 4
olive-sided flycatcher <i>Contopus cooperi</i>	CSSC, BCC (nesting)	A summer (breeding) migrant in the Cascade Range and Modoc Plateau in northern California, Sierra Nevada in eastern California, Coast Ranges, and Transverse and	Nests in late-successional coniferous forests with open canopies.	<u>Present (Foraging/Migration/Wintering)</u> , <u>Low (Nesting)</u> - Uncommon breeder in San Luis Obispo County. Observed in the HCP	3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		Peninsular Ranges in Southern California.		area at Oso Flaco Lake, Meadow Creek, and Oceano Campground. May use a variety of habitats for foraging and/or roosting. Suitable breeding habitat present in the eucalyptus and willows in the HCP area.	
Southwestern willow flycatcher <i>Empidonax trailii extimus</i>	FE, SE (nesting)	Occurs as a summer (breeding) migrant in moist thickets and riparian areas throughout California.	Nests in dense riparian habitats with perennial water.	<u>None</u> - The HCP area is outside the known breeding range. No suitable habitat and no records from area	1, 3
willow flycatcher <i>Empidonax trailii</i>	SE, BCC (nesting)	Common resident in most of California, breeds along the western coast of California from Monterey county to the Mexican border, and along a band in the eastern Sierra Nevada southwest through the southern margin of the San Joaquin Valley.	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2,000-8,000 ft elevation. Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	<u>Present</u> <u>(Wintering/Migration)</u> , <u>Low (Nesting)</u> - HCP area outside the known breeding range and wintering range for this species. Confirmed in the HCP area at Oso Flaco Lake and at Oceano Lagoon as recently as 2016. May use a variety of the willow thicket habitat within the HCP area for both foraging and resting during migration, especially the thickets on the banks and surrounding wetlands of Pismo, Oceano, and Arroyo Grande Lagoons, and Oso Flaco Lake.	3, 4
loggerhead shrike <i>Lanius ludovicianus</i>	CSSC, BCC (nesting)	Resident and winter visitor in lowlands and foothills throughout California; rare on coastal slope north of Mendocino County, occurring only in winter.	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	<u>Present</u> <u>(Nesting/Wintering)</u> - Regularly observed in the HCP area and known to nest and forage in the area.	3, 4
least Bell's vireo	FE, SE	Occurs as a summer (breeding) migrant in the	Nests in riparian habitats, generally in dense	<u>None</u> - The HCP area is outside the known	1, 3

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
<i>Vireo bellii</i> ssp. <i>pusillus</i>	(nesting)	far south of California and in northern Baja California.	vegetation near surface water.	range for this species. No suitable habitat and no records from area.	
California horned lark <i>Eremophila alpestris actia</i>	SWL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	<u>Present (Foraging/Wintering/Nesting)</u> - This species has been observed in the HCP area and the National Wildlife Refuge to the south of the HCP area. Within the HCP area this species has been observed nesting in similar habitat to western snowy plover and California least tern. May nest and forage in a variety of low-grass or bare habitats within the HCP area.	2
bank swallow <i>Riparia riparia</i>	ST (nesting)	Occurs primarily around the remaining natural river banks of the Sacramento and Feather Rivers in the Sacramento Valley. A small number of colonies breed in Monterey, San Mateo, Shasta, Siskiyou, Lassen, Plumas, and Modoc Counties.	Colonial nester, nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine textured/sandy soils near streams, rivers, lakes or ocean to dig nesting hole.	<u>Present (Wintering/Migration), None (Nesting)</u> – HCP area is outside the known breeding range for this species. This species has been confirmed foraging in the HCP area as recently as 2016; however, it is likely a rare migrant in the HCP area. Foraging habitat occurs at Arroyo Grande Creek, Oceano Lagoon, Oso Flaco Lake, Oso Flaco Creek, Pismo Lake, Pismo Creek.	3, 4
Lucy's warbler <i>Oreothlypis luciae</i>	CSSC, BCC (nesting)	Lower Colorado River, and small localized populations occur west to the Borrego Valley, San Diego County, and north through the Mojave	Prefers thickets of honey mesquite, riparian woodland, and occasionally stands of tamarisk.	<u>Present (Wintering/Migration), None (Nesting)</u> – HCP area is outside the known breeding range for this species. This	3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		Desert, Death Valley National Park, and Inyo County.		species has been confirmed foraging in the HCP area at Oso Flaco Lake and Oceano Lagoon as recently as 2015; however, it is likely a rare migrant in the HCP area.	
yellow warbler <i>Setophaga petechia</i>	CSSC, BCC (nesting)	Nests throughout California except the Central Valley, Mojave Desert region, and high altitudes in Sierra Nevada; winters along Colorado River and in parts of Imperial and Riverside Counties.	Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral; may also use oaks, conifers, and urban areas near stream courses.	<u>Present (Foraging/Wintering)</u> , <u>Moderate (Nesting)</u> - Documented in the HCP area at Arroyo Grande Creek and Oso Flaco Lake. Also found nearby at Jack Lake and Little Oso Flaco Lake. Marginal foraging and nesting habitat are present in riparian areas.	3, 4
yellow-breasted chat <i>Icteria virens</i>	CSSC (nesting)	Summer (breeding) migrant in northern California, in portions of the Central Valley and the west slope of the Sierra Nevada, on the Central and Southern coast, and in portions of the southern California deserts.	Occupies early successional riparian habitats with a well-developed shrub layer and an open canopy. Nests in dense riparian and shrub habitats.	<u>Present (Foraging/Wintering)</u> , <u>Low (Nesting)</u> - The species range has not been documented to extend to the coast along Arroyo Grande Creek, but has been documented along Arroyo Grande Creek above Lopez Dam. Confirmed in the HCP area at the Oso Flaco Maps Station in 2000 and at Oso Flaco Lake in 2015. Nesting in the area is not confirmed and may not occur, but this species has been observed singing in the HCP area. May use habitats along Arroyo Grande and Oso Flaco Creeks for nesting and foraging.	3, 4
summer tanager <i>Piranga rubra</i>	CSSC (nesting)	Summer resident of desert riparian along	Requires cottonwood-willow riparian for	<u>Present (Wintering/Migration)</u> ,	3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
		lower Colorado River, and locally elsewhere in California deserts.	nesting and foraging; prefers older, dense stands along streams.	<u>None (Nesting)</u> - HCP area is outside the known breeding range for this species. This species was observed in the HCP area at Oso Flaco Lake as recently as December 2016; however, it is likely a rare migrant in the HCP area. May use a wide variety of habitats within the HCP area during migration.	
tricolored blackbird <i>Agelaius tricolor</i>	CSSC, BCC (nesting)	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony. Frequently nests in blackberry thickets and other scrub vegetation under riparian canopy.	<u>Present (Foraging/Wintering), Low (Nesting)</u> - Confirmed in the HCP area at Oso Flaco Lake as recently as August 2016. No nesting documented in the area. May use habitat adjacent to Arroyo Grande and Oso Flaco Creeks and Oso Flaco Lake for nesting and/or foraging.	3, 4
yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	CSSC (nesting)	Winter resident along the central and south coast, summer resident in eastern California, and year-round resident in southern California.	Nests in freshwater emergent wetlands with dense vegetation and deep water, often along the borders of lakes or ponds.	<u>Present (Wintering/Migration), None (Nesting)</u> - HCP area is outside the known breeding range. Confirmed in the HCP area near Oceano Lagoon and at Oso Flaco lake as recently as 2016; however, it is likely a rare migrant in the HCP area. This species may utilize open areas and emergent vegetation within the HCP area for foraging and/or roosting.	3, 4

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
Mammals					
pallid bat <i>Antrozous pallidus</i>	CSSC	Throughout California except high Sierra from Shasta to Kern Counties and northwest coast, primarily at lower and mid-elevations.	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open space, forages along river channels. Roost sites include crevices in rocky outcrops and cliffs, caves, mines, trees and various human structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	<u>Present</u> - Documented during passive acoustic surveys at Oceano Lagoon on June 2017. May use a variety of habitats within the HCP area, including tree snags and/or hollows and manmade structures.	3, 4
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	FC, SC, CSSC	Found throughout California, but details of its distribution are not well known.	Roosts in caves, buildings, hollow trees; forages in many habitats. Most abundant in mesic habitats.	<u>Present</u> - Documented during passive acoustic surveys at Oceano Lagoon on June 2017. May use a variety of habitats within the HCP area, including tree snags and/or hollows and manmade structures.	2, 3, 4
Western red bat (<i>Lasiurus blossevillii</i>)	CSSC	Occur from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade Crest and deserts. Their winter range includes western lowlands and coastal regions south of the San Francisco Bay.	Feed over a variety of habitats includes grasslands, shrublands, open woodlands and forests, and croplands. Roost in tree foliage, typically in riparian areas.	<u>Present</u> - Documented during passive acoustic surveys at Oceano Lagoon on June 2017. May use a variety of habitats within the HCP area, including tree snags and/or hollows and manmade structures.	3, 4
giant kangaroo rat <i>Dipodomys ingens</i>	FE, SE, FP	Annual grasslands on the western side of the San Joaquin Valley, marginal habitat in alkali scrub.	Needs level terrain and sandy loam soils for burrowing.	<u>None</u> - No suitable habitat and no records from area.	1, 3
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	CSSC	Coastal scrub of southern California from San Diego County to SLO County.	Moderate to dense canopies preferred; they are particularly abundant	<u>Low</u> - Limited suitable habitat and no records from area.	2

Table C1. Special-status Animal Species with the Potential to Occur in the ODD HCP Area					
Species	Listing Status ¹	Range in California	Habitat	Potential to Occur	Sources
			in rock outcrops and rocky cliffs and slopes.		
Southern sea otter <i>Enhydra lutris nereis</i>	FT, CFP	Near shore marine environments from about Ano Nuevo, San Mateo County to Point Sal, SB County.	Needs canopies of giant kelp and bull kelp for rafting and feeding; prefers rocky substrates with abundant invertebrates.	<u>Present (Offshore only)</u> - Southern sea otters are occasionally seen offshore of the HCP area.	1, 3, 4
American badger <i>Taxidea taxus</i>	CSSC	Occurs throughout California and the western United States and Canada.	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and large areas of open, uncultivated ground. Preys on burrowing rodents.	<u>Present</u> - Has been observed in vegetation islands, and nearby Phillips 66 leasehold. American badger tracks have been observed in the open riding area near the vegetation islands. More likely to use the habitat in the southern portion of the HCP area that is further away from urban areas and connected to other open space.	2, 3, 4
¹ Listing Status Key: FE – Federal Endangered FT – Federal Threatened FC – Candidate for Federal listing BCC – USFWS Birds of Conservation Concern			SE – State Endangered ST – State Threatened SC – Candidate for State listing CFP – California Fully Protected CSSC – California Species of Special Concern SWL- State Watch List		
<u>Sources</u>					
<ol style="list-style-type: none"> USFWS. 2017. IPaC Official Species List. List generated August 29, 2017. https://ecos.fws.gov/ipac/publicDocument/VU27V52SPNBXJKHBCT2J7TYWX4 California Natural Diversity Database (CNDDDB). 2017. Oceano and Pismo Beach USGS 7.5 Minute Quadrangles. California Department of Fish and Game, Biogeographic Data Branch. Last updated August, 2017. California Department of Parks and Recreation, 2017. Oceano Dunes Habitat Conservation Plan: Appendix A. Listed and Other Special-status Species not Included in the HCP. California Department of Parks and Recreation. 2017 (August). Oceano Dunes State Vehicular Recreation Area Wildlife Habitat Protection Plan. Prepared by California Department of Parks and Recreation Off-highway Motor Vehicle Division, Oceano Dunes District. 					

Special-Status Animal Species Descriptions

Special-status animal species that are potentially impacted by the existing HCP covered activities, proposed new activities, and potential future activities are described below. Complete descriptions of each HCP covered species including taxonomy, habitat associations, population size, and close to 20 years of annual monitoring data are presented in HCP (section 3.3.1 for SNPL, section 3.3.2 for CLTE, section 3.3.3 for CRLF, and section 3.3.4 for tidewater goby).

Fish

Tidewater Goby

Tidewater goby is endemic to California, occurring along the coast from San Diego County to Del Norte County. They inhabit shallow coastal lagoons and lower stream reaches where the water is brackish to fresh. Tidewater goby are absent from areas where the coastline is steep and streams do not form lagoons or estuaries. They prefer water that is slow-moving but not stagnant, and typically avoid fast currents or strong wave action. They can survive salinities from 0 to over 50 parts per thousand and temperatures from at least 8 to 23 Celsius. They prefer water at depths of 9–39 inches with relatively high dissolved oxygen and substrates of sand and mud with abundant vegetation (Moyle, Yoshiyama, Williams, & Wikramanayake, 1995) but can tolerate very low dissolved oxygen. Very few tidewater gobies have ever been captured in the marine environment (Swift, Nelson, Maslow, & Stein, 1989), which suggests this species rarely occurs in the open ocean. Therefore, the tidewater goby occurs within discrete coastal wetlands naturally separated by the presence of sandbars that restrict access to the Pacific Ocean (McCraney, Goldsmith, Jacobs, & Kinziger, 2010). These sandbars generally breach 1–2 times per year during periods of high surf and freshwater input, resulting in rapid draining of the estuary (Krauss, Militello, & Todoroff, 2002). Thus, successful migration between lagoon habitats requires coordination of breaching events typically between geographically proximate habitats, and dispersal is passive (Lafferty, Swift, & Ambrose, 1999) (Dawson, Stanton, & Jacobs, 2001) (McCraney, Goldsmith, Jacobs, & Kinziger, 2010). Migration between lagoons is thus thought to be rare (McCraney, Goldsmith, Jacobs, & Kinziger, 2010) or at least infrequent.

A total of about 45 acres of suitable tidewater goby habitat is present within the HCP area. This can vary from year to year as hydrologic conditions and shoreline dynamics dictate. Tidewater goby is known to occur in Arroyo Grande Creek/Lagoon and Pismo Creek within the HCP area. The mouths of both creeks end at coastal lagoons/estuaries typical of small coastal watersheds that form sandbars in low-flow summer and fall periods. A lagoon is typically present year-round at Pismo and Arroyo Grande creeks; however, under certain circumstances, Arroyo Grande Lagoon has been known to dry up completely. In most winters, there is sufficient runoff after large rain events to breach the sandbar formed at the crest of the beach and allow a continuous streamflow into the ocean. Tidewater goby have also been observed in Carpenter Creek, which can connect to the Pismo Creek Lagoon, and in the Oceano (Meadow Creek) Lagoon, which drains into the Arroyo Grande Creek/Lagoon. The small Carpenter Creek population is an extension of the population in Pismo Creek.

The USFWS has also identified approximately 7.5–10 acres of available potential (unoccupied) tidewater goby critical habitat in what the USFWS calls the “Oso Flaco Lagoon” (USFWS, 2005a). A true lagoon is often not present here, but in some years, it forms behind the beach, hydrologically associated with Oso Flaco Creek. In 2017, two tidewater gobies were found in Oso Flaco Creek for the first time (Rischbieter D. , 2017). Tidewater goby is not known to occur

in Oso Flaco Lake. Oso Flaco Lake is dominated by warmwater sport fish, such as largemouth bass (*Micropterus salmoides*) and other sunfish, and the creek is typically narrow and confined. The creek rarely impounds to form a true lagoon and, as a result, there is a large freshwater influence with no salt-water prism. Consequently, this area appears likely to be poor long-term habitat for tidewater goby.

Amphibians

California Red-legged Frog

CRLF is the largest native frog in California (3.3–5.4 inches) and has been found at elevations from sea level to about 5,000 feet, with most observations occurring below 3,500 feet (USFWS, 2002). Historically, CRLF was common in coastal habitats from Point Reyes National Seashore, Marin County, California, and inland from the vicinity of Redding, Shasta County, California, southward to northwestern Baja California, Mexico (Hayes & Jennings, 1988). CRLF has been extirpated or nearly extirpated from over 70 percent of its former range (Hayes & Jennings, 1988), (USFWS, 1996). This species is still common in the San Francisco Bay Area and along the central coast in Monterey, San Luis Obispo, and Santa Barbara counties (USFWS, 2002). The most secure aggregations of CRLF are found in aquatic sites that support substantial riparian and aquatic vegetation and lack non-native predators such as American bullfrogs (*Lithobates catesbeianus*).

Habitats of CRLF are characterized by dense, shrubby riparian vegetation associated with deep (2 feet), still, or slow-moving water (Jennings & Hayes, 1994). The shrubby vegetation preferred by CRLF is arroyo willow, cattails, and bulrushes found in wetland and riparian habitats. Most important to CRLF is a breeding pond, or slow-flowing stream reach or deep pool within a stream with vegetation or other material to which egg masses may be attached. These areas must hold water long enough for tadpoles to complete their metamorphosis into juvenile frogs that can survive outside of water (Jennings & Hayes, 1994). CRLF eggs are usually attached to emergent vegetation in lagoons, streams, and a variety of natural and human-made ponds. Water with a salinity of less than 4.5 percent is necessary to ensure the survival of embryonic stages. Juvenile CRLF seem to favor open, shallow aquatic habitats with dense, submergent vegetation. CRLF disperse through uplands, such as grasslands, and typically find cover amongst boulders or rocks and organic debris such as downed trees or logs, industrial debris, and agricultural features such as drains, watering troughs, spring boxes, and abandoned sheds (USFWS, 2001a). CRLF also use small mammal burrows and moist leaf litter for cover (Jennings & Hayes, 1994) (USFWS, 1996). Incised stream channels with portions narrower and deeper than 18 inches may also provide habitat (USFWS, 1996).

Within the HCP area, CRLF are currently known to occur in the Oso Flaco Lake area and in Arroyo Grande Creek (**Error! Reference source not found.**). Suitable breeding habitat encompasses 178 acres within the HCP area, while upland habitat encompasses 4,827 acres. CRLF have been found in the past at Finger Lake and one sub-adult CRLF has been found at Snake Lake just outside the HCP area (Schneider, 2000). CDPR Environmental Scientist staff conducted CRLF presence/absence surveys in the HCP area in accordance with the USFWS protocol (USFWS, 1997) and have found CRLF at Oso Flaco Lake, Little Oso Flaco Lake, Oso Flaco Creek, Oceano (Meadow Creek) Lagoon, Arroyo Grande Creek and estuary, and a presumed CRLF tadpole was observed in Carpenter Creek in 2019. In March 2019, a CRLF egg mass was found in Arroyo Grande Creek. CRLF have also been found in Jack Lake.

Poor water quality and the presence of invasive species in the HCP area might adversely impact CRLF. Oso Flaco Lake is fed primarily from agricultural discharge. Water quality surveys

conducted by the RWQCB identified numerous elements in the water column above regulatory limits (RWQCB, Central Coast Region, 2001). In addition, non-native species, including bluegill (*Lepomis macrochirus*), black bass (*Micropterus salmoides*), goldfish (*Carassius auratus*), and crayfish (*Procambarus clarkii*) that are introduced to water bodies in the HCP area can adversely impact CRLF.

Western Spadefoot Toad

The western spadefoot toad is nearly endemic to California and historically ranged from the vicinity of Redding in Shasta County southward to Mesa de San Carlos in northwestern Baja California (Stebbins R. , 2003). Western spadefoot toad has been extirpated throughout most of the lowlands of southern California (Stebbins R. , 2003) and from many historical locations in the Central Valley (Jennings & Hayes, 1994) (Fisher & Shaffer, 1996).

Western spadefoot toad occurs primarily in grassland habitats but can also be found in valley-foothill hardwood woodlands. Western spadefoot toads are almost completely terrestrial and enter water only to breed. They breed from January to May in temporary pools and drainages that form following winter or spring rains. During dry periods western spadefoot toads construct and occupy burrows that may be up to 3 feet in depth (Ruibal, Tevis, Jr., & Roig, 1969).

Individuals may remain in these burrows for 8 to 9 months. The burrows are typically constructed in soils that are relatively sandy and friable as these soils facilitate both digging and water absorption (Ruibal, Tevis, Jr., & Roig, 1969). Western spadefoot toads forage on a variety of insects, worms, and other invertebrates.

The western spadefoot toad is often difficult to detect due to extended periods of its life cycle spent underground. Very little is known about spadefoot toad at the HCP area, and the few HCP area sightings that exist have been incidental. The last incidental sighting was at the Eucalyptus South vegetation island in 2011 while doing pitfall trapping. A western spadefoot toad was also observed at Oso Flaco Lake in February and March of 2000. In addition, suitable habitat for western spadefoot toad is present within the SVRA in wet years.

Reptiles

Coast (California) Horned Lizard

The coast horned lizard occurs in the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. It occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper, and annual grass habitats. This species inhabits open country, especially sandy areas, washes, floodplains and windblown deposits within a wide range of habitats. Horned lizards forage on the ground in open areas, usually between shrubs and often near ant nests. 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 horned lizards by burrowing into loose soil. Periods of inactivity and winter hibernation are spent burrowed into the soil under surface objects such as logs or rocks, in mammal burrows, or in crevices. The coast horned lizard was documented on site in 1991 (Burton & Kutilek, 1991). In addition, a coast horned lizard was documented in 2006 along the proposed Little Oso Flaco Lake Access Road alternative. Since that time, anecdotal records of coast horned lizard have been reported for various vegetation islands within the HCP area. A coast horned lizard was observed in January 2017 within the Chevron property just south of the Guadalupe-Nipomo Dunes National Wildlife Refuge (NWR) south of the HCP area. Appropriate habitat and food resources for coast horned lizard are present on many of the vegetation islands within the HCP area.

Silvery Legless Lizard

The silvery legless lizard is a secretive fossorial lizard that is common in California in suitable habitats in the Coast Ranges from the vicinity of Contra Costa County south to the Mexican border. The silvery legless lizard usually forages at the base of shrubs or other vegetation either on the surface or just below it in leaf litter or sandy soil. Legless lizards eat insect larvae, small adult insects, and spiders (Stebbins R. , 1954). Legless lizards sometimes seek cover under surface objects such as flat boards and rocks where they lie barely covered in loose soil. They are often encountered buried in leaf litter and commonly burrow near the surface through loose soil. In the HCP area, the silvery legless lizard was documented on site in 1991 (Burton & Kutilek, 1991). A silvery legless lizard was also documented in 2006 along the proposed Little Oso Flaco Lake Access Road alternative. In addition, silvery legless lizards have been observed in the designated campgrounds in the HCP area and within the vegetation islands as recently as 2016 and near the Oso Flaco boardwalk in 2019. Silvery legless lizards have also been observed nearby the HCP area at Jack Lake and Lettuce Lake. Legless lizards are vulnerable to habitat destruction, including the disturbance of surface soils and the spread of invasive vegetation (Jennings & Hayes, 1994).

Western Pond Turtle

The western pond turtle occurs from northern Baja California into Oregon, Washington, and British Columbia (mostly west of the Sierra Nevada-Cascade crest) (Stebbins R. , 2003). At this time, the western pond turtle may be extinct in western Washington and British Columbia. Western pond turtle is typically found at elevations ranging from sea level to approximately 4,980 feet (Stebbins R. , 2003).

The western pond turtle utilizes a wide variety of permanent and ephemeral aquatic habitats and may spend a significant amount of time in upland terrestrial habitats as well. Western pond turtle aquatic habitats typically include permanent freshwater ponds, lakes, marshes, streams, and rivers. It favors sites with deep pools and with an abundance of basking sites, such as partially submerged logs or rocks, matted emergent vegetation, floating aquatic vegetation or exposed shorelines. Undercut banks, root masses, and boulder piles provide underwater escape cover, especially for small hatchlings and smaller turtles that behave more cryptically and are more susceptible to predation.

Terrestrial habitat requirements are variable throughout the range but must include basking sites and nesting habitat. In most areas, terrestrial overwintering habitat is also required (Reese, 1996). While emergent basking sites are preferred because they offer some protection from terrestrial predators and quick escapes to deep water, terrestrial basking sites are also utilized. Terrestrial basking sites include mud banks, rocks, logs, and root wads on the bank, and are never far from water. Nesting occurs terrestrially, usually in open low-slope areas a few feet to over 300 feet from the watercourse. The nest site typically has good exposure to the sun and compact soil (Holland, 1994) (Reese, 1996). Overwintering can be aquatic or terrestrial (Holland, 1994). Terrestrial overwintering site characteristics are highly variable, but the microsite usually includes a thick duff layer (Holland, 1994).

In the HCP area, western pond turtles are often seen basking along the shoreline of Oso Flaco Lake. In June 2001, during a visual survey for CRLF, five western pond turtles were observed in the lake. Western pond turtles were also observed in Oso Flaco Lake and Arroyo Grande Creek within the HCP area in 2006, as well as in Jack Lake nearby the HCP area. Finally, a western pond turtle was rescued from fishing line at Oceano Lagoon in the HCP area and sent to an

approved rehabilitation clinic in September 2016. The non-native species that have been documented at Oso Flaco Lake and the Oceano Lagoon have the potential to compete with or prey upon the native western pond turtles within the HCP area.

Birds

Western Snowy Plover

SNPL is a resident along the Pacific Coast from British Columbia to Mexico and along the Gulf Coast from Texas to the Florida Panhandle. It also breeds locally in the interior from California and Nevada east to Oklahoma and Texas. The Pacific Coast population of the SNPL is defined as those individuals that nest adjacent to tidal waters of the Pacific Ocean, and includes all nesting birds on the mainland coast, peninsulas, offshore islands, adjacent bays, estuaries, and coastal rivers (USFWS, 2004a). The current known breeding range of this population extends from Damon Point, Washington, to Bahia Magdalena, Baja California, Mexico (USFWS, 2006b).

SNPL winter and breed in the same habitats, consisting of mostly sandy, ocean fronting beaches, dry salt flats, and gravel bars (Page, Warriner, Warriner, & Paton, 1995), (Colwell, et al., 2005), (Brinlock & Colwell, 2011). Many beaches that support SNPL nesting, foraging, and wintering, are bordered to the east by dense stands of European beachgrass, which often form an abrupt boundary that defines unsuitable habitat for SNPL (Patrick & Colwell, 2014). SNPL typically nest, forage, and winter on flat to gently sloping, wide beaches with plentiful food sources and sparse vegetation (Page, Warriner, Warriner, & Paton, 1995), (Colwell, et al., 2005), (MacDonald, Longcore, & Dark, 2010), (Muir & Colwell, 2010), (Brinlock & Colwell, 2011). Selecting habitats that are open (or wide) and have less vegetative cover can facilitate early detection of predators and reduce predation risk (Muir & Colwell, 2010), (Brinlock & Colwell, 2011), (Patrick & Colwell, 2014). SNPL nests have been found adjacent to small clumps of vegetation or other beach debris that likely provides additional cover making it more difficult for predators to spot (Page, Stenzel, & Ribic, 1985), (Powell, Habitat Characteristics and Nest Success of Snowy Plovers Associated with California Least Tern Colonies, 2001). In addition, SNPL broods have been observed hiding in vegetation clumps in response to adult alarm calls (Webber, Heath, & Fischer, 2013). In general, SNPL nests are most often located within 328 feet of water, or at least within sight of it (Stenzel, Peaslee, & Page, 1981) (USFWS, 2007b). After the chicks hatch, they tend to move into areas where there is at least some vegetation or beach debris, which provides cover from the heat of the sun, inclement weather, and predators.

Along the Pacific Ocean coastline, SNPL forage in a wide variety of habitat types, from the dry sandy regions of the backdunes, to wet sands, beach-cast kelp, and wrack lines along the lower beaches. They may use freshwater edges such as the mouths of creeks as they cross beaches and the edges of lagoons. Their diet can vary considerably but primarily consists of small marine and terrestrial invertebrates. They also pick insects off vegetation, probe sand, and occasionally take small fish (USFWS, 2007b).

SNPL that occupy the HCP area are part of the Pacific Coast population and may be composed of resident breeders that do not migrate, migratory breeders that leave during the winter months (October to February) and return at the onset of the breeding season, and wintering birds that migrate from interior or other coastal breeding sites, and arrive in November and remain until February (Warriner, Warriner, Page, & Stenzel, 1986). SNPL regularly breed in the HCP area along the open-sand beach from Post 6 south from March to mid-September (**Error! Reference source not found.**). Approximately 300 acres of active riding and camping area south of Post 6 are closed during the breeding season for SNPL and CLTE (**Error! Reference source not**

found.) SNPL have also infrequently been observed breeding adjacent to Arroyo Grande Creek. SNPL winters in the HCP area from October to February. A total of 4,513 acres within the HCP area are considered suitable habitat for SNPL, although 3,510 acres are considered tertiary habitat where SNPL are unlikely to nest, roost, or forage (HCP Map 10).

California Least Tern

CLTE is a colonial nesting seabird that nests along the Pacific Coast from Baja California to San Francisco Bay, California (Grinnel, 1928), (Small, 1994) (Thompson, et al., 1997) (USFWS, 2006a). Nesting also occurs sporadically at inland sites in the San Francisco Bay Delta and Central Valley (USFWS, 2009a).

CLTE often nest in habitats similar to those of SNPL, and there is often an overlap with the two species breeding on the same beach (Powell & Collier, 2000). CLTE nesting colonies along the California coast are typically located on broad dune-backed sandy beaches or small sandspits where vegetation is either sparse or altogether absent (Page, Warriner, Warriner, & Paton, 1995). Nests may be found from within several feet of the shore to more than a mile inland. Nests are normally located in open areas where aerial and terrestrial predators can be detected at a distance. When threatened, adult CLTE will leave the nest and aggressively harass an intruder by mobbing, defecating, and vocalizing.

CLTE forage primarily in near-shore ocean waters and in shallow estuaries and lagoons (Massey, 1988). At colonies where feeding activities have been studied, CLTE forage mostly within 2 miles of the breeding area and primarily in near shore ocean waters less than 60 feet deep (Atwood & Minsky, 1983). CLTE feed on fish caught by diving into the surface waters of freshwater lakes, lagoons, and oceans.

CLTE regularly breed in the HCP area along the open sand beach from Post 6 south from April to August. Approximately 300 acres of active riding and camping area south of Post 6 are closed during the breeding season for SNPL and CLTE (**Error! Reference source not found.**). A total of 4,593 acres within the HCP area are considered suitable breeding and roosting habitat for CLTE, although 3,510 acres are considered tertiary habitat where CLTE are unlikely to occur (HCP Map 12). An additional 80 acres of aquatic habitat within the HCP area is considered suitable foraging habitat for CLTE.

Least Bittern

The least bittern (*Ixobrychus exilis*) is primarily a summer resident in California and breeds in northeastern California, the central coast, the Central Valley, the southern coast, and the southern deserts. Least bitterns require freshwater and brackish marshes with tall, dense emergent vegetation and clumps of woody plants over deep water for breeding. This species builds nests on platforms of live and dead stalks, usually 6–30 inches above the water in emergent vegetation. They forage from emergent vegetation by stalking prey near the surface of the water. Within the HCP area, the least bittern has been observed as recently as December 2016 at Oso Flaco Lake and has been confirmed to breed as recently as May 2016 at this location (eBird, 2017).

White-tailed Kite

The white-tailed kite (*Elanus leucurus*) is found in lowland areas of California west of the Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border. They are residents of the central coast of California (Peterson, 1990). White-tailed kites are residents in a variety of open habitats, including agricultural areas, grasslands, scrub and open chaparral habitats, meadows, and

emergent wetlands throughout the lower elevations of California. Nests are constructed mostly of twigs and placed in small to large trees, often at habitat edges or in isolated groves (Dunk, 1995). This species preys upon a variety of small mammals and other vertebrates. White-tailed kites are often observed at the HCP area, including at Oso Flaco Lake.

Northern Harrier

The northern harrier (*Circus cyaneus*) occurs throughout California. This species is predominantly found in grassland and wetland communities; however, it uses various habitats. In California, northern harriers have been found in habitats including freshwater marshes; brackish and saltwater marshes; wet meadows; weedy borders of lakes, rivers, and streams; annual and perennial grasslands (including those with vernal pools); weed fields; ungrazed or lightly grazed pastures; some croplands (especially alfalfa, grain, sugar beets, tomatoes, and melons); sagebrush flats; and desert sinks (Smith, 2011). Northern harriers are ground-nesting birds. The nest is usually placed in a dense clump of vegetation, such as willows, grasses, sedges, reeds, or cattails. Eggs hatch within 36 days and chicks leave the nest within 14 days of hatching. Females incubate eggs and brood chicks, while males provide most of the food for the females and nestlings. In the breeding season, northern harriers eat small mammals, reptiles, amphibians, and birds. During winter, northern harriers feed almost exclusively on voles; they also eat mice, shrews, rabbits, and songbirds (Smith, 2011). Northern harriers are typically observed in the winter months (e.g., October through February) in the HCP area; however, they are a confirmed, but rare breeder at Oso Flaco Lake (Condor, Environmental Planning Services Inc., 2006). They are often seen foraging in the Oso Flaco area, and can be found foraging within the riding area of the SVRA as well.

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia*) occurs throughout the lowlands of California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas. It is a ground-dwelling owl, typically found nesting in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. It is heavily dependent upon the presence of small mammal burrows (e.g., ground squirrel [*Otospermophilus beecheyi*]) in its habitat to provide shelter from predators or inclement weather, as well as to provide a nesting location. Foraging habitat is often present in grassland areas. In California, burrowing owls breed from February 1 to August 31, with some variances by geographic location and climatic conditions. The non-breeding season (i.e., wintering season) for burrowing owl occurs from September 1 to January 31. Burrowing owls prefer short-grass grasslands with burrow networks, and frequently with boulder fields or rock outcrops. Burrows are frequently modified by these owls. Constructed burrows are readily occupied by burrowing owls and have been constructed for habitat enhancement and mitigation in several sites in California. Western burrowing owls have also been observed using sand dune cavities under ice plant, driftwood piles, culverts, concrete rubble piles, rock outcrops, and standpipes for burrows or winter cover. The burrowing owl is known to utilize the HCP area during migration but does not breed within the area. It was observed at Oso Flaco Lake in 1999 and 2012, in the Phillips 66 Leasehold in 2006, near the chemical toilets on the beach in 2005 and 2006, at Oceano Lagoon in 2010, at the Grand Avenue ramp in 2019, and near the Oso Flaco Lake parking lot in 2019. In addition, burrowing owl tracks were observed at Pavilion Hill in 2016 (Chapman, 2016).

American Peregrine Falcon

American peregrine falcons (*Falco peregrinus* ssp. *anatum*) are distributed worldwide. They occur throughout most of California during migration and winter. Their breeding range in California includes the Channel Islands, the southern and central California coast, the inland north coastal mountains, the Klamath Mountains and Cascade Range, and the Sierra Nevada (Zeiner, Laudenslayer, Jr., Mayer, & White, 1990).

Nesting sites are typically near water on cliffs, banks, dunes, or mounds. They will also occasionally nest on buildings, in cavities in trees or snags, or in the abandoned nests of other raptors. They feed on other birds up to and including ducks in size, and may also take mammals, insects, and fish. Their primary feeding mode is to attack other birds in flight. They require protected cliffs and ledges for cover (Zeiner, Laudenslayer, Jr., Mayer, & White, 1990).

American peregrine falcons have been documented breeding and nesting nearby the HCP area in Shell Beach, which is just north of Pismo Beach. Within the HCP area, American peregrine falcons are commonly observed in flight and hunting, but they have not been observed nesting.

Loggerhead Shrike

The loggerhead shrike (*Lanius ludovicianus*) is a common resident and winter visitor in lowlands and foothills throughout California. Loggerhead shrikes breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground. They require tall shrubs or trees (they also use fences or power lines) for hunting perches, territorial advertisement, and pair maintenance. They require short grasses, forbs, or bare ground for hunting, and large shrubs or trees for nest placement. They also need impaling sites for prey manipulation or storage, which can include sharp, thorny, or multi-stemmed plants and barbed-wire fences. Loggerhead shrikes often build their nests in thorny vegetation, which may help keep predators away. In the absence of trees or shrubs, they may sometimes nest in brush piles or tumbleweed. Nests are typically 2.5 to 4 feet above the ground (Yosef, 1996). Eggs hatch within 17 days and chicks leave the nest within 20 days of hatching. Second broods are common. This species primarily feeds on insects (Yosef, 1996). Loggerhead shrikes are resident birds that commonly nest within the HCP area.

California Horned Lark

The California horned lark (*Eremophila alpestris actia*) occurs in a variety of open habitat, usually where large shrubs and trees are absent. This species can be found from the coastal strand and deserts near sea level to alpine dwarf-shrub habitat above the treeline. This species can be found in disturbed habitats, including plowed fields, bayfill, and graded land. Along the coast, California horned larks often share nest sites with SNPL and CLTE, although they are generally uncommon in this habitat and occur in low numbers. California horned lark breeds from March through July, with peak activity in May. Nests are built in a shallow depression on the ground and made of grass lined with feathers and soft materials. Incubation lasts between 10 and 12 days, and the chicks leave the nest within 12 days of hatching. California horned larks are present year-round in the HCP area and likely breed in the area each year. California horned larks have been seen on nests or with young chicks within the seasonal enclosure, including within North Oso Flaco Enclosure, Boneyard Enclosure, and the 6 Enclosure (George, 2019).

Yellow Warbler

The yellow warbler (*Setophaga petechia*) primarily occurs as a migrant and summer resident in California. It is a common to locally abundant breeder throughout California except for most the Mojave Desert and all of the Colorado Desert. The yellow warbler generally occupies riparian

vegetation in close proximity to water along streams and in wet meadows. Throughout their range, they are found in willows and cottonwoods, and in California they are found in numerous other species of riparian shrubs or trees, varying by biogeographic region. Yellow warblers build their nests in the vertical fork of a bush or small tree such as willow or other riparian species. The nest is typically about 10 feet off the ground but occasionally may be up to about 40 feet (Lowther, Celada, Klein, Rimmer, & Spector, 1999). Eggs hatch within 13 days and chicks leave the nest within 12 days of hatching (Lowther, Celada, Klein, Rimmer, & Spector, 1999). This species primarily feeds on insects. The yellow warbler has been observed in and near the HCP area at Arroyo Grande Creek, Jack Lake, Little Oso Flaco Lake, and Oso Flaco Lake.

Nesting Birds

The HCP area hosts numerous nesting birds within its diverse habitats. Ground-nesting birds, such as killdeer (*Charadrius vociferus*), California horned lark, SNPL, and CLTE nest on the wide, open beaches. Waterbirds, such as least bittern, black-crowned night heron (*Nycticorax nycticorax*), mallard (*Anas platyrhynchos*), and green heron (*Butorides virescens*) nest in the lakes, including Oso Flaco Lake and Pismo Lake in the HCP area. Birds such as yellow warbler, marsh wren (*Cistothorus palustris*), Pacific-slope flycatcher (*Empidonax difficilis*), and Allen's hummingbird (*Selasphorus sasin*) nest within riparian habitats surrounding creeks and lakes in the HCP area. Raptors, such as red-tailed hawk (*Buteo jamaicensis*), great horned owl (*Bubo virginianus*), white-tailed kite, northern harrier, and Cooper's hawk (*Accipiter cooperii*) nest within trees in the HCP area. Birds adapted to a higher level of disturbance, such as American crow (*Corvus brachyrhynchos*), Eurasian collared dove (*Streptopelia decaocto*), house finch (*Carpodacus mexicanus*), cliff swallow (*Petrochelidon pyrrhonota*), western scrub jay (*Aphelocoma californica*), and rock pigeon (*Columba livia*) nest within the developed areas of the HCP area.

Wintering/Migratory Birds

Due to its location within the Pacific Flyway, the HCP area hosts numerous wintering and migratory birds each year, including shorebirds, waterbirds, raptors, and songbirds. Special-status species known to winter or migrate through the HCP area include brant (*Branta bernicla*), redhead (*Aythya americana*), common loon (*Gavia immer*), double-crested cormorant (*Phalacrocorax auratus*), American white pelican (*Pelecanus erythrorhynchos*), California brown pelican (*Pelecanus occidentalis californica*), osprey (*Pandion haliaetus*), long-billed curlew (*Numenius americanus*), marbled murrelet (*Brachyramphus marmoratus*), California gull (*Larus californicus*), black tern (*Chidonias niger*), elegant tern (*Thalasseus elegens*), black skimmer (*Rynchops niger*), Vaux's swift (*Chaetura vauxi*), black swift (*Cypseloides niger*), willow flycatcher (*Empidonax trailii*), bank swallow (*Riparia riparia*), Lucy's warbler (*Oreothylpis luciae*), summer tanager (*Piranga rubra*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*). Wintering/migratory birds are not typically protected unless they are special-status species.

Bats

Pallid Bat

Pallid bats are distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma, and Kansas. This species occurs throughout California except in the high Sierra from Shasta to Kern counties and the northwest coast. Pallid bat occurs in a number of habitats ranging from rocky arid deserts to grasslands, and into higher elevation coniferous

forests. Pallid bats are most abundant in the arid Sonoran life zones below 6,000 feet but have been found up to 10,000 feet in the Sierra Nevada. They often roost in colonies of between 20 and several hundred individuals. Roosts are typically in cliffs, rock crevices, tree hollows, mines, caves, and various structures, such as vacant and occupied buildings, bridges, and bird boxes. Tree roosting has been documented in large conifer snags (e.g., ponderosa pine [*Pinus ponderosa*]), inside basal hollows of giant sequoias (*Sequoiadendron giganteum*) and within bole cavities in oak trees. They have also been reported roosting in stacks of burlap sacks and stone piles. Pallid bats are primarily insectivorous, feeding on large prey that is taken on the ground, or sometimes in flight (Zeiner, Laudenslayer, Jr., Mayer, & White, 1990). Prey items include arthropods such as scorpions, ground crickets, and cicadas (Zeiner, Laudenslayer, Jr., Mayer, & White, 1990). Pallid bats were detected during passive acoustic surveys at Oceano Lagoon nearby in the HCP area in June 2017.

Townsend's Big-eared Bat

Townsend's big-eared bats are found throughout California, except in the highest elevations of the Sierra Nevada. This species is a colonial species. Habitat associations for this species include the inland deserts; cool, moist coastal redwood forests; oak woodlands; and lower- to mid-elevation mixed coniferous-deciduous forests. This species prefers open surfaces of caves or cave-like structures, such as mine adits and shafts, but has also been reported in such structures as buildings, bridges, and water diversion tunnels that offer a cave-like environment. Townsend's big-eared bats forage in edge habitats along streams and areas adjacent to and within a variety of wooded habitats. This species forms maternity colonies between March and June, and these colonies typically begin to disperse in August. Townsend's big-eared bat males are typically solitary during the maternity season. This species is extremely sensitive to disturbance of roosting sites and a single visit may result in abandonment of the roost. Townsend's big-eared bats were detected during passive acoustic surveys at Oceano Lagoon in the HCP area in June 2017.

Western Red Bat

Western red bats are locally common in some areas of California. They occur from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade Crest and deserts. Their winter range includes the western lowlands and coastal regions south of the San Francisco Bay. Western red bats roost in forests and woodlands from sea level up through mixed conifer forests. They feed over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. This species's breeding season begins in August and September when bats mate, and births occur from late May through early July. Western red bats were detected during passive acoustic surveys at Oceano Lagoon in the HCP area in June 2017.

Terrestrial Mammals

American Badger

The American badger is an uncommon, permanent resident found throughout most of California. The American badger is a semifossorial mammal in the weasel family (*Mustelidae*). Macrohabitat for this species includes dry, open forests and woodlands, open scrub, and grasslands. Microhabitat conditions for this species require loose, friable soils for burrow creation and foraging potential. Badgers are typically solitary and nocturnal, but construct burrows for refuge during daylight hours. Badger burrows are usually elliptical, with only one entrance, and are located in areas with plentiful prey sources. The primary prey for American

badgers is ground squirrels and pocket gophers, which badgers typically pursue by digging into their burrows (Grinnell, Dixon, & Linsdale, 1937). Alternative prey resources for American badgers include mice, rats, reptiles, amphibians, and bird eggs. Young are born in the spring and independent by the end of summer. Badgers have very large home ranges, depending on available habitat. Badger males can forage across a range of approximately 1 square mile to 500 square miles, while females can range from one-half square mile to 50 square miles. However, in general, densities are one badger per square mile in occupied, prime habitat (Long, 1983). The American badger was documented within the HCP area in 1991 (Burton & Kutilek, 1991) and has been observed in the vegetation islands and the Phillips 66 Leasehold as recently as 2006 (Condor, Environmental Planning Services Inc., 2006). Badger tracks were also observed in April 2019 in the open riding area in BBQ flats and two small vegetation islands, as well as in between these vegetation islands (Schaefer, 2019). Inactive badger dens have also been observed in the HCP area, although this species is likely fairly uncommon in the HCP area.

Special-Status Plant Species List

The following table includes special-status plant species, listing status, range in California, habitat, and potential for special-status species to occur in the HCP area based on information from USFWS IPaC, CDPR survey and monitoring reports, CNDDDB, and the CNPS Inventory of Rare and Endangered Plants. A total of 77 plant species were determined to have some potential to occur within the HCP area. Of these 77 species, only 33 species have been recorded within the HCP area and/or have moderate or high potential to occur within the HCP area; however, three of these species – Monterey pine (*Pinus radiata*), Monterey cypress (*Cupressus macrocarpa*), and Torrey pine (*Pinus torreyana*) – are not native to the area and are; therefore, not considered special-status within the HCP area. There are also five special-status plant species – California sawgrass (*Cladium californicum*), paniculate tarplant (*Deinandra paniculata*), mesa horkelia (*Horkelia cuneata* ssp. *puberula*), coast woollyheads (*Nemacaulis denudata* var. *denudata*), short-loped broomrape (*Orobanche parishii* ssp. *brachyloba*) – that occur in the HCP area, but are rare and not expected to be encountered during covered activities.

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
red sand verbena <i>Abronia maritima</i>	CRPR 4.2	Along coast from SLO County to Mexican border.	Coastal dunes, 0-100 m.	Perennial herb in the four o'clock family (Nyctaginaceae), Feb.-Nov.	<u>Present</u> - Known from CDPR surveys to occur in and around the HCP area, including near Strand Way, Pismo Dunes Natural Preserve, and on vegetation islands.	3, 4, 5, 6
Hoover's bent grass <i>Agrostis hooveri</i>	CRPR 1B.2	Endemic, coastal SLO and SB Counties.	Closed cone coniferous forest, chaparral, cismontane woodland or valley and foothill grassland usually on sandy soils; 6-610 m.	Perennial herb, Apr.-Jul.	<u>Low</u> - No suitable habitat; records from nearby but not in HCP area.	2, 3, 4
Douglas' fiddleneck <i>Amsinckia douglasiana</i>	CRPR 4.2	Endemic, west of the Sierras from Monterey County to Santa Barbara & in Tehachapi Ranges.	Cismontane woodland or valley and foothill grassland on Monterey shale; 0-1950 m.	Annual herb, Mar.-May	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	3
Morro manzanita <i>Arctostaphylos</i>	FT, CRPR	Endemic to SLO County.	Chaparral (maritime), cismontane	Perennial evergreen shrub,	<u>None</u> - No suitable habitat and no records from HCP	1, 4

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
<i>morroensis</i>	1B.1		woodland, coastal dunes (pre-Flandrian) or coastal scrub on Baywood fine sand; 5-205 m.	Dec.-Mar.	area or nearby.	
Bishop manzanita <i>Arctostaphylos obispoensis</i>	CRPR 4.3	Endemic to Monterey and SLO counties.	Closed-cone coniferous forest, chaparral, and cismontane woodland on serpentinite, rocky soils; 50-1,005 m.	Perennial evergreen shrub, Feb.-June	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	3
oso manzanita <i>Arctostaphylos osoensis</i>	CRPR 1B.2	Endemic to SLO County.	Chaparral or cismontane woodland on dacite porphyry buttes; 95 to 500 m.	Perennial evergreen shrub in the heath family (Ericaceae), Feb.-Mar.	<u>Low</u> - Suitable habitat for this species in the HCP area is limited, as there is very little coast live oak woodland (0.6 acre) or coyote brush scrub (16 acres).	5
pecho manzanita <i>Arctostaphylos pechoensis</i>	CRPR 1B.2	Endemic to SLO and SB Counties.	Closed-cone coniferous forest, chaparral or coastal scrub on siliceous shale; 125-850 m.	Perennial evergreen shrub, Nov.-Mar.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	2, 3
Santa Margarita manzanita <i>Arctostaphylos pilosula</i>	CRPR 1B.2	Endemic, occurs in SLO, SB and Monterey Counties.	Broad-leaved upland forest, closed-cone coniferous forest, chaparral or cismontane woodland sometimes on sandstone; 170-1100 m.	Perennial evergreen shrub in the heath family (Ericaceae), Dec.-May	<u>Low</u> - Suitable habitat for this species in the HCP area is limited as there is very little coast live oak woodland (0.6 acre), coyote brush scrub (16 acres), or closed cone coniferous forest (11.1 acres including Monterey pine forest, Torrey pine stands, Monterey cypress stands, and beach pine forest); the closed	2, 3, 4, 5

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
					cone coniferous forest in this location is considered non-native or naturalized.	
sand mesa manzanita <i>Arctostaphylos rudis</i>	CRPR 1B.2	Endemic to SLO and SB Counties.	Chaparral (maritime) or coastal scrub on sandy soils; 25-322 m.	Perennial evergreen shrub in the heath family (Ericaceae), Nov.-Feb.	<u>Present</u> - Observed within the Phillips 66 Leasehold by CDPR staff.	2, 3, 4, 5, 6
marsh sandwort ² <i>Arenaria paludicola</i>	FE, SE, CRPR 1B.1	Remaining extant occurrences are in SLO and Los Angeles Counties.	Sandy openings in marshes and swamps (fresh water or brackish); 3-170 m.	Perennial stoloniferous herb, May-Aug.	<u>Present</u> - Only known extant population at Oso Flaco Lake. Observed during 2018 surveys.	1, 2, 3, 5, 6
Nuttall's milkvetch <i>Astragalus nuttallii</i> var. <i>nuttallii</i>	CRPR 4.2	Endemic to coast from San Francisco to SB County.	Coastal bluff scrub or coastal dunes; 3-120 m.	Perennial herb in the pea family (Fabaceae), Jan.-Nov.	<u>Present</u> - Known from CDPR surveys and CNDDB records to occur within HCP area including in Pismo Dunes Natural Preserve, Phillips 66 Leasehold, Oso Flaco, and vegetation islands.	3, 4, 5, 6
Davidson's saltscale <i>Atriplex serenana</i> var. <i>davidsonii</i>	CRPR 1B.2	Along coast from Santa Maria to San Diego.	Coastal bluff scrub or coastal scrub on alkaline soils; 10-200 m.	Annual herb, April-Oct.	<u>Low</u> - Determined to have a low chance of occurrence.	4
Brewer's calandrinia <i>Calandrinia breweri</i>	CRPR 4.2	Found in coastal California from Santa Rosa to San Diego.	Chaparral, and coastal scrub on sandy or loamy disturbed sites and burns.	Annual herb, Mar.-Jun.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	3
club-haired mariposa lily <i>Calochortus clavatus</i> var. <i>clavatus</i>	CRPR 4.3	Endemic to Los Angeles, Santa Barbara, San Benito, San Luis Obispo, and Ventura counties.	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland usually on serpentinite,	Perennial bulbiferous herb, May-Jun.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	3

² Species listed in bold are Covered Species in the Oceano Dunes District HCP.

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
			clay, or rocky soils; 75-1,300 m.			
San Luis Obispo mariposa lily <i>Calochortus obispoensis</i>	CRPR 1B.2	Endemic to SLO County.	Chaparral, coastal scrub or valley and foothill grassland often on serpentinite soils; 50-730 m.	Perennial bulbiferous herb, May-Jul.	<u>Low</u> - Determined to have a low chance of occurrence due to the limited habitat in the HCP area.	2, 3, 4
La Panza mariposa lily <i>Calochortus simulans</i>	CRPR 1B.3	Endemic to SLO and SB counties.	Chaparral, cismontane woodland, lower montane coniferous forest or valley and foothill grassland on sandy, often granitic and sometimes serpentinite soils; 395-1100 m.	Perennial bulbiferous herb, Apr.-Jun.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	2, 3
Cambria morning-glory <i>Calystegia subacaulis</i> subsp. <i>episcopalis</i>	CRPR 4.2	Endemic to SLO and SB counties.	Chaparral, cismontane woodland, coastal prairie or valley and foothill grassland usually on clay soils; 30-500 m.	Perennial rhizomatous herb, Mar.-May	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	2, 3
San Luis Obispo sedge <i>Carex obispoensis</i>	CRPR 1B.2	Endemic to Monterey, San Diego, and SLO counties.	Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland often in serpentine seeps and on clay soils; 10-820 m.	Perennial rhizomatous herb, Apr.-Jun.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	2
San Luis Obispo owl's clover <i>Castilleja densiflora</i> spp. <i>obispoensis</i>	CRPR 1B.2	Endemic to SLO County.	Meadows and seeps, or valley and foothill grassland sometimes on serpentinite soils; 10-400 m.	Annual herb, Mar.-May	<u>Low</u> - No suitable habitat; records from nearby but not in HCP area.	2, 3, 4
Monterey Coast paintbrush <i>Castilleja latifolia</i> ssp. <i>latifolia</i>	CRPR 4.3	Endemic to central coast.	Closed-cone coniferous forest, cismontane woodland	Perennial herb (hemiparasitic) in the broomrape family	<u>Present</u> - Known from CDPR surveys to be widespread in the HCP area,	4, 5, 6

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
			(openings), coastal dunes or coastal scrub on sandy soils; 0-185 m.	(Orobanchaceae), Feb.-Sep.	including Carpenter Creek, Oso Flaco Lake, vegetation islands, Pismo Dunes Natural Preserve, and Phillips 66 Leasehold. It primarily occurs within the silver dune lupine–mock heather scrub vegetation alliance (Lupinus chamissonis–Ericameria ericoides Shrubland Alliance)	
California jewelflower <i>Caulanthus californicus</i>	FE, SE, CRPR 1B.1	Santa Barbara Canyon, the Carrizo Plain in San Luis Obispo County, and the Kreyenhagen Hills in Fresno County	Nonnative Grassland, Upper Sonoran Subshrub Scrub, and Cismontane Juniper Woodland; 75-90 m.	Annual herb, Feb-Mar.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	1, 4
Lompoc ceanothus <i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	CRPR 4.2	Endemic to Santa Barbara and SLO counties.	Chaparral (sandy); 5-400 m.	Perennial evergreen shrub, Feb.-Apr.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	3
Point Reyes ceanothus <i>Ceanothus gloriosus gloriosus</i>	CRPR 4.3	Endemic to Mendocino, Monterey, and SLO counties.	Coastal bluff scrub, closed-cone coniferous forest, coastal dunes, and coastal scrub; 5-520 m.	Perennial evergreen shrub, Mar.-May	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	3
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i>	CRPR 1B.1	Endemic to the San Francisco Bay Area, Monterey coast and SLO County.	Valley and foothill grassland (alkaline); 0-230 m.	Annual herb, May-Nov.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	2, 3
coastal goosefoot <i>Chenopodium littoreum</i>	CRPR 1B.2	Endemic to SLO, SB and Los Angeles	Coastal dunes; 10-30 m.	Annual herb in the buckwheat family (Chenopodiaceae),	<u>Present</u> - Known from CDPR surveys and CNDDDB	2, 3, 4, 5, 6

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
		Counties.		Apr.-Aug.	records to occur at Oso Flaco Lake and Phillips 66 Leasehold. The last documented occurrence at Oso Flaco Lake was in 1950. This species was only recently observed at Phillips 66 Leasehold; therefore, it likely has limited distribution in the HCP area.	
dwarf soaproot <i>Chlorogalum pomeridianum</i> var. <i>minus</i>	CRPR 1B.2	Endemic to Alameda, Colusa, Glenn, Lake, Santa Clara, San Luis Obispo, Sonoma, Tehama counties.	Chaparral (serpentinite); 305-1,000 m.	Perennial bulbiferous herb, May-Aug.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	2, 3
Brewer's spineflower <i>Chorizanthe breweri</i>	CRPR 1B.3	Endemic to SLO and Monterey Counties.	Closed-cone coniferous forest, chaparral, cismontane woodland or coastal scrub on serpentinite, rocky or gravelly soils; 45-800 m.	Annual herb, Apr.-Aug.	<u>Low</u> - Determined to have a low chance of occurrence due to limited suitable habitat in the HCP area.	2, 3, 4
Douglas's spineflower <i>Chorizanthe douglasii</i>	CRPR 4.3	Endemic to SLO, San Benito and Monterey Counties.	Chaparral, cismontane woodland, coastal scrub or lower montane coniferous forest on sandy or gravelly soils; 55-1600 m.	Annual herb in the buckwheat family (Polygonaceae), Apr.-Jul.	<u>Present</u> - Documented during previous CDPR surveys to occur within the Pavilion Hill vegetation island.	4, 5, 6
Palmer's spineflower <i>Chorizanthe palmeri</i>	CRPR 4.2	Endemic to Monterey, Santa Barbara, and SLO	Chaparral, cismontane woodland, and valley and foothill grassland on rocky,	Annual herb, Apr.-Aug.	<u>None</u> - No suitable habitat and no records from HCP area or nearby.	3

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
		counties.	serpentinite soils; 55-945 m.			
straight-awned spineflower <i>Chorizanthe rectispina</i>	CRPR 1B.3	Endemic to SLO, SB and Monterey Counties.	Chaparral, cismontane woodland or coastal scrub; 85-1035 m.	Annual herb, Apr.-Jul.	<u>Low</u> - Determined to have a low chance of occurrence due to the limited suitable habitat in the HCP area.	4
Chorro Creek bog thistle <i>Cirsium fontinale</i> var. <i>obispoense</i>	FE, SE, CRPR 1B.2	Endemic to SLO County.	Chaparral, cismontane woodland, coastal scrub or valley and foothill grassland in serpentinite seeps and drainages; 35-380 m.	Perennial herb, Feb.-Sep.	<u>None</u> - No suitable habitat and no records from area.	1, 2, 3, 4
surf thistle <i>Cirsium rhotophilum</i>	ST, CRPR 1B.2	Endemic to SLO and SB Counties.	Coastal bluff scrub or coastal dunes; 3-60 m.	Perennial herb, Apr.-Jun.	<u>Present</u> - Observed in CDPR surveys near Oso Flaco Creek and in the foredunes of the Oso Flaco area.	2, 3, 5, 6
La Graciosa thistle <i>Cirsium scariosum</i> var. <i>loncholepis</i>	FE, ST, CRPR 1B.1	Endemic to SLO, SB and Monterey Counties.	Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps (brackish) or valley and foothill grassland on mesic, sandy soils; 4-220 m.	Perennial herb, May-Aug.	<u>Present</u> - Known from CDPR surveys and CNDDDB records to occur at Oso Flaco Lake, near Jack Lake, in the Callander Dunes, and at the Dune Lake complex. Critical habitat for this species is present in the HCP area.	1, 2, 3, 5, 6
California saw-grass <i>Cladium californicum</i>	CRPR 2.2	Eastern and southern California.	Alkaline or freshwater meadows and seeps; 60-865 m.	Perennial rhizomatous herb in the sedge family (Cyperaceae), Jun.-Sep.	<u>Present</u> - Has not been found in the Oceano Dunes SVRA in recent years; however, it is was documented in the CNDDDB as occurring near Oso Flaco Lake in 1990.	2, 3, 4, 5, 6

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
Pismo clarkia <i>Clarkia speciosa</i> ssp. <i>immaculata</i>	FE, SR, CRPR 1B.1	Endemic to SLO County.	Chaparral (margins, openings), cismontane woodland or valley and foothill grassland on sandy soils; 25-185 m.	Annual herb in the evening primrose family (Onagraceae), May-Jul.	<u>Low</u> - CNDDDB occurrences have been documented at Nipomo Mesa and in Grover Beach. Only limited suitable habitat for this species is present in the HCP area.	1, 2, 3, 4
saltmarsh bird's beak <i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>	FE SE 1B.1	Central and southern California coast.	Coastal dunes and coastal swamps; 0-30 m.	Annual herb, May-Oct.	<u>None</u> - No suitable habitat and no records from area.	1, 4
branching beach aster <i>Corethrogyne leucophylla</i>	CRPR 3.2	Endemic to coast from Santa Cruz to Santa Maria.	Closed-cone coniferous forest or coastal dunes; 3-60 m.	Perennial herb, May-Dec.	<u>Low</u> - Potential habitat present in the HCP area but no records from in or near the area.	3
Monterey cypress <i>Cupressus macrocarpa</i>	CRPR 1B.2	Endemic to Monterey county, but spread elsewhere artificially.	Closed-cone coniferous forest; 10-30 m.	Perennial evergreen tree.	<u>Present</u> - Observed in the HCP area; however, this species is not native in the HCP area and is only considered rare in Monterey county.	4, 6
paniculate tarplant <i>Deinandra paniculata</i>	CRPR 4.2	Several counties in southern California.	Coastal scrub, valley and foothill grassland, and vernal pools, usually on vernal mesic and sometimes on sandy sites; 25- 940 m.	Annual herb in the sunflower family (Asteraceae), Apr.-Nov.	<u>Present</u> - Observed in the HCP area during CDPR surveys in the southern portion of the Phillips 66 Leasehold. Suitable habitat for this plant is limited in the HCP area.	3, 4, 5, 6
dune larkspur <i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	CRPR 1B.2	Endemic to SLO, SB and Ventura Counties.	Chaparral (maritime), coastal dunes; 0-200 m.	Perennial herb in the buttercup family (Ranunculaceae), Apr.-May	<u>Present</u> - Observed in the HCP area by CDPR staff almost every year within the Phillips 66 Leasehold and at South Oso Flaco.	2, 3, 4, 5, 6
umbrella larkspur	CRPR	Endemic to	Chaparral, and	Perennial herb,	<u>Low</u> - Determined	2, 3, 4

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
<i>Delphinium umbracolorum</i>	1B.3	Kern, Monterey, Santa Barbara, SLO, Ventura counties.	cismontane woodland; 400-1,600 m.	Apr.-Jun.	to have a low chance of occurrence due to the limited suitable habitat in the HCP area.	
beach spectaclepod <i>Dithyrea maritima</i>	ST, CRPR 1B.1	Southern coast and off-shore islands from San Luis Obispo to Los Angeles.	Coastal dunes, coastal scrub (sandy); 3-50 m.	Perennial rhizomatous herb, Mar.-May	<u>Present</u> - Known to occur at Oso Flaco Lake and south Oso Flaco area from CDPR and CNDDDB records.	2, 3, 5, 6
Betty's dudleya <i>Dudleya abramsii</i> ssp. <i>bettinae</i>	CRPR 1B.2	Endemic to SLO county.	Chaparral, coastal scrub, and valley and foothill grassland on serpentinite, rocky soils; 20-180 m.	Perennial herb, May-Jul.	<u>None</u> - No suitable habitat and no records from area.	2, 3
mouse gray dudleya <i>Dudleya abramsii</i> ssp. <i>murina</i>	CRPR 1B.3	Endemic to SLO county.	Chaparral, cismontane woodland, and valley and foothill grassland on serpentinite soils; 90-525 m.	Perennial leaf succulent; May-Jun.	<u>None</u> - No suitable habitat and no records from area.	2, 3
Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	CRPR 1B.1	Along coast from west of Paso Robles to Mexican border.	Coastal bluff scrub, chaparral, coastal scrub or valley and foothill grassland on rocky, often clay or serpentinite soils; 5-450 m.	Perennial herb; Apr.-Jun.	<u>None</u> - No suitable habitat and no records from area.	2, 3
Blochman's leafy daisy <i>Erigeron blochmaniae</i>	CRPR 1B.2	Endemic to SLO and SB Counties.	Coastal dunes, coastal scrub; 3-45 m.	Perennial rhizomatous herb; Jun.-Aug.	<u>Present</u> - Locally common and widespread throughout the HCP area.	2, 3, 4, 5, 6
Indian Knob mountainbalm <i>Eriodictyon altissimum</i>	FE, SE, CRPR 1B.1	Endemic to SLO County.	Chaparral (maritime), cismontane woodland or coastal scrub; 80-270 m.	Perennial evergreen shrub, Mar.-Jun.	<u>None</u> - No suitable habitat and no records from area.	1, 2, 3, 4
Hoover's button-celery	CRPR 1B.1	Extant occurrences in	Vernal pools, 3-45 m.	Annual/perennial herb, Jul.-Aug.	<u>None</u> - No suitable habitat and no	2, 3

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
<i>Eryngium aristulatum</i> var. <i>Hooveri</i>		Alameda, San Benito, San Diego and SLO Counties.			records from area.	
suffrutescent wallflower <i>Erysimum suffrutescens</i>	CRPR 4.2	Endemic to and southern coast.	Coastal bluff scrub, chaparral (maritime), coastal dunes or coastal scrub; 0-150 m.	Perennial herb in the mustard family (Brassicaceae), Jan.-Jul.	<u>Present</u> - Locally common and widespread throughout the HCP area.	3, 4, 5, 6
Mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i>	CRPR 1B.1	Endemic to central and southern coast.	Chaparral (maritime), cismontane woodland, coastal scrub on sandy or gravelly soils; 70-810 m.	Perennial herb in the rose family (Rosaceae), Feb.-Sep.	<u>Present</u> - Documented by the CNDDDB within the Oceano Dunes SVRA at Oso Flaco Lake. However, the species was last documented at Oso Flaco Lake in 1973.	2, 3, 4, 5
Kellogg's horkelia <i>Horkelia cuneata</i> var. <i>sericea</i>	CRPR 1B.1	Endemic to coast from San Francisco Bay Area to vicinity of Lompoc.	Closed-cone coniferous forest, chaparral (maritime), coastal dunes or coastal scrub in sandy or gravelly openings; 10-200 m.	Perennial herb, Apr.-Sep.	<u>Present</u> - Observed in the Pismo Dunes Natural Preserve, in Pismo State Beach and in the Phillips 66 Leasehold during CDPR surveys.	2, 3, 4, 5, 6
Southwestern spiny rush <i>Juncus acutus</i> ssp. <i>leopardii</i>	CRPR 4.2	Central and southern coast.	Coastal dunes (mesic), meadows and seeps (alkaline seeps) or marshes and swamps (coastal salt); 3-900 m.	Perennial rhizomatous herb in the rush family (Juncaceae); Mar.-Jun.	<u>Present</u> - Observed in the HCP area in the Pismo Dunes Natural Preserve and at the Eucalyptus Tree vegetation island during previous Oceano Dunes District surveys.	4, 5, 6
Jones' layia <i>Layia jonesii</i>	CRPR 1B.2	Endemic to SLO County.	Chaparral or valley and foothill grassland or clay or serpentinite soils; 5-400 m.	Annual herb, Mar.-May	<u>None</u> - No suitable habitat and no records from area.	2, 3
fuzzy prickly phlox <i>Linanthus californicus</i>	CRPR 4.2	Endemic to SLO and SB Counties.	Coastal dunes, 1-30 m.	Perennial deciduous shrub in the phlox family (Polemoniaceae),	<u>Present</u> - Observed during previous CDPR surveys in the Pismo Dunes	4, 5, 6

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
				Mar.-Aug.	Natural Preserve, Phillips 66 Leasehold, and the backdunes of South Oso Flaco.	
small-leaved lomatium <i>Lomatium parvifolium</i>	CRPR 4.2	Endemic to Monterey, Santa Cruz, and SLO counties.	Closed-cone coniferous forest, chaparral, coastal scrub, and riparian woodland on serpentinite soils; 20-700 m.	Perennial herb, Jan.-Jun.	<u>None</u> - No suitable habitat and no records from area.	3
San Luis Obispo County lupine <i>Lupinus ludovicianus</i>	CRPR 1B.2	Endemic to SLO County.	Chaparral or cismontane woodland on sandstone or sandy soils; 50-525 m.	Perennial shrub, Apr.-Jul	<u>Low</u> - Determined to have a low chance of occurrence due to the limited suitable habitat in the HCP area.	2, 3, 4
Nipomo Mesa lupine <i>Lupinus nipomensis</i>	FE, SE, CRPR 1B.1	Endemic to SLO County.	Coastal dunes; 10-50 m.	Annual herb, Dec.-May	<u>Present</u> - Observed in the HCP area in the eastern part of the Phillips 66 Leasehold in San Luis Obispo County Land Conservancy surveys; also known from CNDDDB records.	1, 2, 3, 5, 6
Jones' bush mallow <i>Malacothamnus jonesii</i>	CRPR 4.3	Endemic to Monterey, Santa Barbara, and SLO counties.	Chaparral, and cismontane woodland; 160-1,075 m.	Perennial deciduous shrub, Apr.-Oct.	<u>None</u> - No suitable habitat and no records from area.	3
dunedelion <i>Malacothrix incana</i>	CRPR 4.3	Endemic to central and southern coast and off-shore islands.	Coastal dunes or coastal scrub; 2-35 m.	Perennial herb in the sunflower family (Asteraceae), Jan.-Oct.	<u>Present</u> - Observed during CDPR surveys at the Pavilion Hill vegetation island, 7.5 revegetation area, in North Oso Flaco, and near Oso Flaco Creek.	3, 4, 5, 6
southern curly-leaved monardella <i>Monardella sinuata</i>	CRPR 1B.2	Endemic to Santa Barbara, and SLO	Chaparral, cismontane woodland, coastal	Annual herb in the mint family (Lamiaceae), Apr.-	<u>Low</u> - Determined to have a low potential of	2, 3, 4

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
<i>ssp. sinuata</i>		counties.	dunes, and coastal scrub on sandy soils; 0-300 m.	Sep.	occurrence due to the limited suitable habitat in the HCP area. Nearby CNDDDB occurrences from 1930s.	
crisp monardella <i>Monardella undulata</i> <i>ssp. crispa</i>	CRPR 1B.2	Endemic to SLO and SB Counties.	Coastal dunes or coastal scrub; 10-120 m.	Perennial rhizomatous herb, Apr.-Aug.	<u>Present</u> - Locally common and widespread throughout the HCP area. Occurs within the vegetation island habitats and at the edges of other vegetation within the HCP area according to 2012 vegetation mapping and CNDDDB records.	2, 3, 4, 5, 6
San Luis Obispo monardella <i>Monardella undulata</i> <i>ssp. undulata</i>	CRPR 1B.2	Endemic to SLO and SB Counties.	Coastal dunes or coastal scrub (sandy); 10-200 m.	Perennial rhizomatous herb, May-Sep.	<u>Present</u> - Observed in the Pismo Dunes Natural Preserve, in the southern part of the Phillips 66 Leasehold, and in the southern backdunes of south Oso Flaco in CDPR surveys; also known from nearby CNDDDB records.	2, 3, 4, 5, 6
California spineflower <i>Mucronea californica</i>	CRPR 4.2	Endemic to central and southern California.	Chaparral, cismontane woodland, coastal dunes, coastal scrub or valley and foothill grassland on sandy soils; 0-1400 m.	Annual herb in the buckwheat family (Polygonaceae, Mar.-Aug.	<u>Present</u> - Observed during CDPR surveys in the Pismo Dunes Natural Preserve, Phillips 66 Leasehold, and South Oso Flaco.	3, 4, 5, 6
Gambel's watercress <i>Nasturtium gambelii</i>	FE, ST,	Central and southern coast.	Marshes and swamps (freshwater or	Perennial rhizomatous herb,	<u>Present</u> - Known from the HCP area	1, 2, 3, 5, 6

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
	CRPR 1B.1		brackish).	Apr.-Oct.	at Oso Flaco Lake.	
spreading navarretia <i>Navarretia fossalis</i>	FT, CRPR 1B.1	Southern California	Chenopod scrub, marshes and swamps, playas, vernal pools.	Annual herb, Apr.-Jun.	<u>None</u> - No suitable habitat and no records from area.	1, 4
coast woolly-heads <i>Nemacaulis denudata</i> var. <i>denudata</i>	CRPR 1B.2	Central and southern coast.	Coastal dunes; 0-100 m.	Annual herb in the buckwheat family (Polygonaceae), Apr.-Sep.	<u>Present</u> - One CNDDDB record in the HCP area within the dunes north of Oso Flaco Lake from 2000.	2, 3, 4
short-lobed broomrape <i>Orobanche parishii</i> ssp. <i>brachyloba</i>	CRPR 4.2	Central and southern coast and off-shore islands.	Coastal bluff scrub, coastal dunes or coastal scrub on sandy soils; 3-305 m.	Perennial herb (parasitic) broomrape family (Orobanchaceae), Apr.-Oct.	<u>Present</u> - Known in HCP area from CDPR surveys and CNDDDB from one occurrence in South Oso Flaco.	2, 3, 4, 5, 6
adobe yampeh <i>Perideridia pringlei</i>	CRPR 4.3	Endemic to central and southern California.	Chaparral, cismontane woodland, coastal scrub, and pinyon and juniper woodland on serpentinite, often clay soils; 300-1,800 m.	Perennial herb, Apr.-Jun.	<u>None</u> - No suitable habitat and no records from area.	3
Monterey pine <i>Pinus radiata</i>	CRPR 1B.1	Found in Monterey, Santa Cruz, SLO, and San Mateo counties.	Closed-cone coniferous forest, and cismontane woodland; 25-185 m.	Perennial evergreen tree.	<u>Present</u> - Has been observed in previous surveys at scattered locations in the HCP area; however, not native to HCP area.	4, 6
Torrey pine <i>Pinus torreyana</i> ssp. <i>torreyana</i>	CRPR 1B.2	Found in Santa Barbara, and San Diego counties.	Closed-cone coniferous forest, and chaparral on sandstone; 30-160 m.	Perennial evergreen tree.	<u>Present</u> - Has been observed in previous surveys at Pismo State Beach and in the Pismo Dunes Preserve; however, not native to HCP area.	4, 6
Hickman's popcorn	CRPR	Endemic to San	Closed-cone	Annual herb in the	<u>Present</u> - Observed	4, 5, 6

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
flower <i>Plagiobothrys chorisianus</i> var. <i>hickmanii</i>	4.2	Mateo, Santa Clara, Santa Cruz, San Benito, Monterey and SLO counties.	coniferous forest, chaparral, coastal scrub, marshes and swamps or vernal pools; 15-185 m.	borage family (Boraginaceae), Apr.-Jun.	during CDPR surveys at four vegetation islands within the HCP area, in the Phillips 66 Leasehold, and near Maidenform.	
sand almond <i>Prunus fasciculata</i> var. <i>punctata</i>	CRPR 4.3	Endemic to SLO and SB Counties.	Chaparral (maritime), cismontane woodland, coastal dunes or coastal scrub on sandy soils; 15-200 m.	Perennial deciduous shrub in the rose family (Rosaceae), Mar.-Apr.	<u>Present</u> - Observed during CDPR surveys within the Phillips 66 Leasehold.	3, 4, 5, 6
black-flowered figwort <i>Scrophularia atrata</i>	CRPR 1B.2	Endemic to SLO and SB Counties.	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub or riparian scrub; 10-500 m.	Perennial herb, Mar.-Jul.	<u>Low</u> - Suitable habitat occurs; however mostly occurs on much older sand dunes than are present in the area.	2, 3, 4
Blochman's groundsel <i>Senecio blochmaniae</i>	CRPR 4.2	Endemic to SLO and SB Counties.	Coastal dunes, 0-100 m.	Perennial herb in the sunflower family (Asteraceae), May-Oct.	<u>Present</u> - Locally common and widespread throughout HCP area. Occurs in the Blochman's groundsel scrub vegetation alliance (Senecio blochmaniae Shrubland Alliance) where Blochman's groundsel is dominant or co-dominant in the shrub layer.	3, 4, 5, 6
Guirado's goldenrod <i>Solidago guiradonis</i>	CRPR 4.3	Endemic to Fresno and San Benito counties.	Cismontane woodland, and valley and foothill grassland in serpentinite seeps; 600-1,370 m.	Perennial rhizomatous herb, Mar.-Sep.	<u>None</u> - No suitable habitat and no records from area.	3
San Bernardino aster <i>Symphyotrichum</i>	CRPR 1B.2	Endemic to southwestern	Cismontane woodland, coastal	Perennial rhizomatous herb,	<u>Low</u> - Determined to have a low	2, 3, 4

Table C2. Special-status Plant Species with the Potential to Occur in the Oceano Dunes HCP Area						
Species	Listing Status ¹	Range in California	Habitat	Life Form/ Blooming Period	Potential to Occur	Sources
<i>defoliatum</i>		California.	scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps or valley and foothill grassland (vernally mesic) near ditches, streams or springs; 2-2040 m.	Jul.-Nov.	chance of occurrence due to the limited suitable habitat in the HCP area.	
¹ Listing Status Key: FE – Federal Endangered FT – Federal Threatened SE – State Endangered ST – State Threatened SR – State Rare		California Rare Plant Rank: CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere. CRPR 2: Plants rare, threatened, or endangered in Calif. but common elsewhere. CRPR 3: More information about this plant needed (Review List). CRPR 4: Limited distribution (Watch List). CRPR Threat Code extensions and their meanings: .1 – Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) .2 – Fairly endangered in California (20-80% occurrences threatened) .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known).				
Sources 1. USFWS. 2017. IPaC Official Species List. List generated August 29, 2017. https://ecos.fws.gov/ipac/publicDocument/VU27V52SPNBXJKHBCT2J7TYWX4 2. California Natural Diversity Database (CNDDDB). 2017. Oceano and Pismo Beach USGS 7.5 Minute Quadrangles. California Department of Fish and Game, Biogeographic Data Branch. Last updated August, 2017. 3. California Native Plant Society Inventory of Rare and Endangered Plants, 2017. Oceano and Pismo Beach Quads. Available at: http://www.cnps.org/cnps/rareplants/ranking.php , accessed August 30, 2017. 4. California Department of Parks and Recreation, 2017. Oceano Dunes Habitat Conservation Plan: Appendix A. Listed and Other Special-status Species not Included in the HCP. 5. California Department of Parks and Recreation. 2017 (August). Oceano Dunes State Vehicular Recreation Area Wildlife Habitat Protection Plan. Prepared by California Department of Parks and Recreation Off-highway Motor Vehicle Division, Oceano Dunes District. 6. MIG TRA Environmental Sciences, Inc., 2015 (February). Pismo State Beach and Oceano Dunes State Vehicular Recreation Area Vegetation Mapping Report.						

Special-Status Plant Species Descriptions

Special-status plant species that are potentially impacted by the existing HCP covered activities, proposed new activities, and potential future activities are described below.

Red Sand Verbena

Red sand verbena (*Abronia maritima*) is a perennial herb in the four o'clock family (Nyctaginaceae) that blooms from February through November. It occurs on coastal dunes from 0 to 330 feet. It grows in the sand in stabilized beach sands of the interior dunes, typically in soil that is free of organic debris. It typically grows in areas from 200 to 5,000 feet from the surf. It forms a green mat along the ground and can sometimes be buried under loose sand. It is nearly extirpated in southern California (CNPS, 2019). Red sand verbena was observed in the HCP area near Strand Way, as well as in the western portion of the Pismo Dunes Natural Preserve. It has also been observed on Pavilion Hill, Tabletop, and Worm Valley vegetation islands; in north Oso Flaco; and near Oso Flaco Creek (MIG|TRA, 2015).

Sand Mesa Manzanita

Sand mesa manzanita (*Arctostaphylos rudis*) is a perennial evergreen shrub in the heath family (Ericaceae) that blooms from November through February. It occurs in maritime chaparral and coastal scrub on sandy soils from 80–1,050 feet. It is endemic to San Luis Obispo and Santa Barbara counties and is threatened by agriculture, road construction, road maintenance, and oil extraction. It has been severely reduced on Nipomo Mesa (CNPS, 2019). Sand mesa manzanita has been observed previously by CDPR staff within the Phillips 66 Leasehold in the HCP area (MIG|TRA, 2015). The closest CNDDDB record to the study area is approximately 1.5 miles east at Nipomo Mesa (CDFW, 2019).

Marsh Sandwort

Marsh sandwort (*Arenaria paludicola*) is a perennial herb in the pink family (Caryophyllaceae). It has rooting, trailing stems and small white, inconspicuous flowers that bloom from May through August. It can also reproduce asexually by producing adventitious roots on the trailing stems that come into contact with suitable conditions. Historically, this species occurred in swamps, marshes, and other wet areas in widely disjunct localities in California and Washington between sea level and 1,480 feet. It is known to have occurred in four counties in the coastal region of Washington, as well as in San Francisco, Santa Cruz, San Luis Obispo, and San Bernardino counties in California (USFWS, 1998).

Marsh sandwort typically occurred on saturated, acidic bog soils that were predominantly sandy with a high organic content (USFWS, 1998). Currently, its primary habitat consists of boggy areas in freshwater marshes and swamps below 560 feet in elevation (USFWS, 2008). Marsh sandwort is found with dense mats of rushes, cattails (*Typha* sp.), and bur-reed (*Sparganium* spp.) (USFWS, 2008).

When it was federally listed in 1993, marsh sandwort was only known from one extant population near the San Luis Obispo County coast at Black Lake Canyon on the Nipomo Mesa Dune complex. Naturally occurring plants were last seen at Black Lake Canyon in 1994 after a steady decline since 1985 (USFWS, 1998). The species had since been reintroduced to Black Lake Canyon on three different occasions, but all attempts were unsuccessful, with the last

observation in 1999. Marsh sandwort is now considered to be extirpated from Black Lake Canyon (USFWS, 2008). Marsh sandwort has also been reintroduced to the Sweet Springs Audubon Nature Preserve in Los Osos in San Luis Obispo County in 2003 (USFWS, 2008) (CDFW, 2019).

Since marsh sandwort was federally listed, a natural population was rediscovered in the HCP area at Oso Flaco Lake in 1998 (Chestnut J. , 1998) (USFWS, 1998) (USFWS, 2008). Chestnut (1998) reported marsh sandwort from two locations, separated by approximately 330 feet, in a marshy area near the northeast corner of Oso Flaco Lake. The larger of the two locations contained at least 65 plants, and the smaller location contained at least 20 plants. The plants were growing in an area dominated by broad-fruited bur-reed (*Sparganium eurycarpum*) and appeared to be associated with Cusick's sedge (*Carex cusickii*), a large, tussock-forming species of localized occurrence in this area. This site now comprises the only known extant, wild population. This population has been in decline since 1998, however, with only 25 clumps reported in 2005. A decline in habitat quantity and quality was recorded at this site in late 2006 (CDFW, 2019). The vegetation at this location was observed to be thicker, denser, and more overgrown, consistent with biostimulation. Development and agricultural operations upstream from the lake have indirectly caused a decline in the quality of the marsh and swamp habitat through increases in nutrients (USFWS, 2008).

A survey by CDPR contractors for marsh sandwort was attempted in 2013. Surveyors could not confirm presence of the plant due to problems with accessibility but did determine that habitat, including the sedge mat microhabitat used by this species, is still present in locations where marsh sandwort was observed in the past. The area was surveyed in June and September 2018 (Chestnut J., 2019). Surveyors found marsh sandwort growing in a narrow band just outside the overhead willow canopy and shoreward from the tule marsh that dominates that portion of the lake. They noted that in this narrow band, Cusick's sedge formed floating clumps that provided a substrate for the marsh sandwort to grow over. Although specific numbers of individuals or population acreage was not determined, it appeared the tule coverage had expanded compared to previous visits, and the habitat band for the sandwort was in turn shrinking (Chestnut J. , 2019). The CNDDDB presumes only the populations at Oso Flaco Lake and Sweet Springs Audubon Nature Preserve in Los Osos to be extant. All other previously reported populations (i.e., 13 since 1899) are considered extirpated or presumed extirpated.

Nuttall's Milkvetch

Nuttall's milkvetch (*Astragalus nuttallii* var. *nuttallii*) is a perennial herb in the pea family (Fabaceae) that blooms from January through November. It is endemic to California and is possibly threatened by foot traffic (CNPS, 2019). It occurs in coastal bluff scrub and coastal dunes from 10 to 400 feet. Nuttall's milkvetch was observed nearby the HCP area in the Pismo Dunes Natural Preserve; at Boy Scout Camp, Worm Valley, Tabletop, and Eucalyptus Tree vegetation islands; in the south end of the Phillips 66 Leasehold; in North Oso Flaco; in the northern part of Maidenform; near Oso Flaco Creek; and in the southwest portion of South Oso Flaco (MIG|TRA, 2015).

Monterey Coast Paintbrush

Monterey Coast paintbrush (*Castilleja latifolia* ssp. *latifolia*) is an annual herb in the broomrape family (Orobanchaceae) that blooms from March through May. It is endemic to California and is threatened by development and grazing (CNPS, 2019). It occurs in the coastal dunes from 30 to

1,300 feet. It is typically found in the stabilized hind dunes or on cliffs flanking the shore. Monterey Coast paintbrush is widespread in the HCP area. It was observed near the interpretive trail and Carpenter Creek, in the Pismo Dunes Natural Preserve, throughout the Phillips 66 Leasehold, at six of the vegetation islands, at Maidenform, near Oso Flaco Creek, and in the eastern part of South Oso Flaco (MIG|TRA, 2015).

Coastal Goosefoot

Coastal goosefoot (*Chenopodium littoreum*) is an annual herb in the goosefoot family (Chenopodiaceae) that blooms from April through August. It occurs on sand dunes from 30 to 100 feet. It is endemic to Los Angeles, Santa Barbara, and San Luis Obispo counties and is known from fewer than 20 occurrences. It is possibly threatened by recreational activities, vehicles, and non-native plants (CNPS, 2019). During rare plant surveys conducted in HCP area, coastal goosefoot was only observed in the southern part of the Phillips 66 Leasehold (MIG|TRA, 2015). It has also been documented in the CNDDDB as occurring at Oso Flaco Lake and nearby the HCP area at Jack Lake (CDFW, 2019).

Douglas's Spineflower

Douglas's spine flower (*Chorizanthe douglasii*) is an annual herb in the buckwheat family (Polygonaceae) that blooms from April through July. It occurs in chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest on sandy or gravelly soils from 180 to 5,250 feet. It is endemic to Monterey, San Benito, and San Luis Obispo counties (CNPS, 2019). Douglas's spineflower has been previously documented at the Pavilion Hill vegetation island during an Oceano Dunes District survey (CDPR, 2011).

Surf Thistle

Surf thistle (*Cirsium rhotophilum*) is a low-growing, short-lived perennial in the sunflower family (Asteraceae) with white flowers in dense heads. Flowering occurs between April and June. It is characterized by large rosettes of spiny, white-woolly, deeply lobed and undulating leaves. The deep roots and white-woolly herbage are adaptations to the physical stresses of the dune habitat, such as high light intensity, sand movement and abrasion, and limited water. Surf thistle occurs only in the narrow strip of coastal habitat between stabilized dunes and windblown beach between 9 and 200 feet in elevation (CDFG, 2005).

This species of surf thistle is endemic to the dunes of the central California coast, from the Nipomo Dunes of southern San Luis Obispo County to Point Conception in Santa Barbara County, including populations within Pismo State Beach and Oceano Dunes SVRA. It grows in coastal foredunes on the slopes of transverse ridges in areas of active sand accumulation. At the southern extreme of its range, it is found in sand at the bases or tops of cliffs (CDFG, 2005).

Within the HCP area, surf thistle was observed near Oso Flaco Creek and in the foredunes of the South Oso Flaco area during vegetation mapping surveys conducted in 2012, as well as during rare plant surveys conducted annually since 2013. In addition, surf thistle has been observed in the north Oso Flaco area during previous surveys conducted by CDPR (CDPR, 2008).

La Graciosa Thistle

La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*) is a bushy biennial or short-lived perennial herb with large, smooth to slightly hairy leaves and clustered heads of white flowers. It is a spreading, mound-like or erect plant in the sunflower family (Asteraceae) that is well

armored with spines on the leaves and flower heads. This species is known from coastal San Luis Obispo and Santa Barbara counties from Pismo Beach south to Los Alamos.

In general, La Graciosa thistle is associated with backdune and coastal wetlands on the margins of dune swales, dune lakes, marshes, estuaries, coastal meadows, seeps, springs, intermittent streams, creeks, and rivers (USFWS, 2009a). This species thrives on sandy soils and is pollinated by hummingbirds and insects (USFWS, 2000). The variety and abundance of pollinators indicate that this species is a generalist (i.e., utilizes a wide variety of pollinators). The distribution of individual plants within populations is often an elongated pattern that is consistent with seed dispersal caused by the prevailing coastal winds (USFWS, 2001b). It is often found growing in a mat of low-growing herbaceous plants, including rushes, sedge, salt grass, Bermuda grass (*Cynodon dactylon*), clover (*Trifolium wormskioldii*), yerba mansa (*Anemopsis californica*), silverweed (*Potentilla anserina*), and birdfoot trefoil (*Lotus corniculatus*) (USFWS, 2001b).

USFWS revised its designation of critical habitat for La Graciosa thistle in 2009 to include 24,103 acres of habitat in San Luis Obispo and Santa Barbara counties (USFWS, 2011a). This critical habitat is divided into six units. The Callender-Guadalupe Dunes unit is the second largest unit (9,696 acres) and includes the Oceano Dunes District. This unit extends along 8.5 miles of coast from Arroyo Grande Creek south to the Santa Maria River. At the time of the most recent USFWS 5-year review (USFWS, 2011a), La Graciosa thistle was considered to have eight extant occurrences distributed among four populations, including southern Callender Dunes Lake, Oso Flaco, southern Guadalupe Dunes, and the Santa Maria River. Two of these occurrences (i.e., Oso Flaco and southern Guadalupe Dunes) are within the HCP area or vicinity. Surveys in and around the HCP area in 2013 and 2015 confirmed the presence of La Graciosa thistle in the South Oso Flaco area at Surprise Lake; however, the Jack Lake occurrence appears to be extirpated (MIG|TRA, 2015). This species was also observed at Surprise Lake in the South Oso Flaco area in April of 2017 (Skinner, 2017).

Dune Larkspur

Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*) is a perennial herb in the buttercup family (Ranunculaceae) that has purple and white or blue and white flowers and blooms from April through May. It occurs in maritime chaparral and on coastal dunes from sea level to 650 feet. It is endemic to California and is threatened by development (CNPS, 2019). Dune larkspur has been previously documented in the HCP area in the Phillips 66 Leasehold and at Oso Flaco Lake in 1998 (CDFW, 2019). From 1998 to 2011, Oceano Dunes District staff has observed dune larkspur almost every year within the Phillips 66 Leasehold property and at South Oso Flaco where it has been present near Beigle Road (CDPR, 2011).

Beach Spectaclepod

Beach spectaclepod (*Dithyrea maritima*) is a low-growing, whitish-flowered perennial herb in the mustard family (Brassicaceae). It is found in small transverse foredunes within approximately 160–1,000 feet from the surf (CDFG, 2005). Beach spectaclepod is usually found in areas of fragile dunes where the sand is relatively unstable. Historically occurring as far south as Los Angeles County and possibly Baja California Norte, Mexico, this species currently occurs in the dunes of San Luis Obispo and Santa Barbara counties and on San Nicholas and San Miguel Islands (CDFG, 2005). Several populations are found on Unocal's property in the Guadalupe Dunes just north of the Santa Maria River [CDFG 2004 as cited in (MIG|TRA, 2015)] (CNPS, 2019). In the HCP area, beach spectaclepod is protected and monitored closely

within the foredune area just north and south of Oso Flaco Lake (CDPR, 2011). Specifically, beach spectaclepod has been observed in the North Oso Flaco area during vegetation mapping surveys conducted in 2012 and in the North and South Oso Flaco areas during rare plant surveys conducted annually since 2012.

Blochman's Leafy Daisy

Blochman's leafy daisy (*Erigeron blochmaniae*) is a perennial rhizomatous herb that blooms from June through August. It is in the sunflower family (Asteraceae) and has light purple flowers. It occurs on coastal dunes and in coastal scrub from 10 to 150 feet. It is often found in scattered locations in stabilized sand dunes or dune scrub habitats. It often co-occurs with other species, including California spineflower (*Mucronea californica*) and blochman's groundsel (*Senecio blochmaniae*). It is endemic to Santa Barbara and San Luis Obispo counties and is threatened by development, non-native plants, and vehicles (CNPS, 2019). Blochman's leafy daisy is locally common and widespread in the HCP area. It was previously documented in the area by Oceano Dunes District surveys (CDPR, 2011) and CNDDDB records with the most recent observation in 2002 in the vicinity of Oso Flaco Lake (CDFW, 2019).

Suffrutescent Wallflower

Suffrutescent wallflower (*Erysium insulare* var. *suffrutescens*) is a perennial herb in the mustard family (Brassicaceae) that blooms from January through July. It is endemic to the southern California coast and is threatened by coastal development, vehicles, and non-native plants (CNPS, 2019). It occurs in coastal bluff scrub, maritime chaparral, coastal dunes, and coastal scrub from sea level to 500 feet. Suffrutescent wallflower is locally common and widespread in coastal dune scrub communities of the HCP area.

Kellogg's Horkelia

Kellogg's horkelia (*Horkelia cuneata* var. *sericea*) is a perennial herb that blooms from April through September. It has white flowers and is in the rose family (*Rosaceae*). It occurs in closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub on sandy or gravelly openings from 30 to 650 feet. It is endemic to California and is possibly threatened by coastal development (CNPS, 2019). Kellogg's horkelia has been documented in the Pismo Dunes Natural Preserve in Pismo State Beach and in the Phillips 66 Leasehold during Oceano Dunes District surveys (CDPR, 2011). It was also documented in the Phillips 66 Leasehold by the CNDDDB with the most recent observation in 1998 (CDFW, 2019).

Southwestern Spiny Rush

Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*) is a perennial rhizomatous herb in the rush family (Juncaceae) that blooms from March through June. It occurs in coastal dunes (mesic), meadows and alkaline seeps, and in coastal salt marshes and swamps from 10 to 3,000 feet. It is often found along the fringes of coastal saline and brackish marshes or along the transition from dune scrub to wetland vegetation. It occurs with native and non-native vegetation, including Arroyo willow, pacific silverweed (*Argentina pacifica*), and dock (*Rumex* sp.). It is threatened by urbanization and flood control projects (CNPS, 2019). Southwestern spiny rush has been documented in the HCP area in the Pismo Dunes Natural Preserve and within the Eucalyptus Tree vegetation island during previous Oceano Dunes District surveys (CDPR, 2011).

Fuzzy Prickly Phlox

Fuzzy prickly phlox (*Linanthus californicus*) is a perennial deciduous shrub in the phlox family (Polemoniaceae) that blooms from March through August. It is endemic to Santa Barbara and San Luis Obispo counties (CNPS, 2019). It occurs on coastal dunes from 3 to 100 feet. In the HCP area, fuzzy prickly phlox was observed in the Pismo Dunes Natural Preserve, the southern part of the Phillips 66 Leasehold, and in the backdunes of South Oso Flaco (MIG|TRA, 2015).

Nipomo Mesa Lupine

Nipomo Mesa lupine (*Lupinus nipomensis*) is a low-growing, blue-flowered, annual herb in the pea family (Fabaceae). Nipomo Mesa lupine requires fine-grained, sandy soils of open sites or sparsely vegetated, stabilized dune communities close to the coast. Flowers are presumably capable of self-pollination but may require insect visitation to maximize seed production. Seed germination and maximum plant size are apparently enhanced by activities of pocket gophers (Walters & Walters, 1988), which also present a threat of herbivory (USFWS, 2000) (USFWS, 2009b). Nipomo Mesa lupine is restricted to dry sandy flats of stabilized coastal dunes that lie west of Nipomo Mesa in San Luis Obispo County (USFWS, 2009b). Associated species include perennial species such as California croton (*Croton californicus*), mock heather, dune eriogonum (*Eriogonum parvifolium*), dune ragwort, and perennial veldt grass (a non-native, invasive species).

At the time of the USFWS 5-year review (USFWS, 2009b), only one Nipomo Mesa lupine population was known to be extant. Individuals in this population are scattered across a 2-mile stretch of backdune habitat west of State Route 1 and in between Black Lake Canyon and Oso Flaco Lake in San Luis Obispo County. USFWS considered all occurrences or colonies in the site to comprise a single population; it is now recorded as one occurrence in CNDDDB (CDFW, 2018a). USFWS estimates the total amount of suitable habitat for Nipomo Mesa lupine in San Luis Obispo County to be approximately 1,000 acres, but the extant occurrences cover approximately 100 acres (USFWS, 2009b). The majority of the habitat for the species is privately owned, mostly by Phillips 66, with smaller portions owned by Pacific Gas and Electric Company and other private landowners. A portion of the habitat also occurs within a California Department of Transportation right-of way (USFWS, 2009b). In the HCP area and vicinity, Nipomo Mesa lupine was only observed in the eastern part of the Phillips 66 Leasehold, which is land that Oceano Dunes District manages as part of the SVRA. It has also been documented in the Phillips 66 Leasehold in annual surveys conducted by the Land Conservancy of San Luis Obispo County (LCSLO, 2015) (Bohlman, 2014).

Dunedelion

Dunedelion (*Malacothrix incana*) is a perennial herb in the sunflower family (Asteraceae) that blooms from January through October. It is endemic to California (CNPS, 2019). It occurs in the foredunes and coastal scrub areas near the ocean from 10 to 115 feet. In the HCP area, dunedelion was observed at the Pavilion Hill vegetation island and the 7.5 Revegetation Area, in North Oso Flaco, and near Oso Flaco Creek (MIG|TRA, 2015).

Crisp Monardella

Crisp monardella (*Monardella undulata* ssp. *crispa*) is a perennial rhizomatous herb that blooms from April through August. It has purple flowers and is in the mint family (Lamiaceae). It occurs in coastal dunes and sandy scrub from 30 to 400 feet. This species is common in the Nipomo

Dunes complex and is often found in the more open sandy areas, especially around the margins of active dunes. It is endemic to Santa Barbara and San Luis Obispo counties and is threatened by vehicles (CNPS, 2019). Crisp monardella is locally common and widespread in the Oceano HCP area and was observed at the sandy edges of other vegetation throughout the area. It has been documented in the HCP area during previous Oceano Dunes District surveys (CDPR, 2011) and in CNDDDB records with the most recent observation in 1998 (CDFW, 2019).

San Luis Obispo Monardella

San Luis Obispo monardella (*Monardella undulata* ssp. *undulata*) is a perennial rhizomatous herb that blooms from May through September. It has purple flowers and is in the mint family (Lamiaceae). It is endemic to Santa Barbara and San Luis Obispo counties and is threatened by coastal development, vehicles, and potentially non-native plants (CNPS, 2019). It occurs in coastal dunes and sandy coastal scrub from 30 to 650 feet. San Luis Obispo monardella was observed in the HCP area in the Pismo Dunes Natural Preserve, as well as within the Phillips 66 Leasehold, and in the southern backdunes of south Oso Flaco (MIG|TRA, 2015). It has also been documented adjacent to the HCP area near Black Lake and Jack Lake (CDFW, 2019).

California Spineflower

California spineflower (*Mucronea californica*) is an annual herb in the buckwheat family (Polygonaceae) that blooms from March through August. It occurs in chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland from sea level to 4,600 feet. It is often found in scattered locations in areas with more open dune scrub vegetation and disturbed areas, such as dirt roads and paths that have been cut through dune scrub. It occurs with a variety of native and non-native species, including mock heather, European beachgrass, and ice plant. It is endemic to California and is threatened by aggregate mining, vehicles, flood control modification, urbanization, water percolation projects, and possibly by non-native plants (CNPS, 2019). In the HCP area, California spineflower has been observed in the Dunes Preserve, in the Phillips 66 Leasehold, and at South Oso Flaco (MIG|TRA, 2015).

Gambel's Watercress

Gambel's watercress (*Nasturtium gambelii*) is a herbaceous perennial in the mustard family (Brassicaceae). This species characteristically roots from the stem, which bears scattered compound leaves and dense clusters of white flowers. Gambel's watercress is found in freshwater or brackish marsh habitats at the margins of lakes and along slow-flowing streams. It grows in or just above the water level and requires a permanent source of water. Historically, Gambel's watercress occurred in interior wetland areas of Orange, San Bernardino, and Los Angeles counties, as well as coastal wetland areas of San Luis Obispo and Santa Barbara counties. A population from Mexico is thought to be extirpated (CDFW, 2018a). At the time of listing, there were three known populations of Gambel's watercress, all within San Luis Obispo County. These locations included Black Lake Canyon, Oso Flaco Lake, and Little Oso Flaco Lake (USFWS, 1993). The Black Lake Canyon and Little Oso Flaco Lake populations are now considered to be "possibly extirpated" (USFWS, 2009c) (USFWS, 2011b) (CDFW, 2018a), with some observers indicating individuals appeared to show introgression with *N. officinale* (white or common watercress). The Gambel's watercress occurrence at Oso Flaco Lake was observed in fall 2013 (Chestnut J., 2013), and the Oso Flaco area was surveyed again in 2018. Within the Oso Flaco Lake area, surveyors found a very healthy population of Gambel's watercress on the farm drain on the agricultural property. The number of individuals or distribution acreage was

not determined. The populations of Gambel's watercress previously observed along the Oso Flaco Lake Causeway were gone (Chestnut J. , Gambel's Watercress and Marsh Sandwort Observations; pers. comm., 2019)).

Pure Gambel's watercress is known from two wild populations that discovered in 1998 and 2016 on Vandenberg Airforce Base in Santa Barbara County and one population that was introduced in 2008 within the Guadalupe-Nipomo Dunes NWR, where a combination of 600 marsh sandwort and Gambel's watercress plants were planted at 8 sites. However, the plants have not fully established at the refuge, and the USFWS does not consider it to be a viable population (USFWS, 2011b).

The population in Black Lake Canyon in San Luis Obispo County has not been seen since 1994 (CDFW, 2018a). An unknown watercress species (*Nasturtium* sp.) was observed in the HCP area near Oso Flaco Creek during vegetation mapping surveys conducted in 2012.

Gambel's watercress within the Oceano Dunes SVRA is threatened by lake eutrophication (artificial or natural addition of substances such as nitrates and phosphates to an aquatic system) and hybridization. Hybridization and subsequent genetic introgression with the closely related *N. officinale*, habitat loss and degradation, biostimulation, sedimentation, encroachment of non-native eucalyptus trees, and drilling of water wells in the immediate watershed are serious threats to any remaining Gambel's watercress (USFWS, 2009c) (USFWS, 2011b) (CDFW, 2018a). In 2013, the RWQCB amended the Central Coastal Basin plan by adopting total maximum daily loads (TMDLs) for nutrients and orthophosphates in the Lower Santa Maria River watershed, including Oso Flaco Lake and tributaries; the State Water Resources Control Board adopted the amendment in 2014 (State Water Resource Control Board, 2014). Achieving the TMDLs should help alleviate adverse effects on native species from nitrogen and other biostimulator chemicals that are found in the watershed (RWQCB, 2013).

Hickman's Popcornflower

Hickman's popcorn flower (*Plagiobothrys chorisianus* var. *hickmanii*) is an annual herb in the borage family (Boraginaceae) that blooms from April through June. It is endemic to California (CNPS, 2019). It occurs in closed-cone coniferous forest, chaparral, coastal scrub, marshes and swamps, and vernal pools from 50 to 280 feet. Hickman's popcorn flower has been documented in four vegetation islands within the HCP area, in the Phillips 66 Leasehold, and near Maidenform (CDPR, 2011).

Sand Almond

Sand almond (*Prunus fasciculata* var. *punctata*) is a perennial deciduous shrub in the rose family (Rosaceae) that blooms from March through April. It is endemic to Santa Barbara and San Luis Obispo counties (CNPS, 2019). It occurs in maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils from 50 to 650 feet. In the HCP area, sand almond has only been observed in the southern part of the Phillips 66 Leasehold (MIG|TRA, 2015).

Blochman's Groundsel

Blochman's groundsel (*Senecio blochmaniae*) is a perennial herb in the sunflower family (Asteraceae) that blooms from May through October. It occurs in coastal dunes and in sandy areas on coastal floodplains from sea level to 330 feet. It is endemic to Santa Barbara and San Luis Obispo counties and is threatened within its range by non-native plants, development, and vehicles (CDFW, 2018a). Blochman's groundsel is locally common and widespread in the HCP

area, especially within dune scrub habitat. This species often co-occurs with Blochman's leafy daisy.

Oceano Dunes District
Habitat Conservation Plan EIR

Appendix D: Biological Effects of Existing
Covered Activities

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Oceano Dunes District HCP EIR

Appendix D: Biological Effects of Existing Covered Activities

Special-Status Animal Species

Existing covered activities are ongoing visitor use or park operation activities occurring within the HCP area. No changes to these activities are proposed by the HCP, therefore, the proposed project would have no new impact generated by these activities. Effects to special-status animal species from these activities are existing baseline environmental conditions.

Covered activities that are short in duration, occur infrequently, or by the nature of activity cause minimal impacts to a species or its habitat, have low risk of causing injury or mortality but may cause disturbance that could result in harassment. FESA defines harassment as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering.”

Discussion of each covered special-status species below separates covered activities into impact categories as follows taking into consideration both the risk and severity of the impact:

- **Negligible** – Minimal impact on the resource occurs; any change that occurs is barely perceptible and not easily measurable. Negligible impacts have not been observed and are extremely unlikely to occur.
- **Minor** – Change in a resource occurs, but no substantial resource impact results; the change in the resource is detectable but does not alter the condition of the resource. Minor impacts have either been observed or are thought to occur and most or all impacts are thought to be avoided with the implementation of avoidance and minimization measures (AMMs). Both lethal and non-lethal impacts can be minor depending on the frequency, duration, and location of the activity.
- **Moderate** – Noticeable change in a resource occurs and this change alters the condition of the resource, but the integrity of the resource remains intact. Moderate impacts have been observed or are thought to occur and cannot be avoided. Both lethal and non-lethal impacts can be moderate depending on the frequency, duration, and location of the activity.
- **Major** – Substantial impact or change in a resource occurs that is easily defined and highly noticeable and that measurably alters the condition of the resource; the integrity of the resource does not necessarily remain intact.

Western Snowy Plover (SNPL)

Impacts to SNPL from HCP covered activities are described in the HCP section 4.3. The existing risk of impact to SNPL from existing covered activities is summarized in EIR Table 6-4.

Covered activities occurring outside of SNPL primary and secondary habitat areas (HCP Maps 10 and 23) have no risk of impacting SNPL and are dismissed from further discussion. Existing covered activities with no impact to SNPL include golfing (CA-4), campground maintenance (CA-20), street sweeping (CA-25), routine riparian maintenance (CA-26), ASI courses (CA-35),

Pismo Beach Golf Course operations (CA-37), natural history/interpretation (CA-39), CDPR ag land management (CA-46), and bioreactor maintenance (CA-47).

No major impacts from existing conditions on SNPL have been identified. Existing covered activities with negligible to moderate impacts to SNPL are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized Recreation (CA-1) and Camping (CA-2). Motorized recreation and camping occur on an ongoing basis in the HCP area in primary and secondary SNPL breeding and wintering shoreline habitat year-round from Grand Avenue to Post 6 and seasonally (non-breeding months) south of Post 6 to the southern riding boundary. Impacts to SNPL from motorized recreation and camping are described in HCP sections 4.3.1.1.1 and 4.3.1.1.2. Take of SNPL has been documented in the HCP area from motor vehicle recreation as summarized in EIR Table 6-8.

Although infrequent, SNPL have been found during the breeding season dead or injured outside the seasonal enclosure and these mortalities/injuries have been attributed to vehicle strike from motorized activities (e.g., a dead individual is found in a tire track), including from campers driving to camp sites. Unprotected SNPL nests outside of enclosures are also at risk of being crushed by a vehicle, although SNPL AMMs 1 through 30 reduce the risk of this occurring; therefore, this is thought to be an infrequent event. Chicks have also been observed in the open riding area where they are at risk of being struck by a vehicle; however, CDPR implements SNPL AMMs 17 through 19 to minimize the risk of a chick being struck by a vehicle and few chicks are thought to be killed by vehicles in the open riding area. In addition, wintering SNPL have been struck by vehicles when they occur in areas where vehicles are driving through. Although CDPR implements SNPL AMMs 1 through 30 to reduce this impact, wintering SNPL are still found dead or injured near tire tracks each year. This indicates that wintering SNPL are still vulnerable to vehicle strike despite the implementation of AMMs. As a result, this lethal impact is moderate. This trend is expected to continue in the future.

Disturbance by motorized recreation can result in stress, reproductive failure, reduced foraging success, illness, or even death. SNPL breeding habitat south of Post 6 in Oceano Dunes SVRA is seasonally closed to motorized recreation under the existing natural resource management program. Therefore, SNPL within the seasonal enclosure south of Post 6 are not disturbed by motorized recreation. SNPL nesting near the Southern Enclosure fence line adjacent to the open riding area or outside the Southern Enclosure within the open riding area have been observed being disturbed by nearby recreation. CDPR implements SNPL AMMs 1 through 30, including installing bumpouts if SNPL appear to be disturbed by nearby recreation activities. Disturbance is difficult to document, however, and it is likely that some disturbance occurs despite the implementation of AMMs. This non-lethal impact is minor. This trend is expected to continue in the future.

Recreationists increase the presence of trash, most of which is disposed of properly in dumpsters. However, any trash that is accessible to predatory species is thought to artificially increase the number of individual predators in areas being used by SNPL and thus indirectly increase predation on SNPL. CDPR implements SNPL AMMs 32 through 42, which includes requiring all visitors to deposit all trash in dumpsters/receptacles and providing trash bags to all campers and CDPR staff and manually removing litter and garbage from the beaches. CDPR also implements a predator management program to control avian and/or mammalian predators that are observed targeting or disturbing SNPL adults, chicks, or eggs. Generalist predators that

forage on refuse continue to be present in the HCP area and are often suspected of preying on eggs, chicks, adults, and juveniles. Therefore, this indirect lethal impact is moderate. This trend is expected to continue in the future.

Habitat quality is permanently reduced in areas open to motorized recreation and camping due to the high level of disturbance. Motorized vehicle recreation reduces available habitat for SNPL and other shorebirds by limiting use in the open riding area compared to non-motorized areas, especially in certain conditions such as during high tides. SNPL are less frequent in areas open to motorized vehicles indicating that they may avoid these areas, especially during the breeding season. In addition, motorized recreation in the non-breeding season when the seasonal enclosure has been removed, alters dune vegetation and topography necessary for SNPL to breed in the coming breeding season. Specifically, motorized recreation reduces vegetation, organic surface materials (e.g., driftwood), and micro-topography required for SNPL breeding and foraging. CDPR implements SNPL AMMs 43 through 45 to restore habitat that has been impacted during the non-breeding season. In addition, CDPR closes off a portion of the open riding area during the breeding season (i.e., the seasonal enclosure) to ensure that suitable habitat is available SNPL breeding, foraging, and roosting. Other primary and secondary habitat for SNPL continues to be used for motorized recreation and remains unavailable or of reduced quality for SNPL. As a result, this habitat impact is moderate. This trend is expected to continue in the future.

Pedestrian Activity (CA-3). Pedestrian activity occurs on an ongoing basis in the HCP area, including within areas where motorized vehicles are not allowed (e.g., Oso Flaco, vegetation islands). Impacts to SNPL from pedestrian activity are described in HCP section 4.3.1.1.3. Pedestrians are not permitted within the seasonal enclosure, which is fenced with predator fence or symbolic fence, and therefore pedestrians do not impact nesting or brooding SNPL within the seasonal enclosure. The cryptic nature of SNPL nests and chicks makes it possible for a pedestrian to crush/kill or injure an active SNPL nest or a chick that is outside the fenced area and not yet identified by monitors. CDPR implements SNPL AMMs 1 through 3, 5 through 8, 14 through 16, 21 through 30, and 47 through 51 to reduce the risk of this occurring. There are no records of SNPL chicks or eggs being crushed/killed or injured due to pedestrian activities in the HCP area and AMMs appear to prevent this from happening. As a result, this this lethal impact is minor. This trend is expected to continue in the future.

Pedestrians moving through habitat occupied by SNPL can disturb nesting, foraging, or roosting SNPL. SNPL frequently feed on terrestrial insects that typically are found in the wrack line where people prefer to walk. Foraging SNPL adults and chicks interrupted by humans stop foraging and move away from the wrack until the disturbance has passed. Stationary activities, such as picnicking and sunbathing, can displace SNPL for long periods. In addition, frequent or prolonged pedestrian activities can keep SNPL from using otherwise suitable habitat. This impact has been most acute along the shoreline south of the Oso Flaco boardwalk, where monitors have observed visitor presence keeping SNPL off nests. CDPR implements SNPL AMMs 1 through 3, 5 through 8, 14 through 16, 21 through 30, and 47 through 51 to reduce the risk of pedestrians causing significant disturbance, however, some disturbance still likely occurs in the HCP area. As a result, this non-lethal impact is minor to moderate depending on the duration and frequency of the disturbance. This trend is expected to continue in the future.

SNPL chicks that enter an area open to pedestrians, have been picked up by a well-meaning visitor attempting to “rescue” the chick by picking it up and moving it to another location or bringing it to park staff. Specifically, this was observed in 2014 when a 1 to 2-day-old SNPL chick was picked up by a park visitor and given to park staff. CDPR implements SNPL AMMs 1

and 2, which includes providing educational information regarding SNPL. These AMMs appear to have reduced this impact since this has not been documented since 2014. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2). CDPR implements SNPL AMMs 32 to 42 to reduce the effects on SNPL. This indirect lethal impact is moderate. This trend is expected to continue in the future.

Fishing (CA-5). Impacts to SNPL from fishing activity are described in HCP section 4.3.1.1.5. Fishing impacts on SNPL are similar to effects from pedestrians (CA-3). Effects are more limited to the shoreline areas where foraging occurs rather than to beach nesting areas. As a result, lethal impacts to SNPL likely don't occur from fishing activities.

People fishing generally occupy the shoreline for longer periods than pedestrians passing through. As a result, SNPL also appear to avoid foraging near fishing activity. CDPR implements all AMMs listed above for pedestrians and SNPL AMM 52 to reduce effects on SNPL. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Increased predation on SNPL could result from visitor trash or discarded fishing bait as described above for motorized recreation (CA-1) and camping (CA-2). CDPR implements SNPL AMM 53 to reduce the effects on SNPL. This indirect lethal impact is moderate. This trend is expected to continue in the future.

Bicycling (CA-4), Dog Walking (CA-6), Equestrian (CA-7), Boating/Surfing (CA-8), and Aerial/Wind Driven Activities (CA-9). In accordance with Superintendent's Order 554-003-2015¹, kite flying and kiteboarding are not allowed in areas where chicks are expected to forage (i.e., between Pier Avenue and the southern Oceano Dunes SVRA boundary) or within 1,000 feet of the shoreline during the breeding season. In addition, most of these activities do not occur in areas where SNPL are known to nest; however, if, in the future, SNPL nest in new areas, the cryptic nature of SNPL nests and chicks makes it possible for an active SNPL nest or a chick that is outside the fenced area and not yet identified by monitors to be crushed/killed or injured by pedestrians associated with these activities. CDPR implements SNPL AMMs 1 through 3, 5 through 8, 14 through 16, 21 through 30, and 47 through 51 to reduce the risk of this occurring and there are no records of SNPL chicks or eggs being crushed/killed or injured due to these activities in the HCP area. Therefore, AMMs appear to prevent this from happening. As a result, this lethal impact is negligible. This trend is expected to continue in the future.

Dog walking, equestrian recreation, and boating/surfing activities have been observed disturbing SNPL during foraging or roosting activities outside the seasonal enclosure in the breeding and non-breeding season and aerial/wind driven activities sometimes result in disturbance to SNPL foraging or roosting during the non-breeding season. Specifically, SNPL are displaced from foraging or roosting habitat during the period of disturbance. Most disturbances are short in duration and SNPL will move to other locations to forage and/or roost. In addition, CDPR

¹ Superintendent's Orders are subject to change (approximately every 3-5 years); therefore, the numbers and titles associated with the Superintendent's Order will likely change during the HCP term. However, the subject matter will continue to be addressed within the new Superintendent's Orders. In addition, Superintendent's Orders can be updated or added due to new or changed circumstances as part of the adaptive management process (HCP section 5.6).

implements AMMs 54 through 57 to reduce the disturbances associated with dog walking and horses. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Holidays (CA-10) and Special events (CA-11). Impacts to SNPL from holidays and special events are described in HCP sections 4.3.1.1.10 and 4.3.1.1.11. The existing impact of holidays and special events is similar to those of motorized vehicles (CA-1), camping (CA-2), and pedestrians (CA-3). Potential adverse impacts to SNPL from visitor activities may be exacerbated during periods of high visitor use, such as holidays (CA-10) or special events (CA-11). Holidays and special events do not increase the number of day use or camping vehicles or OHV allowed on the beach.

Fireworks are prohibited in the HCP area, however, a once a year the City of Pismo has a firework display on July 4 on the Pismo Beach pier. Therefore, during the July 4 holiday, many fireworks spectators congregate in the northern portion of the HCP area, which is over 2 miles from the northern edge of the Southern Enclosure. SNPL are largely precluded from foraging and roosting in areas that are heavily congested during the fireworks displays (e.g., the area north of Grand Avenue). In addition, although fireworks are illegal in the HCP area, illegal fireworks have been regularly observed during the July 4 week in or near SNPL breeding habitat, including adjacent to the seasonal enclosure. Illegal fireworks in these areas have been observed disturbing nesting, roosting, and/or foraging SNPL. Specifically, disturbance from fireworks has been observed causing SNPL to flush or move from the area, which results in increased vigilance or stress, decreased foraging, and/or decreased brooding. CDPR implements AMMs addressing holidays (SNPL AMMs 25 through 28 and AMMs 61 through 62), including increasing staff near the Southern Enclosure to minimize illegal firework use. As a result, this non-lethal impact is minor to moderate, depending on the amount of disturbance due to fireworks during the holiday. This trend is expected to continue in the future.

Special events concentrate people in specific locations within the park. Those locations are always within portions of the park that already accommodate daily human activity. Special events also change use patterns and increase visitation on days that might normally not be at capacity. Special events require a permit from the District and are subject to conditions that protect the environment, such as demarcation of the event area, biological monitors, and trash control (SNPL AMM 63 and AMM 64). Specific special event AMMs are based on past experience and dependent on the event location, timing, and potential to impact covered species like SNPL. Currently, this non-lethal impact is considered minor to moderate, depending on the location and type of special event. This trend is expected to continue in the future.

Natural Resources Management

SNPL and CLTE Management (CA-12a and 12b). Impacts to SNPL from these management activities are described in HCP section 4.3.1.2.2 and section 4.3.1.2.3. Existing SNPL and CLTE management activities includes surveying, monitoring, banding, predator control, habitat enhancement, and erecting fencing and enclosures. Minor adverse impacts can result from monitors or their vehicles accidentally crushing nests, although this has not been documented within the HCP area to date. As a result, this lethal impact is considered minor. This trend is expected to continue in the future.

Monitors have caused temporary disturbance to SNPL during fence installation/maintenance, surveys, banding, habitat enhancement, and other monitoring activities. At times, this disturbance has resulted in chicks leaving the protection of the seasonal enclosure and entering

the open riding area and/or chicks moving into the territory of another nest and being attacked or chased out by the attending adult. CDPR implements AMMs (e.g., SNPL AMMs 72 and 73) to reduce the risk of a chick being flushed into the open riding area or the territory of another nest. As a result, lethal impacts associated with monitoring activities are not thought to occur and are considered negligible. However, some disturbance does occur during monitoring activities due to the nature of the activities. As a result, non-lethal impacts are moderate. This trend is expected to continue in the future.

Fences placed in otherwise open habitat can be hazardous to flying birds. Shorebirds have been observed being killed upon striking cable (symbolic) fences at other sites (Page et al. 2002). Although infrequent, monitors at Oceano Dunes SVRA have observed SNPL striking the seasonal enclosure fence while flying (CDPR 2014a). In 2015, CDPR placed brightly colored strips of fencing along sections of the Southern Enclosure to increase the visibility of the enclosure fence. The strip of fencing was attempted as an experiment in 2015 and was placed on the western and northern Southern Enclosure fence in 2016 with favorable results. CDPR will continue to implement this program by lining the top of the Southern Enclosure fence with a strip of thicker plastic fencing (orange silt construction fencing cut into approximately 1-foot sections) in March of each year, covering most of the western and northern Southern Enclosure fenced areas. If staff resources are available, some of the eastern fenceline and bumpout fencing will also be lined with this strip fencing. Therefore, it is anticipated the visible fencing will continue to reduce the likelihood of a SNPL striking a fence in areas where it is installed. SNPL are known to nest in the Oso Flaco area and can still strike symbolic fencing in this area. However, this event has rarely been documented since the implementation of the SNPL and CLTE management program. As a result, this event will continue to be rare. Overall, the seasonal enclosure fence is an important protective measure that has increased SNPL reproductive success in the HCP area. Therefore, the seasonal enclosure fence will continue to be used despite the potential for birds to strike the fence.

Installation of SNPL single-nest enclosures can be disruptive to SNPL and adults are sometimes displaced from incubation for the duration of the enclosure construction. Single-nest enclosures also pose a risk to incubating adult SNPL because they can increase the likelihood that predators key onto the enclosure and prey on the attending adults. CDPR implements AMMs (SNPL AMMs 67 through 72 and AMMs 88 and 89) to reduce these impacts. However, lethal take of SNPL has occurred in the HCP area from predation at the single-nest enclosures (EIR Table 6-8). As a result, this lethal impact is moderate. This trend is expected to continue in the future.

Take of SNPL associated with banding occurs under an existing permit authorization from the USFWS. Take associated with banding is associated with the capture of the SNPL chicks and is non-lethal, although injury or mortality can occur during banding. CDPR implements AMMs to minimize the risk of injuries or mortalities occurring during banding (SNPL AMMs 81 and 82) and this rarely, if ever occurs. As a result, the lethal impact from banding is negligible and the non-lethal impact from banding is moderate. This trend is expected to continue in the future.

Within the HCP area, cameras are sometimes installed at SNPL nests to document nest predators. Cameras have been effective for identifying nest predators in other locations in California (Demers and Robinson-Nilsen 2012). While they collect useful data on nesting SNPL, cameras that are used to monitor nests need to be maintained, which can cause additional disturbance when the monitors approach the cameras to maintain them. Cameras have not been observed influencing nest success in the HCP area to date. To ensure effects from cameras are minimized, CDPR will also continue to implement the SNPL and CLTE management program, which

includes AMMs to be implemented while using still or video cameras (SNPL AMMs 74 through 80), such as training monitors on how to install cameras, not installing cameras when the wind speed is above 15 mph or strong enough to move sand or if it is raining, waiting to deploy cameras if a predator sighting recently occurred, and not installing cameras on nests that are readily visible to the public. As a result, the effects of using cameras near SNPL nests are considered to be minor. This trend is expected to continue in the future.

Collecting SNPL chicks and eggs as part of the ongoing salvage and rescue activities in the HCP area (AMM 90) requires handling chicks and/or eggs to relocate them to an authorized wildlife facility.² This activity can also result in increased stress and vigilance of chicks while monitors attempt to capture the chicks. In addition, captive rearing is not always successful, and eggs or chicks may not survive in the captive facility. Despite this potential outcome, in studies where survival of captive-reared young is low, proponents of the technique point out that even small numbers that survive and breed indicate some success toward conservation of the species since otherwise the eggs or chicks would not have survived (Roche et al. 2008, Neuman et al. 2013). In the past, approximately 112 eggs and 52 chicks within the HCP area have been salvaged when they were found abandoned or injured. A portion of these individuals have survived to fledging age in a captive rearing facility. These fledglings have been released back into the wild, and many were documented as integrating into the wild SNPL population and breeding, although not necessarily within the HCP area. As a result, salvaging SNPL eggs and chicks will continue to be beneficial to the individuals removed, which—if they go on to breed—would benefit SNPL overall.

Based upon many years of implementation, the monitoring data presented in the HCP demonstrate these management activities have a beneficial effect that exceed the risk level of incidental take and have increased SNPL reproductive success in the HCP area. Therefore, the overall existing impact of SNPL and CLTE management activities on SNPL is beneficial. This trend is expected to continue in the future.

Tidewater Goby and Salmonid Surveys (CA-13), CRLF Surveys and Management (CA-14), Listed Plant Monitoring, Propagation, and Habitat Enhancement (CA-15), Habitat Restoration Program (CA-16), Invasive Plant and Animal Control (CA-17), and Water Quality Monitoring (CA-19). Tidewater goby and salmonid surveys already occur approximately four times per year in Arroyo Grande Creek and lagoon and at least annually in Pismo Creek and lagoon/Carpenter Creek and Oso Flaco Creek. CRLF surveys occur multiple times per year between January and September, including numerous daytime and nighttime surveys within appropriate aquatic habitats (e.g., Arroyo Grande Creek, Oso Flaco Lake, Oso Flaco Creek, Pismo Creek, Carpenter Creek). The District also already manages and restores vegetation in the HCP area, monitors water quality, and conducts invasive species control in the HCP area, as determined to be necessary. The activities occur by CDP staff who are trained in avoidance and minimization protocols. As a result, these activities do not modify SNPL habitat and have not been documented as resulting in lethal take.

These activities have resulted in non-lethal impacts to SNPL, including harassment as defined by FESA. Although most of these activities do not occur in areas where SNPL are known to nest,

² Impacts associated with the proposed new activity SNPL egg and chick capture for captive rearing if observed to be threatened by recreation activities and other non-covered species management activities (AMM 22) is included in EIR section 6.3.2.1.

listed plant monitoring occurs in North and South Oso Flaco during the breeding season and can disturb nesting SNPL and deter them from incubating eggs or brooding chicks during the period of disturbance. In addition, SNPL have been known to nest near Arroyo Grande Creek; therefore, tidewater goby and salmonid surveys and CRLF surveys and management can disturb nesting SNPL if they nest at Arroyo Grande Creek. All of these activities can disturb foraging or roosting SNPL by displacing them from foraging or roosting habitat during the period of disturbance and/or deterring them from foraging or roosting during the period of disturbance. CDPR staff implements AMMs, including, but not limited to, SNPL AMMs 91 through 99 to minimize any impacts to SNPL. As a result, these non-lethal impacts are considered minor. This trend is expected to continue in the future.

Habitat Monitoring System (CA-18). Impacts to SNPL from the habitat monitoring system activities are described in HCP section 4.3.1.2.9. During the breeding season monitors conduct three surveys for birds within and along the shoreline of the seasonal enclosure and elsewhere in the HCP area. Lethal impacts have not been documented to date with the implementation of AMMs.

These surveys can disturb nesting or brooding SNPL. CDPR implements SNPL AMMs (HCP Table 5-2), as appropriate, such as having a monitor with 10(a)(1)(A) Recovery Permit (or approved by the USFWS) conduct the surveys near the seasonal enclosure, to minimize the impact. However, some disturbance to nesting and foraging/roosting SNPL may occur. Therefore, this non-lethal impact is minor. However, based upon many years of implementation, the monitoring data presented in the HCP demonstrate the information collected as part of these surveys have a beneficial effect that exceeds the risk level of take. Therefore, the overall existing impact of habitat monitoring system on SNPL is beneficial. This trend is expected to continue in the future.

Park Maintenance

General Facilities Maintenance (CA-21) and Heavy Equipment Response (CA-29). Impacts to SNPL from general facilities maintenance and heavy equipment response are described in HCP section 4.3.1.3.2 and section 4.3.1.3.10, respectively. General facilities maintenance and heavy equipment response currently occur as needed in the HCP area, except for mechanical trash removal, which is described in more detail in EIR section 6.3.2.1. Park maintenance vehicles or equipment can injure or kill SNPL adults, juveniles, or chicks. Park maintenance vehicles, equipment, or workers can also accidentally crush nests. However, this has not been documented in the HCP area. CDPR also implements SNPL AMMs 100 through 103 to reduce the risk of park maintenance vehicles or equipment striking a SNPL or crushing a nest and these AMMs appear to reduce the lethal impacts from these activities. As a result, this lethal impact is minor. This trend is expected to continue in the future.

General facilities maintenance activities and heavy equipment response can adversely affect SNPL in the HCP area by disturbing nesting, brooding, roosting, or foraging SNPL, which can result in stress, reproductive failure, reduced foraging, illness, or even death. Such impacts are generally short in duration and relatively infrequent. CDPR implements SNPL AMMs 100 through 103 to specifically address general facilities maintenance activities and similar AMMs are applied to heavy equipment response. These AMMs reduce the risk of general maintenance activities or heavy equipment response disturbing SNPL; however, some disturbance still occurs. As a result, this non-lethal impact is moderate. This trend is expected to continue in the future.

Trash Control (CA-22). Impacts to SNPL from trash control activities are described in HCP section 4.3.1.3.3. Dumpsters are emptied in the HCP area every week. Other garbage bins are emptied regularly, including within Pismo State Beach and along various creeks. Vehicles driving to the trash bins are not known to have struck an SNPL to date and the risk of a vehicle striking a SNPL adult, juvenile, or chick or crushing a nest during trash control activities is considered low. As a result, the lethal impact is considered negligible. This trend is expected to continue in the future.

Trash bins are not located in areas where trash control activities disturb incubating, brooding, foraging, or roosting SNPL. Implementation of SNPL AMMs 100 through 103 ensures that the risk of disturbance to SNPL from trash control activities is low and this non-lethal impact is minor. This trend is expected to continue in the future.

Trash dumpsters attract a large number of gulls that land and forage in the dumpsters if they are left uncovered. As a result, the continued use of the uncovered trash bins within or near SNPL breeding habitat artificially increases the number of predatory species, including gulls, and thus increases depredation of SNPL. Increasing the number of trash bins on holidays and during special events to accommodate the increased number of visitors also artificially increases the number of predators at these times and increases depredation of SNPL. To reduce these impacts, CDPR is evaluating several options to reduce the movement of trash from the dumpsters and reduce predator presence at the dumpster sites. CDPR also implements a predator management program to ensure depredation of SNPL is minimized. Reducing predator presence near the dumpsters reduces the risk of predation on SNPL. However, the existing lethal indirect impacts due to predation as a result of trash control is moderate. This trend is expected to continue in the future. However, a solution to reduce the movement of trash in the future could reduce this impact further.

Wind Fencing (CA-23), Sand Ramp/Other Vehicle Access (CA-24), Perimeter and Vegetation Island Fencing (CA-27), Minor grading (CA-30), and Boardwalk/Other Pedestrian Access Maintenance (CA-31). Fencing, minor grading, and boardwalk/pedestrian access maintenance occur within the HCP area as needed but are typically conducted outside the nesting season. The activities occur by CDPR staff who are trained in avoidance and minimization protocols. Impacts to nesting SNPL have not been observed from these activities, especially with the implementation of SNPL AMMs. In addition, these activities do not modify SNPL nesting habitat. As a result, lethal and nesting habitat modification impacts are negligible. This trend is expected to continue in the future.

These activities can disturb foraging or roosting SNPL by displacing them from foraging or roosting habitat during the period of disturbance and/or deterring SNPL from foraging or roosting during the period of disturbance. However, these activities are typically localized and relatively short in duration. In addition, SNPL AMMs are applied, as appropriate. As a result, this non-lethal impact is negligible. This trend is expected to continue in the future.

Cable Fence Maintenance (CA-28). Cable fence maintenance occurs by CDPR staff who are trained in avoidance and minimization protocols. Impacts to nesting SNPL have not been observed from these activities, especially with the implementation of SNPL AMMs (HCP Table 5-2). In addition, these activities do not modify SNPL nesting habitat. As a result, lethal take and

nesting habitat modification impacts are negligible. This trend is expected to continue in the future.

Cable fence maintenance can disturb foraging or roosting SNPL by displacing them from foraging or roosting habitat during the period of disturbance and/or deterring SNPL from foraging or roosting during the period of disturbance. However, SNPL AMMs are applied, as appropriate, including delaying activities if SNPL are observed nearby. As a result, the non-lethal impact is negligible. This trend is expected to continue in the future.

Cable fence maintenance can modify SNPL foraging habitat and deter SNPL from foraging in the area if sand is pushed out of the cable fence area into foraging habitat. This has been observed in the HCP in the past. However, additional foraging habitat is present along the HCP area shoreline, including within the protected enclosure area. As a result, this foraging habitat modification impact is minor. This trend is expected to continue in the future.

Visitor Services

Ranger, Lifeguard, Park Patrols (CA-32). Regular ranger and park aide patrols occur throughout the HCP areas open to the public to ensure that visitors are obeying regulations. Patrols are largely conducted via vehicles. Lifeguards perform their services at their assigned lifeguard towers and on roaming patrols that extend from Pismo State Beach to the southern open riding area boundary. Lifeguard towers are installed seasonally around spring break. Tower sites are subject to change but are currently near Grand and Pier Avenues and the North Beach Campground. CDPR rangers, lifeguards, and park aides all must drive across Arroyo Grande Creek and Pismo Creek, when necessary. Impacts from crossing creeks are described in more detail under CA-40 below.

Ranger, lifeguard, and park patrols occur by CDPR staff who are trained in avoidance and minimization protocols. Ranger and patrol vehicles have struck SNPL in the past; however, this has not been documented as happening since 2002 and given the increased AMMs, such as SNPL AMM 100, that require staff training and SNPL AMM 101 that requires all CDPR staff to observe closures and speed limits, vehicle strike is not expected to occur. As a result, this lethal impact is negligible. This trend is expected to continue in the future.

Ranger and patrol activities do not occur in areas where SNPL are known to nest; however, if SNPL nest in new areas these activities could result in disturbance of nesting SNPL and SNPL could be deterred from incubating eggs or brooding chicks. These activities could also result in disturbance of SNPL during foraging or roosting. Specifically, SNPL could be displaced from foraging or roosting habitat during the period of disturbance and/or could be deterred from foraging or roosting during the period of disturbance. These activities are typically localized and relatively short in duration. In addition, SNPL AMMs are implemented, as appropriate, including establishing a buffer around all SNPL nests (AMM 6) and requiring all CDPR staff to observe closures (AMM 101); therefore, this non-lethal impact is minor. This trend is expected to continue in the future.

Emergency Response (CA-33) and Access by non-CDPR vehicles (CA-34). Emergency response and access by non-CDPR vehicles occurs within the HCP area as needed. Impacts to SNPL from emergency response and non-CDPR vehicles are described in HCP section 4.3.1.4.2 and section 4.3.1.4.3, respectively. Impacts to SNPL from emergency response and non-CDPR vehicles is generally be similar to park maintenance activities, although CDPR emergency responders sometimes have to travel quickly through areas where SNPL are present and non-CDPR emergency personnel are not always trained before entering an area.

SNPL foraging or roosting along the shoreline and not protected by an enclosure can be struck by a speeding emergency vehicle, which can occur during the breeding or non-breeding season. In addition, a nest outside the enclosure that has not yet been discovered by monitors could be crushed by a speeding emergency vehicle during the breeding season. An emergency vehicle has not been observed striking a foraging or roosting SNPL or crushing a SNPL nest in the HCP area to date; however, this event may be difficult to observe. Therefore, although unlikely, it is possible for a roosting or foraging SNPL or a SNPL nest to be struck by an emergency vehicle. As a result, this lethal impact is moderate. This trend is expected to continue in the future.

Medevac helicopters are also sometimes used in the HCP area during emergencies. Medevac helicopters flying low over or landing within occupied SNPL habitat can cause significant disturbance to nesting and/or brooding SNPL. The noise from the helicopter can be highly disruptive to SNPL and the helicopter itself may be seen as a threat. Adults may flush from the nest and leave the eggs unattended. SNPL nests or chicks may be abandoned if the adult is disturbed enough it does not return to the nest or chicks. Chicks may also be separated from adults leaving them vulnerable to predation and/or inclement weather, they may become separated from their brood, or they may move into the open riding area where they are vulnerable to vehicle strike. In addition, helicopters can lead to increased vigilance in adults which can lead to them being energetically stressed or to reduced foraging. However, helicopter activity in the HCP area is an infrequent event, especially in areas where SNPL typically nest. Therefore, this non-lethal impact is minor. This trend is expected to continue in the future.

Emergencies that occur within a seasonal enclosure can be highly disruptive to SNPL as adults may flush from the nest and leave the eggs unattended for the duration of the disturbance. SNPL nests or chicks may be abandoned if the adult is injured, killed, or disturbed enough it does not return to the eggs or chick. In addition, SNPL chicks that are out in the open may be separated from adults during the disturbance, which may leave them vulnerable to predation and/or inclement weather. Disturbance can also separate broods, cause chicks to move into the open riding area, and expose chicks to inclement weather. Although emergency response has occurred within the seasonal enclosure, such events are rare and do not occur in most years. Monitors also inform emergency responders of the locations of sensitive areas and escort emergency response personnel into and out of the seasonal enclosure to minimize the potential for vehicle strike, when feasible (AMM 111). Monitors also attempt to survey the area once the emergency situation has resolved and all emergency personnel are clear in order to document and alleviate any impacts that occurred. Due to event infrequency, short-term duration of disturbance, and use of monitors (as feasible), the non-lethal impact of these covered activities is considered minor. This trend is expected to continue in the future.

Emergency response also disturbs and/or deters foraging SNPL when they drive past, and they can become malnourished if the disturbance is prolonged. However, typically, emergency response drives through an area quickly. In addition, adequate alternative foraging habitat is present in the HCP area for SNPL, including during the non-breeding season. AMM 112 is also implemented, which includes identifying locations of non-breeding flocks of SNPL using appropriate signage. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Beach Concessions (CA-36). Concession operated services occur throughout the open riding area away from the seasonal enclosure. These services have not been observed impacting nesting SNPL. During the non-breeding season, SNPL have been observed roosting and foraging along the shoreline south of Grand Avenue, which is open to street-legal vehicles. Vehicles driving to

and from the concession services can disturb individual SNPL in this area by flushing them from their location and causing them to become energetically stressed. As a result, this non-lethal impact is moderate. This trend is expected to continue in the future.

Other Activities

Vehicle Crossing of Creeks (CA-40). CDPR vehicles regularly cross Pismo/Carpenter Creek. CDPR vehicles sometimes cross Oso Flaco Creek close to shoreline to access the southern portion of the HCP area. CDPR and non-CDPR vehicles also regularly cross Arroyo Grande Creek. SNPL have been known to nest near Arroyo Grande Creek. Vehicle crossing of Arroyo Grande Creek have disturbed nesting, foraging, and roosting SNPL at Arroyo Grande Creek. In addition, although CDPR vehicles are trained in avoidance and minimization measures, vehicles crossing CDPR vehicles crossing Oso Flaco and Pismo/Carpenter Creek could disturb foraging and roosting SNPL. This non-lethal impact is minor. This trend is expected to continue in the future.

A vehicle has not been observed striking a nesting SNPL near Arroyo Grande Creek to date. However, although unlikely, a vehicle crossing Arroyo Grande Creek could injure or kill a nesting SNPL. This is especially unlikely because any vehicle crossing of the creek remains close to the shore where SNPL are not expected to nest. A vehicle crossing a creek can also injure or kill a SNPL adult, juvenile, or chick foraging in the area; however, CDPR implements SNPL AMMs 4 through 23 to reduce this impact. As a result, lethal impacts from vehicles crossing Arroyo Grande Creek are considered minor. This trend is expected to continue in the future.

Dust Control Activities (CA-44). Many dust control projects have already been conducted in the HCP area, as described in HCP Section 2.2.5.5. Impacts associated with future dust control activities are discussed in EIR section 6.4.1.1. Dust control activities associated with the Oceano Dunes SVRA Dust Control Program Environmental Impact Report (EIR; CDPR 2017) conducted to date required pre-work surveys for all special-status wildlife, removal of species from work areas, and avoidance of nesting birds, including a 300-foot buffer from nesting SNPL. As a result, the lethal or non-lethal impact from dust control activities associated with the Dust Control Program EIR likely have not occurred and the impact is negligible.

Dust control vegetation that has been planted in the HCP area, and to a lesser degree wind fencing, installed near known SNPL breeding, roosting, and/or foraging habitat may have impacted breeding SNPL by providing habitat for predators to hide and stalk nesting, foraging, and/or roosting SNPL. In addition, protective perimeter fence posts, wind fencing, and some temporary dust and meteorological monitoring equipment may be tall and sturdy enough to provide perching habitat for common ravens, gull species, raptors, or other avian species that may have preyed on SNPL nests. At this time, these indirect impacts from dust control activities are not known. CDPR implements all AMMs (HCP Table 5-2) for dust control activities, as appropriate. In addition, CDPR implements a predator management program to control avian and/or mammalian predators that are observed targeting or disturbing SNPL adults, chicks, or eggs. The existing indirect lethal impact of existing dust control activities on SNPL is considered minor.

Vegetation that has been planted in the HCP area within SNPL habitat associated with dust control activities reduces available suitable SNPL breeding and/or wintering habitat by decreasing the amount of open, wide beaches. Reducing SNPL habitat by planting vegetation in suitable habitat for this species leads to less open (or wide), sparsely vegetated beaches and may

potentially increase predation on adults, chicks, and/or eggs if SNPL are not able to detect predators moving towards the nest location. Dust control activities associated with the Dust Control Program EIR were designed and implemented to avoid active nest areas and SNPL primary habitat/critical habitat. Most existing dust control activities occurred within tertiary habitat where SNPL have rarely nested in the past (HCP Table 3-2). However, some secondary habitat was lost. As a result, the habitat impacts are considered moderate.

A 48-acre area located outside the seasonal enclosure just north of Post 6 and within primary habitat for SNPL has been fenced as a preliminary step toward establishing a new foredune and permanently closing the area to vehicles and camping. The 48-acre area was closed during the SNPL non-breeding season, and a SNPL breeding season has not occurred since the closure; therefore, impacts to breeding SNPL associated with the closure are not known at this time. Effects of fencing the 48-acre area on wintering SNPL are discussed here. However, due to the speculative nature of fencing the 48-acre area on breeding SNPL, impacts on breeding SNPL are addressed in EIR section 6.4.1.1.

Lethal impacts to SNPL did not occur during fence installation. Installing fencing around the 48-acre area may have disturbed foraging and/or roosting wintering SNPL by displacing them from suitable foraging and/or roosting habitat during the disturbance and/or deterring them from foraging and/or roosting during the period of disturbance. However, C DPR conducted pre-construction surveys for SNPL prior to starting work and delayed activity until SNPL were no longer present (SNPL AMM 101). As a result, potential non-lethal impacts to foraging and/or roosting SNPL from foredune construction were considered negligible.

Cultural Resource Management (CA-45). Cultural resource management activities are generally conducted outside areas where SNPL are typically observed or outside the SNPL breeding season and do not impact SNPL. In the unlikely event that cultural resource management activities must occur during the breeding season in areas SNPL typically nest, these activities could disturb and/or displace SNPL from roosting or nesting. In addition, cultural resource management activities could disturb and/or displace SNPL from roosting or foraging during the non-breeding season. To reduce any impacts from cultural resource management activities, C DPR implements SNPL AMMs, as appropriate. Therefore, surveys are conducted in areas where SNPL could occur to ensure SNPL nests, adults, and chicks are not present within and near the cultural resource management area, and activities are delayed until an experienced monitor determines no impacts will occur if a SNPL is observed during the surveys. Furthermore, environmental monitors accompany archaeologists in the field when cultural resources protection work must occur within or adjacent to areas where SNPL are known to nest to limit the potential for disturbance to nesting SNPL. Therefore, the impacts from cultural resource management activities are considered negligible. This trend is expected to continue in the future.

Use of Pesticide (CA-51). C DPR currently uses pesticides in the HCP area, as necessary, to control invasive species. The activities occur by C DPR staff who are trained in avoidance and minimization protocols. Aerial spraying occurs in the backdunes to control veldt grass. These areas are not considered suitable habitat for SNPL; therefore, aerial spraying does not impact breeding or wintering SNPL. Other forms of pesticide use do not occur in areas where SNPL are known to nest during the breeding season. Although unlikely, if SNPL nest in new areas these activities can result in disturbance of nesting SNPL and SNPL can be deterred from incubating eggs or brooding chicks. Pesticide use does occur within SNPL nesting habitat outside the breeding season when wintering SNPL are present. In addition, SNPL may be impacted by drift

from herbicide sprayed outside, but nearby known breeding areas. However, CDPR implements SNPL AMMs 115 through 122, which include delaying work if a SNPL is observed nearby, not spraying if wind speed is over 10 miles per hour, and ensuring all workers are trained to work in sensitive habitat, to reduce these impacts in the event a SNPL nest occurs nearby. Ultimately, pesticide use in the HCP area is beneficial to SNPL by reducing the spread of invasive plant species into SNPL breeding and non-breeding habitat. This trend is expected to continue in the future.

SNPL Critical Habitat

Park Visitor Activities

Motorized Recreation (CA-1), Camping (CA-2), Pedestrian Activity (CA-3), Holidays (CA-10), and Special events (CA-11). In the final rule designating SNPL critical habitat in the HCP area, the USFWS acknowledged that portions of Oceano Dunes SVRA have been degraded by recreation activities. However, the USFWS noted use of an area for recreational activities does not preclude the use of the area by SNPL.

While some covered activities have been occurring for much longer, almost all of the covered activities have been occurring in the HCP area for over 20 years, including at the time when the USFWS designated SNPL critical habitat. For example, at least some covered activities currently occur within and will continue to occur within almost all of the 780 acres of SNPL critical habitat in the HCP area. These activities are conducted in the same manner as they were conducted at the time critical habitat was designated. Within the critical habitat, 356 acres of critical habitat are open to motorized recreation and camping at least part of the year. Approximately 300 acres open to motorized recreation are currently closed via seasonal exclusions to motorized activities during the SNPL and CLTE breeding season.

Heavy recreational use in the HCP area may continue to reduce the quality of some designated SNPL critical habitat for nesting or wintering activities. Specifically, SNPL may continue to use areas that are heavily used by humans, but productivity may continue to be limited in these areas. Heavy recreational use in critical habitat was occurring within the HCP area at the time critical habitat was designated; therefore, critical habitat for SNPL has not been adversely changed by recreational activities.

EIR section 6.3.2.1 discusses future changes SNPL critical habitat associated with the Boneyard Exclosure and 6 Exclosure reduction (CA-50). EIR section 6.4.1.1 discusses future changes to SNPL critical habitat associated with the New Particulate Matter Reduction Plan (PMRP) for dust control (CA-44).

California Least Tern (CLTE)

Impacts to CLTE from HCP covered activities are described in the HCP section 4.4. The existing risk of impact to CLTE from covered activities is summarized in EIR Table 6-4.

Covered activities occurring outside of CLTE primary and secondary habitat areas have no risk of impacting CLTE and are dismissed from further discussion. Covered activities with no impact to CLTE include golfing (CA-4), campground maintenance (CA-20), sand ramp and other vehicle access (CA-24), street sweeping (CA-25), ASI courses (CA-35), Pismo Beach Golf

Course operations (CA-37), CDPR ag land management (CA-46), and bioreactor maintenance (CA-47).

No major impacts from existing conditions on CLTE have been identified. Existing covered activities affecting CLTE are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized Recreation (CA-1) and Camping (CA-2). Motorized recreation and camping occur on an ongoing basis in the HCP area in primary and secondary CLTE breeding habitat from Grand Avenue to Post 6. Impacts to CLTE from motorized recreation and camping are described in HCP sections 4.4.1.1.1 and 4.4.1.1.2. Take of CLTE has been documented in the HCP area from motor vehicle recreation is summarized in EIR Table 6-9.

Motorized recreation and camping activities are not allowed within the seasonal exclosure south of Post 6 during the breeding season. Since CLTE almost exclusively nest and form their night roost within the seasonal exclosure, motorized recreation and camping rarely, if ever, directly impact incubating adults, eggs, and individuals within the night roost. If a CLTE does nest outside the exclosure, an unprotected nest can be crushed by a vehicle, although CLTE AMMs 1 through 23 reduce the risk of this occurring and this is thought to be an infrequent event. Chicks have been observed in the open riding area where they are at risk of being struck by a vehicle; however, CDPR implements CLTE AMMs 14 and 15 to minimize the risk of a chick being struck by a vehicle and few chicks are thought to be killed by vehicles in the open riding area. In addition, if in the future CLTE in the HCP area change their night roost location to an area outside the exclosure that is accessible to vehicles, individuals in the night roost can be struck by a vehicle, although CLTE AMM 16 is implemented to reduce the risk of this occurring. Given that chicks and fledglings that are inexperienced at flying are observed each year in the open riding area and, although unlikely, CLTE adults or eggs can be crushed/killed or injured outside the seasonal exclosure by vehicle strike from motorized activities, including from campers driving to camp sites, this lethal impact is considered moderate. This trend is expected to continue in the future.

Disturbance by motorized recreation can result in stress, reproductive failure, reduced foraging success, illness, or even death. CLTE breeding habitat south of Post 6 in Oceano Dunes SVRA is seasonally closed to motorized recreation under the existing natural resource management program. Therefore, CLTE within the seasonal exclosure are not disturbed by motorized recreation. CLTE nesting near the fence line adjacent to the open riding area have been observed being disturbed by nearby recreation. CDPR implements CLTE AMMs 1 through 23, including installing bumpouts if CLTE appear to be disturbed by nearby recreation activities. Disturbance is difficult to document, however, and it is likely that some disturbance occurs despite the implementation of AMMs. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2) for SNPL. CDPR implements CLTE AMMs 24 through 33 to reduce the effects on CLTE. This indirect lethal impact is moderate. This trend is expected to continue in the future.

Habitat quality is permanently reduced in areas open to motorized recreation and camping due to the high level of disturbance. Motorized vehicle recreation reduces available habitat for CLTE and other shorebirds by limiting use in the open riding area compared to non-motorized areas. CLTE are less frequent areas open to motorized vehicles, indicating that they may avoid these

areas. In addition, motorized recreation in the non-breeding season when the seasonal exclosure has been removed, alters dune vegetation and topography necessary for CLTE to breed in the coming breeding season. Specifically, motorized recreation reduces vegetation, organic surface materials (e.g., driftwood), and micro-topography required for CLTE breeding and foraging. C DPR implements CLTE AMMs 34 through 36 to restore habitat that has been impacted during the non-breeding season. In addition, C DPR closes off a portion of the open riding area during the breeding season (i.e., the seasonal exclosure) to ensure that suitable habitat is available CLTE breeding and roosting. Other primary and secondary habitat for CLTE continues to be used for motorized recreation and remains unavailable or of reduced quality for CLTE. As a result, this habitat impact is moderate. This trend is expected to continue in the future.

Pedestrian Activity (CA-3). Pedestrian activity occurs on an ongoing basis in the HCP area, including within areas where motorized vehicles are not allowed (e.g., Oso Flaco, vegetation islands). Impacts to CLTE from pedestrian activity are described in HCP section 4.4.1.1.3. Pedestrians are not permitted within the Southern Exclosure, which is fenced with predator fence, and therefore pedestrians do not impact nesting CLTE within the seasonal exclosure. Within the HCP area, CLTE nests have rarely been found outside the fenced areas. Although CLTE almost exclusively nest within the Southern Exclosure, CLTE could nest outside the exclosure in areas open to pedestrians. If a CLTE establishes a nest outside the seasonal exclosure in an area open to pedestrians, the cryptic nature of CLTE nests and chicks makes it possible for a pedestrian to crush eggs or kill or injure chicks in an active CLTE nest that has not yet identified by monitors. C DPR implements CLTE AMMs 1 through 3, 5 through 12, 14 through 16, 21 through 23, and 37 through 39 to reduce the risk of this occurring. There are no records of CLTE chicks or eggs being crushed/killed or injured due to pedestrian activities in the HCP area and AMMs appear to prevent this from happening. As a result, this lethal impact is minor. This trend is expected to continue in the future.

CLTE nesting near the fence line or outside the seasonal exclosure have been observed being disturbed by nearby pedestrian activities. Chronic disturbance of breeding adults from pedestrian activities near the exclosure indirectly affects chicks or eggs. Chicks or eggs have been abandoned, left unattended for prolonged periods of time, and/or exposed to predation when the disturbance from pedestrian activity has last too long. In addition, eggs have buried by sand or not properly incubated. When adults defend a nest against a threat, eggs and/or chicks are left unattended and exposed to inclement weather, heat stress, and/or predation. These effects are exacerbated if human disturbance coincides with periods of high wind or extreme temperature. C DPR implements AMMs 1 through 3, 5 through 12, 14 through 16, 21 through 23, and 39 (as appropriate) and these AMMs appear to be successful at reducing disturbance impacts. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Pedestrians moving through aquatic habitat areas occupied by foraging CLTE (e.g., Oso Flaco Lake) have been seen disturbing CLTE foraging and/or roosting in these areas. This has been most frequent at the footbridge hand railing at Oso Flaco Lake, which is used by CLTE for perching after chicks have fledged and adult birds are teaching fledglings to fish in the lake. Pedestrians at the lake disturb CLTE adults and fledglings and deter them from foraging in the area. Fledglings learning to fish have become energetically stressed since they are unable to forage normally. C DPR implements CLTE AMMs 1 and 38 to reduce the risk of this occurring. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

CLTE chicks that enter an area open to pedestrians, have been picked up by a well-meaning visitor attempting to “rescue” the chick by picking it up and moving it to another location or

bringing it to park staff. Specifically, this was observed in 2010 when a park visitor picked up an injured fledgling in the open riding area and gave it to park staff. CDPR implements CLTE AMMs 1 and 2, which includes providing educational information regarding CLTE. These AMMs appear to have reduced this impact since this has not been documented since 2010. Therefore, this non-lethal impact is minor. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2) for SNPL. CDPR implements CLTE AMMs 24 through 33 to reduce the effects on CLTE. Therefore, this indirect lethal impact is moderate. This trend is expected to continue in the future.

Fishing (CA-5). Visitors in the HCP area fish along the shoreline, at Oso Flaco Lake, and in other aquatic habitats where CLTE forage. People fishing generally occupy habitat longer than pedestrians who are just passing through. Foraging and/or roosting CLTE often avoid areas near fishing activities. Lethal impacts to CLTE likely don't occur from fishing activities. However, some CLTE are still observed foraging and roosting in locations where fishing occurs and fishing activities that remain near foraging and/or roosting CLTE for extended periods of time, disrupt foraging for long periods, thereby disrupting normal foraging behavior and causing adults and/or chicks to become energetically stressed. This has been observed at Oso Flaco Lake where adult CLTE often take fledglings to teach them to forage. To reduce impacts to foraging CLTE, CDPR implements AMMs 38 and 40. Therefore, if fishing activity is observed disturbing CLTE, visitors are asked to relocate, as needed. Monitors also retain the option to close access to Oso Flaco Lake, as needed, to ensure foraging and/or roosting birds are not disturbed. The existing impact of fishing on CLTE is minor. This trend is expected to continue in the future.

Increased predation on CLTE could result from visitor trash or discarded fishing bait as described above for motorized recreation (CA-1) and camping (CA-2). CDPR implements CLTE AMMs 24 to 33 and AMM 41 to reduce the effects. This indirect lethal impact is moderate. This trend is expected to continue in the future.

Bicycling (CA-4), Dog Walking (CA-6), Equestrian (CA-7), Boating/Surfing (CA-8), and Aerial/Wind Driven Activities (CA-9). In accordance with Superintendent's Order 554-003-2015³ and AMMs 47 and 48, kite flying and kiteboarding are not allowed in areas where chicks are expected to forage (i.e., between Pier Avenue and the southern Oceano Dunes SVRA boundary) or within 1,000 feet of the shoreline during the breeding season. As a result, lethal and non-lethal impacts from kite flying and kite boarding are negligible. This trend is expected to continue in the future.

Impacts from park visitor activities (CA-4, CA-6, CA-7, CA-8, and CA-9) on CLTE are similar to those described above for SNPL. Specifically, with the implementation of CLTE AMMs, including, but not limited to, AMMs 42 through 46, lethal and non-lethal impacts are minor. This trend is expected to continue in the future.

³ Superintendent's Orders are subject to change (approximately every 3-5 years); therefore, the numbers and titles associated with the Superintendent's Order will likely change during the HCP term. However, the subject matter will continue to be addressed within the new Superintendent's Orders. In addition, Superintendent's Orders can be updated or added due to new or changed circumstances as part of the adaptive management process (HCP section 5.6).

Holidays (CA-10) and Special events (CA-11). Impacts to CLTE from holidays and special events are described in HCP sections 4.4.1.1.10 and 4.4.1.1.11. The existing impact of holidays and special events is similar to those of motorized vehicles (CA-1), camping (CA-2), and pedestrians (CA-3). Potential impacts to CLTE from visitor activities may be exacerbated during periods of high visitor use, such as holidays (CA-10) or special events (CA-11) and are similar to those described for SNPL above. CDPR implements AMMs specifically addressing holidays and special events (CLTE AMMs 49 through 54). As a result, lethal and non-lethal impacts from holidays and special events on CLTE are minor or moderate, depending on the amount and location of the disturbance. This trend is expected to continue in the future.

Natural Resources Management

SNPL and CLTE Management (CA-12a and 12b). Impacts to CLTE from these management activities are described in HCP section 4.4.1.2.2 and section 4.4.1.2.3. SNPL and CLTE management activities include surveying, monitoring, banding, predator control, habitat enhancement, and erecting fencing and exclosures. Effects from the activities are similar to those described above for SNPL, although predators have not been observed keying in on the large single-nest exclosures used to protect CLTE nests outside the seasonal exclosure. Lethal take of CLTE has been documented as occurring from CLTE striking the symbolic fence (EIR Table 6-9) and monitors are known to disturb CLTE during some activities. CLTE chicks are also banded, which results in capture of CLTE chicks. CLTE AMMs 55 through 76 are implemented to minimize injury, harm, and disturbance to CLTE associated with SNPL and CLTE management activities. Lethal and non-lethal impacts from these activities are moderate. However, based upon many years of implementation, the monitoring data presented in the HCP demonstrate these management activities have a beneficial effect that exceed the risk level of incidental take and have increased CLTE reproductive success in the HCP area. Therefore, the overall existing impact of SNPL and CLTE management activities on CLTE is beneficial.

Tidewater Goby and Salmonid Surveys (CA-13), CRLF Surveys and Management (CA-14), Listed Plant Monitoring, Propagation, and Habitat Enhancement (CA-15), Habitat Restoration Program (CA-16), Invasive Plant and Animal Control (CA-17), and Water Quality Monitoring (CA-19). Tidewater goby and salmonid surveys already occur approximately four times per year in Arroyo Grande Creek and lagoon and at least annually in Pismo Creek and lagoon/Carpenter Creek and Oso Flaco Creek. CRLF surveys occur multiple times per year between January and September, including numerous daytime and nighttime surveys within appropriate aquatic habitats (e.g., Arroyo Grande Creek, Oso Flaco Lake, Oso Flaco Creek, Pismo Creek, Carpenter Creek). The District also already manages and restores vegetation in the HCP area, monitors water quality, and conducts invasive species control in the HCP area, as determined to be necessary. The activities occur by CDPR staff who are trained in avoidance and minimization protocols. As a result, these activities do not modify CLTE habitat and have not been documented as resulting in lethal take.

These activities have resulted in non-lethal impacts to CLTE, including harassment as defined by FESA. Although most of these activities do not occur in areas where CLTE are known to nest or roost, listed plant monitoring occurs in North and South Oso Flaco during the breeding season. CLTE are not known to nest within North or South Oso Flaco and have not been disturbed by these activities to date. However, if CLTE nest in these areas in the future these activities can disturb nesting CLTE and deter them from incubating eggs or brooding chicks during the period of disturbance. All of these activities can disturb foraging or roosting CLTE by displacing them from foraging and/or roosting habitat during the period of disturbance and/or could be deterred

from foraging and/or roosting during the period of disturbance. CDPR staff implements AMMs, including, but not limited to, CLTE AMMs 77 through 86 to minimize any impacts to CLTE. As a result, the non-lethal impacts are considered minor. This trend is expected to continue in the future.

Habitat Monitoring System (CA-18). Impacts to CLTE from the habitat monitoring system activities are described in HCP section 4.4.1.2.9. Impacts to CLTE are similar to those described above for SNPL above. CDPR implements AMMs (HCP Table 5-2), as appropriate, such as having a monitor with 10(a)(1)(A) Recovery Permit (or approved by the USFWS) conduct the surveys near the seasonal enclosure, to minimize the impact. This non-lethal impact is minor; however, based upon many years of implementation, the monitoring data presented in the HCP demonstrate the information collected as part of these surveys have a beneficial effect that exceeds the risk level of incidental take. Therefore, the overall existing impact of habitat monitoring system on CLTE is beneficial. This trend is expected to continue in the future.

Park Maintenance

General Facilities Maintenance (CA-21) and Heavy Equipment Response (CA-29). Impacts to CLTE from general facilities maintenance and heavy equipment response are described in HCP section 4.4.1.3.2 and section 4.4.1.3.10, respectively. General facilities maintenance and heavy equipment response currently occur as needed in the HCP area, except for mechanical trash removal, which is described in more detail in EIR section 6.3.2.2. The activities occur by CDPR staff who are trained in avoidance and minimization protocols. Impacts to nesting CLTE and CLTE night roost are not known to occur from these activities because CLTE almost exclusively nest and establish their night roost within the Southern Enclosure where these activities are not permitted. In addition, implementation of CLTE AMMs 16 and 87 through 89 ensures these impacts do not occur. As a result, lethal and non-lethal impacts are negligible. This trend is expected to continue in the future.

In the rare event that a CLTE establishes a nest that is outside the enclosure and has not yet been discovered by monitors, activities that occur in primary breeding habitat for CLTE can result in destruction or disturbance of a CLTE nest. CDPR implements CLTE AMM 7, which requires daily searches for nests in potential nesting habitat that is outside these enclosures to reduce this impact. In addition, any nests found outside a seasonal enclosure are quickly protected by a single-nest enclosure CLTE AMMs 10 through 14). As a result, these lethal and non-lethal impacts are considered negligible. This trend is expected to continue in the future.

Foraging and/or roosting CLTE can be disturbed by activities within foraging habitat, such as Oso Flaco Lake. Specifically, activities can disturb CLTE adults and fledglings and deter them from foraging in the area. Fledglings learning to fish can become energetically stressed when they are unable to forage normally. However, these activities have minimal impacts on foraging CLTE because activities are either accomplished quickly or accomplished outside the period when CLTE are on site. In addition, CDPR implements CLTE AMMs 87 through 89 to ensure the impact is minimized. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Trash Control (CA-22). Impacts to CLTE from trash control activities are described in HCP section 4.4.1.3.3. Dumpsters are emptied in the HCP area every week. Other garbage bins are emptied regularly, including within Pismo State Beach and along various creeks. Vehicles conducting trash activity are not known to have struck a CLTE to date and this is not thought to happen since CLTE typically remain protected within the seasonal enclosure or are observed

flying in the air to forage during the nesting season. Trash bins are also not located in areas where trash control activities can disturb incubating CLTE. Implementation of CLTE AMMs 1 through 23 and 87 through 89 ensure vehicle strike and/or disturbance does not occur. Therefore, lethal and non-lethal impacts are negligible. This trend is expected to continue in the future.

Trash dumpsters attract a large number of gulls that land and forage in the dumpsters if they are left uncovered. As a result, the continued use of the uncovered trash bins within or near CLTE breeding habitat artificially increases the number of predatory species, including gulls, and thus increases depredation of CLTE. Increasing the number of trash bins on holidays and during special events to accommodate the increased number of visitors also artificially increases the number of predators at these times and increase depredation of CLTE. To reduce these impacts, CDPR is evaluating several options to reduce the movement of trash from the dumpsters and reduce predator presence at the dumpster sites. CDPR also implements a predator management program to ensure depredation of CLTE is minimized. Reducing predator presence near the dumpsters reduces the risk of predation on CLTE. However, the existing lethal indirect impacts due to predation as a result of trash control is moderate. This trend is expected to continue in the future. However, a solution to reduce the movement of trash in the future could reduce this impact further.

Wind Fencing (CA-23), Perimeter and Vegetation Island Fencing (CA-27), Cable Fence Maintenance (CA-28), Minor Grading (CA-30), and Boardwalk/Other Pedestrian Maintenance (CA-31). These activities typically occur outside the nesting season and don't impact CLTE. However, at times, boardwalks and/or fencing need to be maintained to ensure their integrity and this can occur during the nesting season. The activities occur by CDPR staff who are trained in avoidance and minimization protocols. Impacts to CLTE have not been observed from these activities, especially with the implementation of CLTE AMMs. In addition, these activities do not modify CLTE nesting or foraging habitat. As a result, lethal, non-lethal, and habitat modification impacts are considered negligible. This trend is expected to continue in the future.

Routine Riparian Maintenance (CA-26). Routine riparian maintenance is currently conducted in the HCP area at Oso Flaco Lake, Meadow Creek, Carpenter Creek, Pismo Lake, and Oceano Lagoon under a CDFW Lake and Streambed Alteration Agreement (1600-2012-0001-R4). Routine riparian maintenance activities are not conducted in suitable CLTE nesting habitat; therefore, these activities will not affect nesting CLTE and lethal impacts to CLTE do not occur. The Pismo Lake spillway and the two culverts at Oso Flaco Lake are maintained as needed. CLTE may forage and/or roost adjacent to riparian maintenance areas in open water habitats including Pismo Lake and Oso Flaco Lake. Maintenance typically entails CDPR staff manually or, if needed, mechanically removing vegetation, debris, and sediment build-up above the natural channel bed. Noise from equipment during culvert maintenance can temporarily disturb foraging CLTE and interfere with foraging activity if conducted during the CLTE breeding season. Routine riparian maintenance work in or adjacent to CLTE foraging habitat is implemented outside of the breeding season, when feasible. If maintenance activities must be conducted during the breeding season, CDPR implements CLTE AMM 96 to minimize disturbance to foraging CLTE. This includes having a monitor present to observe CLTE behavior and stopping work if CLTE are observed being disturbed until it is determined that no additional impacts will occur. As a result, the non-lethal impacts of these activities on CLTE are negligible. This trend is expected to continue in the future.

All tree trimming and invasive plant removal activities at Oso Flaco Lake occur between August 15 and March 1, which is largely outside the CLTE breeding season. If CLTE are present in Oso

Flaco Lake, tree trimming and invasive plant removal can disturb foraging CLTE and interfere with foraging activities. To reduce this impact, CDPH implements CLTE AMM 96. Lethal impacts from tree trimming do not occur. Because most tree trimming occurs when CLTE are already gone from the HCP area and AMMs are implemented to avoid impacts if a CLTE is observed, non-lethal impacts from tree trimming and invasive removal are also considered negligible. This trend is expected to continue in the future.

Visitor Services

Ranger, Lifeguard, Park Patrols (CA-32) and Beach Concessions (CA-36). Regular ranger and park aide patrols occur throughout the HCP areas open to the public to ensure that visitors are obeying regulations. Patrols are largely conducted via vehicles. Lifeguards perform their services at their assigned lifeguard towers and on roaming patrols that extend from Pismo State Beach to the southern open riding area boundary. Lifeguard towers are installed seasonally around spring break. Tower sites are subject to change but are currently near Grand and Pier Avenues and the North Beach Campground. CDPH rangers, lifeguards, and park aides all must drive across Arroyo Grande Creek and Pismo Creek, when necessary. Concession operated services occur throughout the open riding area away from the seasonal enclosure.

Ranger, lifeguard, and park patrols occur by CDPH staff who are trained in avoidance and minimization protocols. Although ranger and patrol vehicles have struck SNPL in the past, this has not been observed for CLTE. This is most likely because CLTE almost exclusively nest and form their night roost within the Southern Enclosure where these activities do not occur. Furthermore, CLTE AMMs, such as CLTE AMM 87 that requires staff training, and CLTE AMM 88 that requires all CDPH staff observe closures and speed limits, ensure vehicle strike of CLTE from ranger, lifeguard, or park patrol does not occur. As a result, this lethal impact is negligible. This trend is expected to continue in the future.

Ranger and patrol activities do not occur in areas where CLTE are known to nest or form their night roost; however, if a CLTE nest or night roost was established in a new area outside the seasonal enclosure these activities could result in disturbance of nesting CLTE and CLTE could be deterred from incubating eggs or attending chicks. These activities could also result in disturbance of roosting CLTE. Specifically, CLTE could be displaced from roosting habitat during the period of disturbance. Ranger and patrol activities are typically localized and short in duration since they pass through the area quickly. In addition, CDPH implement CLTE AMMs 7 and 9 through 16 to reduce disturbance impacts to nesting CLTE from motorized vehicle activity. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Vehicles driving to and from the concession services can strike an individual CLTE in the concession area or disturb an individual by flushing them from their location and causing them to become energetically stressed. However, CLTE do not typically nest or form their night roost outside of the Southern Enclosure. In addition, concession services are required to drive the speed limit and observe other park regulations (CLTE AMM 98). As a result, this non-lethal impact is negligible. This trend is expected to continue in the future.

Emergency Response (CA-33) and Access by non-CDPH vehicles (CA-34). Impacts to CLTE from emergency response and non-CDPH vehicles are described in HCP section 4.4.1.4.2 and section 4.4.1.4.3, respectively. Impacts from emergency activities are not known and have not been documented, although these impacts may be difficult to observe. Potential impacts to CLTE from emergency response and non-CDPH vehicles are generally similar to park maintenance

activities; however, CDPRE emergency responders sometimes have to travel quickly through areas where CLTE could be present and non-CDPRE emergency personnel are not always trained before entering an area.

Most CLTE nest and roost within the Southern Enclosure and are protected from being injured or killed by a speeding emergency vehicle. Although this has not been documented in the HCP area to date, CLTE nesting or roosting along the shoreline and not protected by an enclosure can be struck by a speeding emergency vehicle, especially since emergency vehicles often need to travel through an area quickly. This is most likely to occur after the chicks have fledged when CLTE have been observed roosting along the shoreline near water bodies, including Arroyo Grande creek. Since emergency response is relatively infrequent and most CLTE found roosting outside the enclosure can fly, this lethal impact is considered minor. This trend is expected to continue in the future.

The impact of medevac helicopters on CLTE is similar to those described above for SNPL and is considered a minor non-lethal impact. This trend is expected to continue in the future.

Emergencies that occur within a seasonal enclosure, and especially within the Southern Enclosure, can be highly disruptive to CLTE. Adults may flush from the nest and leave the eggs unattended for the duration of the disturbance. CLTE nests or chicks can be abandoned if the adult is injured, killed, or disturbed enough it does not return to the eggs or chick. In addition, CLTE chicks that are out in the open can be separated from adults during the disturbance, which can leave them vulnerable to predation and/or inclement weather. Disturbance can also cause chicks to move into the open riding area. Although emergency response has occurred within the seasonal enclosure, such events are rare and do not occur in most years. Monitors also inform emergency responders of the locations of sensitive areas and escort emergency response personnel into and out of the seasonal enclosure, when feasible (CLTE AMM 97). Monitors also attempt to survey the area once the emergency situation has resolved and all emergency personnel are clear in order to document and alleviate any impacts that occurred. Due to event infrequency, short-term duration of disturbance, and use of monitors (if feasible), the non-lethal impact of these covered activities is considered minor. This trend is expected to continue in the future.

Natural History and Interpretation Programs (CA-39). Natural history and interpretive programs occur at Oso Flaco Lake where CLTE forage. The footbridge hand railing at Oso Flaco Lake is used by CLTE for perching after chicks have fledged and when adult birds are teaching fledglings to fish in the lake. As a result, foraging and roosting CLTE have been temporarily disturbed by noise and activities associated with interpretive walks and field trips at Oso Flaco Lake. To minimize possible disturbance to foraging and/or roosting CLTE at Oso Flaco Lake, CDPRE implements AMM 99, which requires that CDPRE hold large group programs when CLTE are not present or modify the program to avoid disturbance. As a result, this non-lethal impact is considered a negligible impact. This trend is expected to continue in the future.

Other Activities

Vehicle Crossing of Creeks (CA-40). CDPRE vehicles regularly cross Pismo/Carpenter Creek. CDPRE vehicles sometimes cross Oso Flaco Creek close to shoreline to access the southern portion of the HCP area. CDPRE and non-CDPRE vehicles also regularly cross Arroyo Grande Creek. Although unlikely, if a CLTE nest is located near Arroyo Grande Creek, a vehicle crossing the creek can injure or kill a nesting CLTE. This is unlikely because any vehicle crossing of the creek is typically close to the shore where CLTE do not nest. In addition, CLTE

have only been documented nesting near Arroyo Grande Creek one time in the past. As a result, lethal impact from vehicles crossing Arroyo Grande Creek is considered minor. This trend is expected to continue in the future.

CDPR vehicles regularly cross Pismo/Carpenter Creek. CDPR vehicles sometimes cross Oso Flaco Creek close to shoreline to access the southern portion of the HCP area. CDPR and non-CDPR vehicles cross Arroyo Grande Creek. CDPR and non-CDPR vehicles crossing creeks can disturb roosting CLTE if they roost at this location. CLTE are typically only observed roosting at these locations toward the end of the breeding season when chicks have fledged. At this time, CLTE are capable of flying out of harm's way. In addition, CDPR implements CLTE AMMs, including AMMs associated with motorized recreation (CA-1), which reduce the impacts to CLTE roosting in this area. This non-lethal impact is minor. This trend is expected to continue in the future.

Dust Control Activities (CA-44). Many dust control projects have already been conducted in the HCP area, as described in HCP Section 2.2.5.5. Impacts associated with future dust control activities are discussed in EIR section 6.4.1.2. Dust control activities associated with the Oceano Dunes SVRA Dust Control Program EIR (CDPR 2017) conducted to date required pre-work surveys for all special-status wildlife, removal of species from work areas, and avoidance of nesting birds, including a 300-foot buffer from nesting CLTE. As a result, the lethal and non-lethal impacts from existing dust control activities is negligible.

The indirect impacts on CLTE from existing dust control activities are similar to those described for SNPL above. Vegetation planted in the HCP area may increase the number of predators in the HCP area and thus artificially increase predation on CLTE. CDPR implements all AMMs (HCP Table 5-2), as appropriate. In addition, CDPR implements a predator management program to control avian and/or mammalian predators that are observed targeting or disturbing CLTE adults, chicks, or eggs. The existing indirect lethal impact of existing dust control activities on CLTE is considered minor.

Vegetation planting associated with the Dust Program EIR within suitable CLTE habitat has similar impacts as those described above for SNPL, although CLTE are not present in the HCP area during the winter. Vegetation that has been planted in the HCP area to date reduces available suitable CLTE breeding habitat by decreasing the amount of open, wide beaches. Dust control activities associated with the Dust Program EIR were designed to avoid active nest areas and CLTE primary habitat. Dust control activities generally occurred in tertiary habitat where they did not impact breeding CLTE. However, some secondary habitat has been lost, but the existing habitat impacts have been minor.

A 48-acre area located outside the seasonal enclosure just north of Post 6 and within primary habitat for CLTE has been fenced as a preliminary step toward establishing a new foredune and permanently closing the area to vehicles and camping. The 48-acre area was closed during the non-breeding season when CLTE are not present, and a CLTE breeding season has not occurred since the closure; therefore, impacts to CLTE associated with the closure are not known at this time. Due to the speculative nature of fencing the 48-acre area on breeding CLTE, impacts on breeding CLTE are addressed in EIR section 6.4.1.2.

Cultural Resource Management (CA-45). Cultural resource management activities have similar impacts on CLTE as described above for SNPL and similar AMMs are implemented to reduce these impacts. As a result, lethal impacts do not occur, and non-lethal impacts are considered minor. This trend is expected to continue in the future.

Use of Pesticide (CA-51). Pesticide impacts to CLTE are similar as those described for SNPL above. Pesticide use, including aerial spraying, does not occur during the breeding season in areas where CLTE are known to nest. The activities occur by CDPR staff or contractors working under the direction of CDPR staff who are trained in avoidance and minimization protocols. In addition, CLTE AMMs 103 through 110, which include delaying work if a CLTE is observed nearby, not spraying if wind speed is over 10 miles per hour, and ensuring all workers are trained to work in sensitive habitat, are implemented to reduce these impacts in the event a CLTE occurs nearby. As a result, lethal impacts to CLTE do not occur and non-lethal impacts are considered minor. Ultimately, pesticide use in the HCP area is beneficial to CLTE by reducing the spread of invasive plant species into CLTE breeding habitat. This trend is expected to continue in the future.

California Red-legged Frog (CRLF)

Impacts to CRLF from HCP covered activities are described in the HCP section 4.5. The existing risk of impact to CRLF from covered activities is summarized in EIR Table 6-4. There have been no recorded instances of historic take of CRLF.

Covered activities occurring outside of CRLF aquatic and upland dispersal habitat areas (HCP Maps 14 and 25) and/or that have no risk of impacting CRLF and are dismissed from further discussion. Existing covered activities with no impact to CRLF include bicycling and golfing (CA-4), fishing (CA-5), dog walking (CA-6), boating/surfing (CA-8), aerial/wind driven activities (CA-9), SNPL and CLTE management (CA-12a and 12b), habitat restoration program (CA-16), general facilities maintenance (CA-21), trash control (CA-22), wind fencing (CA-23), sand ramp/other vehicle access (CA-24), street sweeping (CA-25), perimeter and veg island fencing (CA-27), cable fencing (CA-28), heavy equipment response (CA-29), minor grading (CA-30), ranger/lifeguard (CA-32), access by non-CDPR vehicles (CA-34), ASI courses (CA-35), beach concessions (CA-36), natural history/interpretation (CA-39), cultural resource management (CA-45), and bioreactor maintenance (CA-47).

Existing covered activities affecting CRLF are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized Recreation (CA-1), Camping (CA-2), Pedestrian Activities (CA-3), Equestrian Recreation (CA-7), Holidays (CA-10), and Special Events (CA-11). Motorized recreation and camping occur on an ongoing basis in the HCP area. Motorized recreation and camping do not impact CRLF aquatic habitat. No additional vehicles are allowed to enter the HCP area on holidays or during special events. Therefore, no additional impact to CRLF occurs from motorized recreation on holidays or during special events.

Motorized recreation and camping are generally limited to the open sand beaches and dunes in the HCP area. These areas are considered suitable upland dispersal habitat for CRLF and CRLF could disperse through and be injured or killed by vehicles. However, CRLF have not been observed in these areas and this habitat is likely rarely used by CRLF for dispersal over other more suitable habitats since these areas provide minimal cover and are generally inhospitable to CRLF. In addition, CRLF AMMs 1 through 3 are implemented to reduce any impacts in areas where motorized recreation is permitted. As a result, this lethal impact is minor. This trend is expected to continue in the future.

Although motorized recreation and camping are permitted in CRLF upland habitat and could reduce the quality of upland habitat, the impacts of motorized recreation and camping on the quality of CRLF upland dispersal and aestivation habitat are negligible since these activities are not expected to permanently alter barren sand habitat where they occur. This trend is expected to continue in the future.

The two designated campgrounds within the HCP area are adjacent to Meadow Creek, Carpenter Creek, and Oceano (Meadow Creek) Lagoon. CRLF have been observed in Oceano (Meadow Creek) Lagoon and, although not positively identified, were potentially observed in Carpenter Creek and could be injured or killed by campground activities. However, activities at the campground have not been observed directly impact CRLF and the likelihood of direct impacts in the campground areas is low. As a result, this lethal impact is negligible. This trend is expected to continue in the future.

Indirect effects on CRLF from recreation activities include an increase in trash, which could potentially boost predator populations (e.g., raccoons) and thereby incidentally increase predation on CRLF. CDPR implements CRLF AMMs 4 through 9, including informing all visitors they are to dispose of their trash in a trash dumpster and enforcing rules to ensure the campsites are maintained in a clean condition, to reduce this impact. The increase in visitors on holidays and during special events could increase the amount of trash in the HCP area; however, this does not result in additional effects on CRLF that have not previously been described. As a result, this indirect lethal impact is minor. This trend is expected to continue in the future.

Most pedestrian- and equestrian-based activities have little, if any, effect on CRLF or its habitat since CRLF in the HCP area have only been found in aquatic habitats less frequented by visitors. Pedestrians and equestrians crossing creeks or entering lagoons could stir up sediment and increase turbidity in CRLF aquatic habitat. However, these impacts are temporary, localized, and short in duration. In addition, CRLF AMM 10 is implemented to reduce impacts from pedestrians crossing Carpenter Creek and Pismo Creek. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Natural Resources Management

Tidewater Goby and Salmonid Surveys (CA-13), Listed Plant Management (CA-15), Invasive Plant and Animal Control (CA-17), and Water Quality Monitoring (CA-19). Tidewater goby and salmonid surveys already occur approximately four times per year in Arroyo Grande Creek and lagoon and at least annually in Pismo Creek and lagoon/Carpenter Creek and Oso Flaco Creek. The District also already monitors water quality and conducts invasive species control in the HCP area, as determined to be necessary. The activities occur by CDPR staff who are trained in avoidance and minimization protocols. Generally, depending on the location of the activities (e.g., Oso Flaco Lake), egg masses and CRLF individuals may be present. If CRLF are encountered unintentionally during seining or dipnetting associated with tidewater goby and salmonid surveys (CA-13), CDPR biologists can impact all life stages (i.e., eggs, tadpoles, juveniles, and adults) when handling individuals and egg masses to remove them from the dipnet or seine. In addition, although infrequent, electrofishing is conducted as part of the salmonid surveys in habitat upstream of tidewater goby habitat (e.g., Arroyo Grande Creek). If CRLF are present, electrofishing can injure or kill all CRLF life stages or result in capture of any CRLF life stages. CDPR implements CRLF AMMs 12 through 14, including conducting a visual survey for CRLF prior to sampling for tidewater gobies in areas where CRLF egg masses may be present and postponing sampling for tidewater gobies until the CRLF eggs have hatched or CRLF are no

longer present. To date, CRLF have not been injured or killed during these activities. As a result, lethal impacts from tidewater goby and salmonid surveys are considered minor. This trend is expected to continue in the future.

Any listed plant management (CA-15) for marsh sandwort and Gambel's watercress at Oso Flaco Lake, invasive plant or animal control in Oso Flaco Lake or other suitable habitat (CA-17), and water quality monitoring (CA-19) can temporarily affect all life stages of CRLF (i.e., eggs, tadpoles, juveniles, and adults) by disturbing CRLF, if present. CDPR implements CRLF AMMs 18 through 20 to minimize the impact due to disturbance, including conducting surveys for CRLF within 100 feet of activities to ensure no CRLF are present and delaying activities until any individuals have moved from the area or appropriate AMMs (e.g., relocation or biological monitoring) are in place. As a result, non-lethal impacts due to disturbance are minor. Ultimately, listed plant management, invasive pest plant and animal control, and water quality monitoring and improvements in aquatic habitat where CRLF may occur, are beneficial to CRLF by reducing invasive species in the area, improving water quality, and providing more suitable habitat for CRLF. This trend is expected to continue in the future.

Activities within aquatic habitats can indirectly affect CRLF by temporarily stirring up sediment and increasing turbidity in areas where they occur. Sediment stirred up during activities are minimal, localized, and temporary and activities do not typically occur in areas where CRLF are present. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

CDPR biologists or their contractors can facilitate the introduction of amphibian chytridiomycosis when they move from one aquatic habitat to another. Amphibian chytridiomycosis is a disease caused by the zoospore fungus pathogen *Batrachochytrium dendrobatidis* (Bd), which can cause lethargy and weakness in adult frogs and usually results in death of tadpoles. Amphibian chytridiomycosis is transported in water or mud, including in muddy footwear. To minimize the potential to spread Bd, CDPR biologists use the Recommended Equipment Decontamination Procedures (CRLF AMM 15). This includes disinfecting equipment and clothing after entering a pond/stream or before entering a new pond where CRLF may occur. Bd has not been found within the HCP area and the decontamination procedures will continue to minimize the threat. As a result, impacts associated with Bd are negligible or minor. This trend is expected to continue in the future.

CRLF Surveys and Management (CA-14) and Habitat Monitoring System (CA-18). CRLF surveys occur multiple times per year between January and September, including numerous daytime and nighttime surveys within appropriate aquatic habitats (e.g., Arroyo Grande Creek, Oso Flaco Lake, Oso Flaco Creek, Pismo Creek, Carpenter Creek). Most CRLF surveys result in negligible impacts to CRLF since most surveys for CRLF are eyeshine surveys conducted from kayaks or the edge of the waterbodies and only involve visually scanning for CRLF and/or egg masses. Eyeshine surveys are sometimes conducted multiple times at one site during the breeding season if a CRLF is observed in order to attempt to better determine the breeding status of CRLF at these locations. During these surveys, care is taken not to disturb sediments, vegetation, or any visible larvae. Therefore, impacts to CRLF and/or egg masses from eyeshine surveys are negligible. This trend is expected to continue in the future.

Dipnetting surveys for CRLF has only rarely occurred in the HCP area to date; however, CDPR has always had the option to dipnet for purposes of monitoring, identification, and management of the species. If dipnet surveys are conducted, CDPR biologists or their contractors could

impact all life stages of CRLF (i.e., eggs, tadpoles, juveniles, and adults) when handling individuals and egg masses. During these surveys, CDPR biologists could capture, injure, or kill a CRLF egg mass, tadpole, juvenile, or adult. To reduce impacts associated with these surveys when they do occur, CDPR implements CRLF AMM 16, which requires that the survey be conducted by a USFWS-approved biologist in accordance with the USFWS Revised Guidance on Site Assessments and Field Surveys for the CRLF. However, CRLF adults/sub-adults, juveniles, tadpoles, or egg masses are still captured and crushing of egg masses, mortality, and/or injury can still occur. As a result, this lethal impact is moderate. Ultimately, CRLF surveys and management have a beneficial effect on CRLF by providing information necessary to contribute to conservation of the species. This trend is expected to continue in the future.

If dipnetting is conducted, these surveys involve biologists standing in water. Surveys within aquatic habitats can impact CRLF by temporarily stirring up sediment and increasing turbidity. Sediment stirred up during wading and/or dip netting activities is minimal, localized, and temporary. In addition, CRLF AMM 18 is implemented to minimize turbidity associated with any activities within water. Therefore, this non-lethal impact is minor. This trend is expected to continue in the future.

CDPR biologists or their contractors could facilitate the introduction of amphibian chytridiomycosis when entering the water for CRLF surveys similar to the impact described above for CA-13, CA-15, CA-17 and CA-19. The impacts associated with Bd are negligible or minor. This trend is expected to continue in the future.

Ultimately, these activities (CA-14 and CA-18) have an overall beneficial effect on CRLF by providing information necessary to contribute to conservation of the species and/or improving CRLF habitat in the long-term. This trend is expected to continue in the future.

Park Maintenance

Campground Maintenance (CA-20) and Boardwalk/Other Pedestrian Maintenance (CA-31). The two designated campgrounds within the HCP area are adjacent to Meadow Creek, Carpenter Creek, and Oceano (Meadow Creek) Lagoon. CRLF have been observed in Oceano (Meadow Creek) Lagoon and, although not positively identified, were potentially observed in Carpenter Creek. Impacts to CRLF in the HCP area have not been documented but can occur. Maintenance vehicles at the campground or near other aquatic areas can inadvertently strike a CRLF that has left the creek or lagoon corridors and kill or injure it. This mostly likely to occurs if activities occur during the night or under wet conditions. CDPR implements CRLF AMM 23 to avoid ground disturbing maintenance activities during heavy precipitation (i.e., at least 0.5-inch of precipitation in a 24-hour period). Therefore, maintenance activities that continue in any weather conditions are limited to housekeeping-type routine maintenance activities such as repairs to hose bibs and changing lightbulbs that do not impact CRLF. In addition, CRLF AMM 22 is implemented and all maintenance personnel continue to receive a training prior to activities that, at a minimum, cover CRLF life history and work constraints. CRLF have not been observed being killed by maintenance activities to date. As a result, this lethal impact is considered minor. This trend is expected to continue in the future.

Park Maintenance/Other Activities

Routine Riparian Maintenance (CA-26) and CDPR Ag Land Management (CA-46). Riparian maintenance and agricultural land management activities that could impact CRLF include the clearing of debris, vegetation, and sediment; riparian tree and shrub vegetation control (e.g., removing or trimming vegetation); and emergent and invasive species control. CRLF could

occur in riparian areas or agricultural ditches where maintenance activities are located. CDPR implements CRLF AMMs 24, 25 and 26, as appropriate, which include conducting activities during periods when egg masses or larvae are unlikely to be present, conducting pre-activity surveys no more than two weeks prior to maintenance activities, having a 10(a)(1)(A) permitted biologist (or USFWS-approved biologist) on-site during activities, and implementing appropriate AMMs, as necessary (e.g., exclusion fencing, relocation). As a result, lethal and non-lethal impacts from riparian maintenance activities are negligible. This trend is expected to continue in the future.

CRLF have not been found within the agricultural ditches; however, CRLF adults could be present in these areas and activities could disturb or injure/kill an individual (e.g., when equipment is used to remove sediment, debris, or vegetation). CDPR implements CRLF AMM 24, which includes conducting activities during low flow periods (if feasible) and CRLF AMM 27, which includes a 10(a)(1)(A) permitted biologist (or USFWS-approved biologist) relocating CRLF (if necessary), to reduce the potential to disturb, injure, or kill CRLF. As a result, this lethal impact is considered minor. This trend is expected to continue in the future.

Riparian maintenance and agricultural management activities can temporarily result in an increase in turbidity especially if the in-stream vegetation traps and holds sediments. Temporarily suspended sediment can affect CRLF. However, sediment stirred up during activities is minimal, localized, and temporary. In addition, heavy equipment is not placed in the water, and any back-hoe work is restricted to the roadside or upper bank with only the bucket placed in the water body (CRLF AMM 28). As a result, this non-lethal impact is considered minor. This trend is expected to continue in the future.

Riparian maintenance activities can indirectly attract CRLF predators into potential CRLF habitat areas. For example, temporary disturbance of stream channel soils during removal of sediment or emergent vegetation can create areas of ponded water that support bull frog and invasive red swamp crayfish, both of which prey upon CRLF. To minimize these effects, CDPR implements CRLF AMM 34, which requires that CDPR smooth the disturbed areas with the potential to pond water with a rake to avoid creation of potential habitat for CRLF predators. As a result, this indirect impact is negligible. This trend is expected to continue in the future.

CDPR biologists could facilitate the introduction of Bd, which is transported in water or mud, including in muddy footwear as described above for Natural Resource Management Activities CA-13, CA-15, CA-17 and CA-19. Decontamination procedures (CRLF AMM 15) continue to minimize the threat. As a result, impacts associated with Bd are negligible. This trend is expected to continue in the future.

Riparian maintenance activities can temporarily impact an annual maximum of approximately 0.3 acre of wetlands for culvert cleanout, debris removal, and emergent vegetation removal. In addition, approximately 2 miles of riparian corridor segments are subject to tree maintenance and invasive weed control as the need arises. Maintenance of these areas will reoccur over the course of the permit, as needed, when vegetation regrows. These activities temporarily reduce aquatic and/or riparian habitat available for CRLF. This habitat impact is moderate. This trend is expected to continue in the future.

Visitor Services

Emergency Response (CA-33). It is necessary from time to time for law enforcement and/or medical aids to respond to an emergency that is located off a designated trail. When this occurs, there may be some trampling of vegetation near an aquatic resource or a creek may be crossed.

To date, it has not been possible to document the impacts associated with the emergency response. Generally, it is possible, but highly unlikely, that eggs, tadpoles, juveniles, or adults could be directly affected by such an incident by being struck/crushed by a vehicle. This is especially true for vehicles that need to drive above the 15-mph speed limit to respond to an emergency. Because the risk of impact is low, this lethal impact is considered minor. This trend is expected to continue in the future.

Emergency response activities that cross creeks temporarily stir up sediment and increase turbidity. Sediment stirred up during activities is minimal, localized, and temporary. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Pismo Beach Golf Course Operations (CA-37). CRLF has been observed in Arroyo Grande Creek, Carpenter Creek⁴, and Oceano (Meadow Creek) Lagoon. CRLF also have a low to moderate potential to occur in nearby Meadow Creek, which is adjacent to Pismo Beach Golf Course. It is also possible that CRLF may disperse to Meadow Creek, Carpenter Creek, and/or the golf course ponds, especially during wet weather, although this is not known to have occurred in the HCP area to date. If CRLF disperse through the golf course, golf course operations and maintenance activities, such as golf cart traffic and mowers could potentially strike CRLF individuals and injure or kill them. The potential for such incidents is low because golf carts travel on small paved paths where CRLF are less likely to occur and most adult CRLF movement is during the night when no golfing activity occurs. Maintenance activities, including mowing, are unlikely to affect CRLF because maintenance activities occur during the day when CRLF movement is less likely to occur and grass height at the golf course does not provide adequate cover for frogs. Maintenance activities occasionally remove emergent vegetation or sediment from the water features in the golf course potentially impacting CRLF. Existing AMMs 25 and 26 require pre-activity surveys, on-site monitoring during project activity, and relocation of CRLF if necessary. As a result, lethal and non-lethal impacts to CRLF from golf course activities are considered minor. This trend is expected to continue in the future.

Other Activities

Vehicle Crossing of Creeks (CA-40). CRLF are not known to occur in the portions of Arroyo Grande Creek or Oso Flaco Creek where vehicles are permitted to cross since most vehicles cross close to the ocean and CRLF do not occur within saltwater. Therefore, no lethal or non-lethal impacts occur in these locations.

CRLF can occur in Carpenter Creek and can be impacted by motor vehicles crossing this creek. CRLF may be inadvertently struck by a vehicle; however, this is not thought to have occurred and is unlikely since vehicle operators crossing the creek are encouraged to cross in areas with no or low flow and travel at speeds of less than 15-mph. In addition, CDPR implements CRLF AMM 36, which requires that CDPR staff periodically review conditions and identify issues that may result from vehicles crossing Carpenter Creek. As a result, this impact is negligible. This trend is expected to continue in the future.

Vehicles crossing Carpenter Creek stir up sediment and increase turbidity in the creek; however, these impacts are minimal, localized, and temporary. In addition, CDPR implements CRLF AMM 36, which requires that CDPR staff periodically review conditions and identify issues that

⁴ In 2019, a potential CRLF tadpole was observed, although it was not positively identified.

may result from vehicles crossing Carpenter Creek. As a result, this indirect non-lethal impact is minor. This trend is expected to continue in the future.

Dust Control Activities (CA-44). Dust control activities are currently occurring in the HCP area as part of the Dust Control Program EIR. Dust control activities do not result in impacts to CRLF aquatic habitat. Dust control activities temporarily disturb suitable aestivating or dispersing CRLF during activities. It is unlikely, but possible, that CRLF can disperse through or be found in open sand areas prior to dust control measures being installed. Individuals in a dust control work area can be injured or crushed. CDPR implements AMMs for CRLF, as appropriate, including conducting pre-activity surveys as necessary and delaying activities until the individual moves from the work area or appropriate AMMs are in place (e.g., relocation, exclusion fencing, biological monitoring). Impacts to CRLF from dust control activities have not been observed and are not known. As a result, impacts to dispersing CRLF are minor.

Dust control activities alters upland dispersal habitat for CRLF through planting of vegetation and placement of dust control devices and monitoring equipment. This impact is minor since few CRLF have been found in the HCP area and additional dispersal habitat continues to be available in the HCP area. In addition, dust control devices may provide additional cover for dispersing CRLF and benefit the species. Impacts associated with future dust control activities are discussed in EIR section 6.4.1.3.

Use of Pesticides (CA-51). Very few pesticides are tested for toxic effects to amphibians. Most studies look at mammals, birds, fish, and insects. In the absence of robust toxicity data for amphibians in aquatic habitats, the Environmental Protection Agency (EPA) uses fish toxicity as a surrogate. Pesticides used the HCP area can cause mortality if CRLF ingest a toxic pesticide directly or through their food source. Pesticides can also cause indirect effects by changing food availability and habitat quality, including water quality. Many pesticides used in the HCP area are used in upland habitat only and, therefore, do not impact CRLF since CRLF only disperse through this area. The pesticides used in or near aquatic habitat in the HCP area have been found to either be non-toxic to CRLF or have been shown to have low toxicity slight toxicity to fish; therefore, CRLF mortality is not thought to occur. In addition, CDPR implements CRLF AMMs 42 through 49 to ensure the mortality or indirect impacts to CRLF do not occur.

CRLF present within pesticide work area could be injured or killed by workers applying the pesticides. In addition, CRLF could be disturbed by workers applying the pesticides and may move from protective cover and be exposed to predation or inclement weather. However, CDPR implements CRLF AMM 42 to ensure that CRLF in the work area are not injured, killed, or disturbed by activities. With this AMM, CRLF are likely not injured or killed; however, some disturbance may still occur. As a result, the lethal impact is considered negligible and the non-lethal (harassment) impact is considered minor.

Ultimately, these pesticides have a beneficial effect on CRLF by improving CRLF habitat by preventing the encroachment of invasive plant species. Pesticide use in upland areas, adjacent to waterbodies, and, at times, within waterbodies will continue into the future under appropriate permits.

Tidewater Goby

Impacts to tidewater goby from HCP covered activities are described in the HCP section 4.6. The existing risk of impact to tidewater goby from covered activities is summarized in EIR Table 6-4.

Covered activities occurring outside of tidewater goby habitat areas have no impact on tidewater goby and are dismissed from further discussion. Existing covered activities with no impact to tidewater goby include camping (CA-2), bicycling and golfing (CA-4), fishing (CA-5), boating/surfing (CA-8), aerial/wind driven activities (CA-9), SNPL and CLTE management (CA-12a and 12b), listed plant management (CA-15), habitat restoration program (CA-16), campground maintenance (CA-20), general facilities maintenance (CA-21), trash control (CA-22), wind fencing (CA-23), sand ramp/other vehicle access (CA-24), street sweeping (CA-25), perimeter and veg island fencing (CA-27), cable fencing (CA-28), heavy equipment response (CA-29), minor grading (CA-30), boardwalk/other pedestrian maintenance (CA-31), access by non-CDPR vehicles (CA-34), ASI courses (CA-35), beach concessions (CA-36), Pismo Beach Golf Course operations (CA-37), natural history/interpretation (CA-39), riding in 40 Acres (CA-42), replacement of safety and education center (CA-43), dust control program (CA-44), cultural resource management (CA-45), CDPR ag land management (CA-46), and bioreactor maintenance (CA-47).

Existing covered activities affecting tidewater goby are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized Recreation (CA-1), Pedestrian Activities (CA-3), Dog Walking (CA-6), Equestrian (CA-7), Holidays (CA-10), and Special Events (CA-11). Most of these activities do not occur in tidewater goby habitat and; therefore, do not impact tidewater goby. However, vehicles, pedestrians, and dogs, and equestrians can and do cross tidewater goby habitat in Arroyo Grande Creek. Pedestrians, dogs, and equestrians also cross tidewater goby habitat in Pismo Creek, Oso Flaco Creek, and Carpenter Creek, as allowed. Impacts to tidewater goby from these activities have not been observed and are not known. In general, these activities can trample or injure tidewater goby or collapse tidewater goby breeding burrows within Arroyo Grande Creek estuary and Pismo Creek estuary. CDPR implements Tidewater goby AMMs 1 through 10 within the HCP area to reduce the risk of killing or injuring tidewater goby or crushing tidewater goby burrows. Therefore, this lethal impact is considered minor. This trend is expected to continue in the future. Impacts from vehicles crossing creeks are also discussed further under Other Activities CA-40 below.

Recreation activities disturb tidewater goby habitat and/or increase turbidity or degrade water quality. These impacts can be exacerbated during holidays and special events. Tidewater goby AMMs 1 through 14 are implemented in the HCP area to reduce these impacts. Therefore, any habitat disturbance, water quality degradation, or increase in turbidity is minimal, localized, and temporary. This non-lethal impact is minor. This trend is expected to continue in the future.

Natural Resources Management

Tidewater Goby and Salmonid Surveys (CA-13), CRLF Surveys and Management (CA-14), Invasive Plant and Animal Control (CA-17), Habitat Monitoring System (CA-18), and Water Quality Monitoring (CA-19). Tidewater goby and salmonid surveys already occur approximately four times per year in Arroyo Grande Creek and lagoon and at least annually in Pismo Creek and lagoon/Carpenter Creek and Oso Flaco Creek. CDPR biologists and/or contractors capture all life stages of tidewater goby during seining associated with regular tidewater goby and salmonid surveys (CA-13). Tidewater goby have also been injured or even killed during seining associated with monitoring tidewater goby and salmonid populations, although this is fairly uncommon. Mortality or injury occur if fish become tangled in seine nets, burrows are trampled during

survey work, and/or spawning substrates are disrupted during survey activities. Tidewater goby AMMs 15 through 24 are implemented in the HCP area to reduce the risk of lethal take of tidewater goby during tidewater goby and salmonid surveys; however, tidewater goby are still captured each year and, in some years, individuals are injured or killed. As a result, the lethal impact is minor and the non-lethal (capture) impact is moderate. Ultimately, tidewater goby and salmonid surveys have a beneficial effect on tidewater goby by providing information necessary to contribute to conservation of the species. This trend is expected to continue in the future.

Dipnet surveys are rare in the HCP area, but when dip net surveys are necessary to survey for CRLF, tidewater goby egg burrows can be disturbed, and tidewater goby can be captured in dip nets if the surveys occur in tidewater goby habitat. Captured individuals can be injured or even killed when caught in the dip net. Tidewater goby AMMs 27 and 28 are implemented in the HCP area to reduce the risk of lethal take of tidewater goby during CRLF surveys. To date, CRLF surveys are not thought to have injured or killed tidewater goby. As a result, this lethal and non-lethal impact is minor. This trend is expected to continue in the future.

All activities indirectly affect tidewater goby when conducted in suitable tidewater goby habitat by temporarily stirring up sediment and increasing turbidity. Increased turbidity reduces visibility for tidewater gobies, resulting in reduced foraging success, difficulty escaping from predators, and reduced reproductive success. However, sediment stirred up during activities is minimal, localized, and temporary and will not affect tidewater goby or their habitat in the long-term. Ultimately, these activities (CA-13, CA-17, CA-18, and CA-19) have an overall beneficial effect on tidewater goby by providing information necessary to contribute to conservation of the species and/or improving tidewater goby habitat in the long-term. This trend is expected to continue in the future.

Park Maintenance

Routine Riparian Maintenance (CA-26). Riparian maintenance activities that could potentially affect tidewater goby include culvert maintenance and emergent vegetation removal when these activities are located near or within occupied habitat. Tidewater goby individuals can be injured or killed, and egg burrows can be crushed during these activities if tidewater goby are present near the culverts or vegetation maintenance. CDPR implements AMMs 34 through 39, to minimize impacts to tidewater goby during riparian maintenance activities, including conducting a pre-activity survey, ensuring heavy equipment does not enter the water, and relocating individuals, as necessary. These measures are thought to be sufficient to minimize lethal and non-lethal impacts. As a result, the lethal and non-lethal impacts are considered negligible. This trend is expected to continue in the future.

Culvert maintenance requires a backhoe bucket to enter the water and can require personnel to enter the water. These activities stir up sediments and temporarily affect downstream water quality by increasing turbidity. In addition, removing vegetation can stir up sediments and increase turbidity. The effect of turbidity is the same as described above for Natural Resource Management activities (CA-13, CA-14, CA-17, and CA-19) and is minor. This trend is expected to continue in the future.

Riparian maintenance can affect tidewater goby habitat if an equipment leak or spill occurs and enters the water. Tidewater goby AMMs 40 and 41 are implemented, which require that refueling and maintenance of equipment occur at least 60 feet from riparian habitat and appropriate spill containment be kept on-site at all times so any spills can immediately be

cleaned. As a result, impacts on water quality from riparian maintenance are negligible. This trend is expected to continue in the future.

Visitor Services

Ranger, Lifeguard, Park Patrols (CA-32) and Emergency Response (CA-33). It is necessary from time to time for law enforcement and/or medical aid to respond to an emergency. It is possible, but highly unlikely, that eggs, juveniles, or adults could be crushed, injured, or killed by such an incident. As a result, this lethal impact is minor.

Emergency or law enforcement personnel may also trample vegetation or cross a creek and stir up sediments, temporarily affecting downstream water quality by increasing turbidity. Increased turbidity can reduce visibility for tidewater gobies, resulting in reduced foraging success, difficulty escaping from predators, and reduced reproductive success. Potential damage to tidewater goby habitat is minor, localized, and temporary. This non-lethal but is considered minor.

Other Activities

Vehicle Crossing of Creeks (CA-40). Vehicles or equipment crossing creeks (i.e., Arroyo Grande Creek, Oso Flaco Creek, or Pismo/Carpenter Creek) can harm or kill tidewater goby if they are present at the time of crossing, though this is not possible to document. However, during high-flow, winter flood events when tidewater goby may be migrating through, vehicular crossing of creeks is prohibited or very limited. In addition, CDPR implements tidewater goby AMMs 43 and 44, which include reviewing conditions and identifying/addressing issues if ponded water is present at the vehicle crossings. Although these AMMs are thought to greatly minimize any lethal impacts, some lethal impacts are thought to still occur. As a result, this lethal impact is considered moderate. This trend is expected to continue in the future.

Crossing creeks stirs up sediment, which could affect upstream reaches of Arroyo Grande Creek or Oso Flaco Creek by increasing turbidity. However, any effects from increased turbidity are minor, localized, and temporary and do not affect tidewater goby in the long-term. As a result, this non-lethal impact is considered minor. This trend is expected to continue in the future.

Use of Pesticide (CA-51). Pesticides used in the HCP area can cause mortality if tidewater goby ingest a toxic pesticide directly or through their food source. Pesticides can also cause indirect effects by changing food availability and habitat quality, including water quality. Many pesticides used in the HCP area are used in upland habitat only and, therefore, do not impact tidewater goby. The pesticides used in or near aquatic habitat in the HCP area have been found to have low toxicity to slight toxicity to fish; therefore, they are not thought to be toxic to tidewater goby. Tidewater goby AMMs 47 through 55 are also implemented to reduce the risk of mortality or indirect impacts to tidewater goby. As a result, the lethal and non-lethal impacts are considered minor. Ultimately, these pesticides have a beneficial effect on tidewater goby by improving tidewater goby habitat by preventing the encroachment of invasive plant species. Pesticide use in upland areas, adjacent to waterbodies, and, at times, within waterbodies will continue into the future under appropriate permits.

Tidewater Goby Critical Habitat

Critical habitat for tidewater goby is designated within the HCP area in Pismo Creek and Oso Flaco Lake. Activities currently occurring in the HCP area do not permanently modify or reduce the quality of tidewater goby critical habitat. All of the baseline activities were being conducted during the time that the USFWS designated tidewater goby critical habitat.

California (Coast) Horned Lizard and Silvery Legless Lizard

The existing risk of impact to coast horned lizard and silvery legless lizard from existing covered activities is summarized in EIR Table 6-4. Silvery legless lizard and coast horned lizard may occur throughout the HCP area, although coast horned lizard is thought to be very uncommon in the HCP area. The potential to encounter these species is highest in vegetated and/or moist areas; however, these species could be found in open sand areas as they travel on the edge of existing habitat areas or disperse between potential habitat areas.

Covered activities occurring outside of coast horned lizard and silvery legless lizard habitat and/or that have no risk of impacting these species and are dismissed from further discussion. Existing covered activities with no impact to California horned lizard and silvery legless lizard include bicycling and golfing (CA-4), fishing (CA-5), equestrian recreation (CA-7), boating/surfing (CA-8), aerial/wind driven activities (CA-9), SNPL and CLTE management (CA-12a and 12b), tidewater goby and salmonid surveys (CA-13), CRLF surveys and management (CA-14), water quality monitoring (CA-19), campground maintenance (CA-20), sand ramp/other vehicle access (CA-24), street sweeping (CA-25), Pismo Beach Golf Course operations (CA-37), natural history/interpretation (CA-39), vehicle crossing creeks (CA-40), CDPR ag land management (CA-46), and bioreactor maintenance (CA-47). SNPL and CLTE management (CA-12b) has a low beneficial impact by providing additional protection and cover for these species during the SNPL and CLTE breeding season.

Existing covered activities affecting coast horned lizard and silvery legless lizard are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized Recreation (CA-1), Camping (CA-2), Dog Walking (CA-6), and Special Events (CA-11). Motorized recreation, dog walking, and camping do not impact vegetation island habitat or other moist habitat (e.g., Oso Flaco Lake) for coast horned lizard or silvery legless lizard.

Motorized recreation and camping are generally limited to the beaches and dunes in the HCP area and/or designated campgrounds. Silvery legless lizard was observed in the designated campgrounds in the past, although this is considered to be an uncommon occurrence. Although beaches, dunes, and campgrounds are considered suitable upland habitat for coast horned lizard and silvery legless lizard and these species can disperse through and be injured or killed or disturbed by vehicles, people, or dogs in these areas, this habitat is thought to be infrequently used by these species for dispersal over other more suitable habitats since these areas provide minimal cover. As a result, the lethal and non-lethal impacts are considered minor. This trend is expected to continue in the future.

The effects of motorized recreation and camping to the quality of upland habitat are negligible since these activities do not permanently alter barren sand habitat where they occur. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2) for SNPL and CLTE. CDPR implements SNPL AMMs 32 to 42 and CLTE AMMs 24 through 33 to reduce the effects on SNPL and CLTE. These measures also reduce the effect of trash on coast horned lizard and silvery legless lizard. Therefore, this indirect lethal impact is minor. This trend is expected to continue in the future.

No additional vehicles are allowed to enter the HCP area during special events and special events typically occur in areas where motorized recreation already occurs, so the impacts from special

events are thought to be similar to those from motorized recreation. Therefore, no additional lethal or non-lethal impacts to coast horned lizard or silvery legless lizard occur during special events.

Park Visitor Activities

Pedestrian Activities (CA-3) and Holidays (CA-10). Pedestrians are allowed within the vegetation islands and other areas where coast horned lizard and silvery legless lizard may occur. Impacts to coast horned lizard and silvery legless lizard from pedestrian activities are not known. Pedestrians walking through suitable habitat for these species can injure or kill species. In addition, pedestrians can deter these species from foraging or resting and cause them to move from protective cover exposing them to predators. Potential impacts to coast horned lizard and silvery legless lizard from visitor activities may be exacerbated during periods of high visitor use, such as holidays. As a result, lethal and non-lethal impacts from pedestrian activities on coast horned lizard and silvery legless lizard are considered minor to moderate depending on the duration, type, and intensity of the activity. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2). CDPR implements SNPL AMMs 32 to 42 and CLTE AMMs 24 through 33 to reduce the effects on SNPL and CLTE. These measures also reduce the effect of trash on coast horned lizard and silvery legless lizard. Therefore, this indirect lethal impact is minor. This trend is expected to continue in the future.

Natural Resources Management

Listed Plant Management (CA-15), Habitat Restoration Program (CA-16), and Invasive Plant and Animal Control (CA-17). Listed plant management, habitat restoration, and invasive plant and animal control activities can result in injury or mortality of coast horned lizard and silvery legless lizard if they are present within the work area. The potential to encounter these species is highest in already vegetated or moist areas (e.g., vegetation islands); however, these species can also be found in open sand areas as they travel and disperse between more suitable habitat areas. As part of CDPR's standard practices in the HCP area, pre-construction surveys are conducted, if determined necessary by a CDPR Environmental Scientist, prior to conducting listed plant management, habitat restoration, or invasive plant management in the vegetation islands or other suitable habitat for coast horned lizard and silvery legless lizard to avoid harm and injury to individual lizards. If an individual is observed during the pre-construction survey or work, activities are delayed until the individual has moved from the area or a qualified biologist moves the individual from the area. With implementation of these measures, the lethal and non-lethal impacts on coast horned lizard and silvery legless lizard is minor. Overall, these activities could create additional vegetated and/or cover habitats for both silvery legless lizard and coast horned lizard and remove potential non-native predators and are, therefore, beneficial to this species. This trend is expected to continue in the future.

Habitat Monitoring System (CA-18). As part of the Habitat Monitoring System within the HCP area, coverboards are used to inventory reptiles and amphibians present in the vegetation island habitat. Silvery legless lizards and coast horned lizards, if present, are handled for identification purposes during coverboard surveys. These species could also be killed or injured during handling, although this is unlikely and has not been documented to date. As a result, the Habitat Monitoring System has moderate lethal and non-lethal (capture) impacts on coast horned lizard and silvery legless lizard. Ultimately, however, the Habitat Monitoring System has beneficial

impacts on these species by providing useful information on the species distribution and habitat in the HCP area. This trend is expected to continue in the future.

Park Maintenance

General Facilities Maintenance (CA-21), Trash Control (CA-22), Wind Fencing (CA-23), Routine Riparian Maintenance (CA-26), Perimeter and Vegetation Island Fencing (CA-27), Cable Fence Maintenance/Replacement (CA-28), Heavy Equipment Response (CA-29), Minor Grading (CA-30), and Boardwalk/Other Pedestrian Maintenance (CA-31). Trash control, wind fencing, perimeter fencing, cable fencing, heavy equipment response, minor grading, and general facilities maintenance occur outside of vegetated areas (i.e., typical coast horned lizard and silvery legless lizard habitat) or within open sand areas. Although open sand areas are considered suitable upland habitat for coast horned lizard and silvery legless lizard and these species could disperse through and be injured or killed by equipment associated with these activities, this habitat is thought to be infrequently used by these species for dispersal over other more suitable habitats since these areas provide minimal cover. As a result, the lethal impact of these activities on coast horned lizard or silvery legless lizard are considered minor. Trash control (CA-22) has a moderate beneficial effect on silvery legless lizard and coast horned lizards by reducing the presence of potential predators. This trend is expected to continue in the future.

Boardwalks within the HCP area span dune vegetation or open sand beaches. Coast horned lizard and silvery legless lizard could use the boardwalk as cover and/or they could occur within vegetation adjacent to the boardwalk, although their occurrence in these areas is unknown. Vegetation island fencing is installed directly adjacent to habitat where coast horned lizard or silvery legless lizard have been found in the past. Riparian maintenance activities include activities such as exotic species control and riparian tree maintenance. Coast horned lizard and silvery legless lizard may use riparian vegetation as cover, although their occurrence in these areas is not known. Boardwalk maintenance, vegetation island fencing, and riparian maintenance activities may injure or kill these species, as well as cause them to move from cover into more open habitat where they are at risk of predation. As part of CDPRE's standard practices in the HCP area, pre-construction surveys are conducted, as determined necessary by a CDPRE Environmental Scientist, prior to boardwalk maintenance, vegetation island fencing, and riparian maintenance within or adjacent to suitable habitat for coast horned lizard and silvery legless lizard to avoid harm and injury to individual lizards. If an individual is observed during the pre-construction surveys, activities are delayed until the individual has moved from the area or the individual is moved out of harm's way by a qualified biologist. With implementation of this measure, the non-lethal impact on coast horned lizard and silvery legless lizard is considered minor. This trend is expected to continue in the future.

Visitor Services

Ranger, Lifeguard, Park Patrols (CA-32), Emergency Response (CA-33), Access by Non-CDPRE Vehicles (CA-34), ASI Courses (CA-35), Beach Concessions (CA-36). Ranger, lifeguard, and park patrols; emergency response; access by non-CDPRE vehicles; ASI courses; and beach concessions all occur within open sand areas. Although open sand areas are considered suitable upland habitat for coast horned lizard and silvery legless lizard and these species could disperse through and be injured or killed by beach construction equipment associated with these activities, this habitat is thought to be infrequently used by these species for dispersal over other more suitable habitats since these areas provide minimal cover. As a result, the lethal and non-lethal

impacts of these activities on coast horned lizard or silvery legless lizard is considered minor. This trend is expected to continue in the future.

Other Activities

Dust Control Activities (CA-44). Dust control activities are currently occurring within the HCP area as part of the Dust Control Program EIR. Dust control activities can result in injury or mortality of these species if they are present within the work area. The potential to encounter these species is highest in already vegetation or moist areas, which don't typically require dust control measures; however, these species can be found in open sand areas as they travel and disperse between more suitable habitat areas. These species can also be attracted to areas where dust control measures are implemented (e.g., straw bales and vegetation); therefore, maintenance of these areas can result in injury or mortality of these species. However, dust control activities require pre-construction surveys prior to removing or installing dust control measures to avoid harm and injury to individual lizards (MIG|TRA 2017). If an individual is observed during the pre-construction survey or during the dust control activities, activities are delayed until a qualified biologist (i.e., a biologist with a Scientific Collecting Permit) relocates the individual. With implementation of this project requirement, the lethal and non-lethal impacts on coast horned lizard and silvery legless lizard is minor. Overall, the dust control program has created additional vegetated and/or cover habitats for both silvery legless lizard and coast horned lizard and is, therefore, beneficial to this species. Impacts from future dust control activities are discussed in EIR section 6.4.1.5.

Cultural Resources Management (CA-45). Cultural resource management activities typically occur within open sand areas, although they could occur anywhere in the HCP area. Cultural resource management activities typically involve minimal disturbance and do not typically require ground disturbance. As a result, lethal impacts to coast horned lizard or silvery legless lizard are not expected. Should a cultural resource site be located in upland habitat utilized by coast horned lizard or silvery legless lizard, testing, data recovery, stabilization, or restoration of the site could result in disturbance to individuals within the cultural resource work area. However, any disturbance is likely to be temporary and short in duration and lizards are expected to move from the area to nearby suitable habitat. Therefore, the non-lethal impact of these activities on California horned lizard or silvery legless lizard is minor.

Use of Pesticide (CA-51). Pesticides in the HCP area are used to prevent the spread of invasive species. Application of pesticides in the HCP area could result in injuring or killing coast horned lizard or silvery legless lizard if they are trampled during application, although this is unlikely since these species typically move out of harm's way. Pesticide application could also result in temporarily flushing coast horned lizard or silvery legless lizard from cover, although these species typically find additional cover and/or return to their previous cover after the disturbance has passed. In addition, AMMs for pesticides are implemented for listed species to reduce the risk of mortality or indirect impacts, which also benefit coast horned lizard and silvery legless lizard. As a result, these lethal and non-lethal impacts are minor.

Although pesticides are not thought to cause mortality to wildlife species, mortality is difficult to observe and can occur. Pesticides used the HCP area can cause mortality if coast horned lizard or silvery legless lizard ingest a toxic pesticide directly or through their food source. Pesticides could also cause indirect effects by changing food availability and habitat quality. Many pesticides used in the HCP area are used in upland habitat where coast horned lizard and silvery legless lizard may occur. Pesticides in the HCP area typically have low toxicity to slight toxicity

to animals and target invasive plant species; therefore, the risk of mortality is low. AMMs for pesticides are implemented for listed species to reduce the risk of mortality or indirect impacts, which also benefit coast horned lizard and silvery legless lizard. In addition, all pesticides in the HCP area are used in accordance with the label. As a result, this lethal impact is minor.

Ultimately, pesticides have a beneficial effect on coast horned lizard and silvery legless lizard by improving habitat by preventing the encroachment of invasive plant species.

Western Spadefoot Toad

The existing risk of impact to western spadefoot toad from covered activities is summarized in EIR Table 6-4. Overall, impacts to western spadefoot toad are considered to be similar to CRLF as described above, with the exception that western spadefoot toad does not occur in agricultural lands or at the Pismo Beach golf course. As a result, unlike CRLF, no impacts occur from Pismo Beach Golf Course Operations (CA-37) or CDPR Agricultural Land Management (CA-46).

Although western spadefoot toad is known to aestivate in upland habitats for longer periods than CRLF, this species is considered very uncommon in the HCP area and; therefore, this species is considered unlikely to be impacted by covered activities in upland or aquatic habitat.

Western Pond Turtle (WPT)

The existing risk of impact to WPT from existing covered activities is summarized in EIR Table 6-4. WPT have been found within numerous lakes within and near the HCP area, including Oso Flaco Lake. WPT may occur within the creeks in the HCP area when they are dispersing; however, WPT, to date, have not been observed in the HCP area creeks.

Covered activities occurring outside of WPT aquatic habitat areas and/or activities that have no risk of impacting WPT and are dismissed from further discussion. Existing covered activities with no impact to WPT include motorized recreation (CA-1), bicycling and golfing (CA-4), dog walking (CA-6), equestrian recreation (CA-7), boating/surfing (CA-8), aerial/wind driven activities (CA-9), special events (CA-11), SNPL and CLTE management (CA-12a and 12b), habitat restoration program (CA-16), campground maintenance (CA-20), general facilities maintenance (CA-21), trash control (CA-22), wind fencing (CA-23), sand ramp/other vehicle access (CA-24), street sweeping (CA-25), perimeter and veg island fencing (CA-27), cable fencing (CA-28), heavy equipment response (CA-29), minor grading (CA-30), ranger/lifeguard (CA-32), emergency response (CA-33), access by non-CDPR vehicles (CA-34), ASI courses (CA-35), beach concessions (CA-36), natural history/interpretation (CA-39), dust control activities (CA-44), cultural resource management (CA-45), CDPR agricultural land management (CA-46), and bioreactor maintenance (CA-47).

Existing covered activities affecting WPT are described below and are part of the baseline environmental setting.

Park Visitor Activities

Camping (CA-2). Camping does not directly impact WPT aquatic habitat. The two designated campgrounds within the HCP area are adjacent to Meadow Creek, Carpenter Creek, and Oceano (Meadow Creek) Lagoon. WPT may use these creeks for dispersal. Activities at the campground have not been observed directly impacting WPT. Therefore, lethal impacts to WPT in the HCP area are negligible. This trend is expected to continue in the future.

Indirect effects on WPT from camping activities include an increase in trash, which can boost predator populations and thereby incidentally increase predation on WPT or reduce water

quality. The natural resource management program in the HCP area reduces these impacts by informing all visitors they are to dispose of their trash in a trash dumpster and enforcing rules to ensure the campsites are maintained in a clean condition. As a result, this indirect lethal impact is considered minor. This trend is expected to continue in the future.

Pedestrian Activities (CA-3), Fishing (CA-5), and Holidays (CA-10). Most pedestrian- and equestrian-based activities have little, if any, effect on WPT or its habitat since WPT are found in aquatic habitats less frequented by visitors. Although it has never been observed in the HCP, WPT could get caught by fisherman using bait in suitable aquatic habitat (e.g., Oso Flaco Lake) and could be injured or killed. WPT could also ingest a fishhook. WPT that ingest a fishhook typically die from the trauma or starve. This has been observed at other locations in California and Oregon where fishing is allowed but has never been observed in the HCP area. Despite the possibility for lethal impacts, they have not been observed in the HCP area to date and are considered unlikely to occur. As a result, this lethal impact is minor. This trend is expected to continue in the future.

Pedestrians crossing creeks, entering lagoons, and/or wading or fishing in freshwater habitats disturb basking WPT and deter them from basking and or foraging, which could increase stress and/or expose WPT to predation. However, these impacts are temporary, localized, and relatively short in duration and additional suitable habitat is present away from pedestrian activity where WPT can forage or bask. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Indirect effects on WPT from pedestrian and/or fishing activities can include an increase in trash, which can boost predator populations and thereby incidentally increase predation on WPT or reduce water quality. The natural resource management program in the HCP area reduces these impacts by informing all visitors they are to dispose of their trash in a trash dumpster and enforcing rules to ensure the campsites are maintained in a clean condition. The increase in visitors on holidays could increase the amount of trash in the HCP area; however, this does result in additional effects on WPT that have not previously been described. As a result, this indirect lethal impact is considered minor. This trend is expected to continue in the future.

Natural Resources Management

Tidewater Goby and Salmonid Surveys (CA-13), Listed Plant Management (CA-15), Invasive Plant and Animal Control (CA-17), Habitat Monitoring System (CA-18), and Water Quality Monitoring (CA-19). These activities have not resulted in mortality or injury of a WPT to date and are unlikely to in the future since they are conducted by experienced natural resource staff members familiar with the species in the HCP area. As a result, the lethal impact on WPT is negligible.

Depending on the location of the tidewater goby/salmonid surveys, listed plant management, invasive plant and animal control, and water quality monitoring, WPT individuals can be present (e.g., Oso Flaco Lake), although impacts from these activities have not been documented to date. Any listed plant management (CA-15) for marsh sandwort and Gambel's watercress at Oso Flaco Lake, invasive plant or animal control (CA-17) in Oso Flaco Lake or other suitable aquatic habitat, and water quality monitoring (CA-19) can temporarily affect WPT, if present. Activities can disturb basking WPT and deter them from basking and or foraging, which can increase stress and/or expose WPT to predation. Interruption of basking can ultimately lead to a decrease in survival. Activities in Oso Flaco Lake and other suitable freshwater habitat associated with the natural resource management program is temporary and relatively short in duration. In addition,

activities are conducted by natural resources staff familiar with the species in the HCP area. However, if activities in Oso Flaco Lake or other areas where WPT have previously been observed last for an extended period of time, a pre-construction survey for WPT is conducted, as determined to be necessary by CDPR Environmental Scientist staff. If an individual is observed during the pre-construction survey, activities are delayed until the individual has moved from the area or until appropriate AMMs are in place. AMMs could include relocation and/or biological monitoring. As a result, non-lethal impacts due to disturbance are considered minor. This trend is expected to continue in the future.

Activities within aquatic habitats can indirectly affect WPT by temporarily stirring up sediment and increasing turbidity. Sediment stirred up during activities are minimal, localized, and temporary. As a result, this non-lethal impact is minor. Ultimately, listed plant management (CA-15), invasive pest plant and animal control (CA-17), habitat monitoring system (CA-18), and water quality monitoring (CA-19) in aquatic habitat where WPT occurs, are beneficial to WPT by reducing invasive species in the area, increasing water quality, and providing more suitable habitat for WPT. This trend is expected to continue in the future.

CRLF Surveys and Management (CA-14). Most CRLF surveys are eyeshine surveys conducted from the edge of the waterbodies and only involve visually scanning for CRLF and/or egg masses. During these surveys, care is taken not to disturb sediment or vegetation. Eyeshine surveys can disturb basking WPT and deter them from basking and or foraging, which could increase stress and/or expose WPT to predation. As a result, this non-lethal impact is considered minor to moderate, depending on the duration of the disturbance. This trend is expected to continue in the future.

CDPR biologists or their contractors can impact WPT during CRLF monitoring surveys that involve dipnetting, although this has not been documented to date. During these surveys, CDPR biologists could capture, injure, or kill a WPT. However, dipnetting surveys in the HCP area are infrequent and are conducted by an experience USFWS-approved or permitted biologist in accordance with the USFWS Revised Guidance on Site Assessments and Field Surveys for the CRLF. As a result, this lethal impact is minor. This trend is expected to continue in the future.

If dipnetting is conducted, these surveys involve biologists standing in water. Surveys within aquatic habitats can impact WPT by temporarily stirring up sediment and increasing turbidity. Sediment stirred up during wading and/or dip netting activities is minimal, localized, and temporary and; therefore, this non-lethal impact is minor. CRLF surveys and management slightly benefit WPT since WPT often occupy the same habitat and WPT individuals and habitat are sometimes located during these surveys. This trend is expected to continue in the future.

Park Maintenance

Routine Riparian Maintenance (CA-26). Riparian maintenance activities that can affect WPT include the clearing of debris, vegetation, and sediment; riparian tree and shrub vegetation control (e.g., removing or trimming vegetation); and emergent and invasive species control. WPT are not known to occur within Meadow and Carpenter Creeks. WPT are known to occur in riparian areas at Oso Flaco Lake and Oceano Lagoon where maintenance activities are located. Lethal (injury or mortality) impacts to WPT are not expected since CDPR staff conducting the activities are trained in avoidance and minimization measures and/or escorted by a staff member trained in AMMs. If WPT are present in the riparian maintenance work area, they can be disturbed or caught by hand equipment used to remove sediment, debris, or vegetation. As part of the natural resources program in the HCP area, activities are conducted during low flow

periods (if feasible). In addition, pre-construction surveys are conducted by CDPR prior to conducting riparian maintenance, as determined necessary by a CDPR Environmental Scientist, within suitable aquatic habitat for WPT to avoid harm and injury to individual WPT. If an individual is observed during the pre-construction survey or during the riparian maintenance activities, activities are delayed until the individual has moved from the area or until appropriate AMMs are in place. AMMs could include relocation, exclusion fencing, and/or biological monitoring. As a result, non-lethal impacts from disturbance on WPT are minor. This trend is expected to continue in the future.

Riparian maintenance activities at Oso Flaco Lake can temporarily result in an increase in turbidity especially if the in-stream vegetation traps and holds sediments. Temporarily suspended sediment can affect WPT. However, sediment stirred up during activities are minimal, localized, and temporary. In addition, heavy equipment is not placed in the water, and any back-hoe work is restricted to the roadside or upper bank with only the bucket placed in the water body. As a result, this non-lethal impact is minor. Riparian maintenance activities slightly benefit WPT by improving habitat. This trend is expected to continue in the future.

Boardwalk/Other Pedestrian Maintenance (CA-31). Any effects on WPT aquatic habitat during boardwalk maintenance are minor and temporary, and direct impacts to individuals have not occurred and are not expected to occur.

Visitor Services

Pismo Beach Golf Course Operations (CA-37). Despite being artificial and areas of periodic high human use, golf courses can provide suitable habitat for turtles. WPT have been observed in the Pismo State Beach golf course ponds and low-growing turf grass in sunny areas. WPT have not been documented as being impacted by golf course operations to date, however, impacts can occur during these activities. If WPT are present in the low-growing turf grass, golf course operations and maintenance activities, such as golf cart traffic and mowers can strike WPT individuals and injure or kill them. The potential for such incidents is low because golf carts travel on small paved paths where WPT are less likely to occur. In addition, WPT are typically visible enough that the mower operators can avoid them. As a result, this lethal impact is considered minor. This trend is expected to continue in the future.

Pismo State Beach golf course activities near the golf course ponds can disturb basking WPT and deter them from basking and or foraging, which can increase stress and/or expose WPT to predation. However, most golf course activities (e.g., mowing, golfing) do not occur close enough to the ponds to disturb WPT. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Golf course maintenance may include removal of overgrown emergent vegetation, which could disturb, injure, or kill WPT. However, these activities are typically conducted by hand and have not resulted in mortality or injury of a WPT to date. In addition, these impacts are typically localized and short in duration. As a result, lethal and non-lethal impacts to WPT from golf course activities are considered minor. This trend is expected to continue in the future.

Other Activities

Vehicle Crossing of Creeks (CA-40). WPT are not known to occur in Arroyo Grande Creek or in Oso Flaco Creek in the areas where vehicles are permitted to cross and are unlikely to be present in this area since they require freshwater only; therefore, no impacts are likely to occur in these locations. WPT can occur in Carpenter Creek and can be impacted by motor vehicles crossing

this creek. WPT may be inadvertently struck by a vehicle; however, this is unlikely since WPT have never been observed in this area and vehicle operators crossing the creek are encouraged to cross in areas with no or low flow and travel at speeds of less than 15 miles per hour. As a result, this lethal impact is considered minor. This trend is expected to continue in the future.

Vehicles crossing Carpenter Creek can stir up sediment and increase turbidity in the creek; however, these impacts are minimal, localized, and temporary. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Use of Pesticides (CA-51). The District Draft Aquatic Pesticide Application Plan (APAP) states that imazapyr and glyphosate are both used within aquatic habitats. The APAP also states that both these pesticides have been found to have low toxicity to wildlife since they target specific enzymes for plants needed to process aromatic amino acids. As a result, direct WPT mortality does not occur from pesticide use in aquatic habitats. In addition, application of these pesticides takes place between October 1 and February 28 when WPT are less likely to be present.

Broad-scale insecticide use to reduce mosquito larvae in wetland areas that contain WPT may reduce invertebrate prey, although label restrictions on the pesticide products are designed to reduce that risk and all pesticides in the HCP area are used in accordance with the label. Herbicide use for aquatic invasive plants may alter the availability of cover and basking sites especially for very small turtles. However, no relevant information was found detailing either of these potential threats. Overall, pesticides have a beneficial effect on WPT by preventing encroachment of invasive plants and allowing the establishment of native plants. This trend is expected to continue in the future.

Western Burrowing Owl

Western burrowing owls in California generally breed from February 1 to August 31. Breeding burrowing owls do not occur within the HCP area. Therefore, no impacts to breeding burrowing owls occur. This trend is expected to continue in the future.

Burrowing owls in California are also found in burrows or other wintering habitat (e.g., driftwood, dune vegetation) outside the breeding season from September 1 to January 31. Suitable habitat for wintering burrowing owl is present in the HCP area, and wintering burrowing owls have been observed in the HCP area. Burrowing owl may be found in suitable small mammal burrows, in dune vegetation, and/or near woody debris on the beach. To date, burrowing owls have been observed in the HCP area at Oso Flaco Lake in 1999 and 2012, in the Phillips 66 Leasehold in 2006, near the chemical toilets on the beach in 2005 and 2006, at Oceano Lagoon in 2010, at the Grand Avenue ramp in 2019, and in the Oso Flaco Lake parking lot in 2019. In addition, burrowing owl tracks were observed at Pavilion Hill in 2016 (R. Chapman, pers. comm 2016). Therefore, wintering burrowing owls could be impacted by existing covered activities. The existing risk of impact to western burrowing owls from covered activities is summarized in EIR Table 6-4.

Covered activities occurring outside of western burrowing owl habitat and/or activities that have no risk of impacting burrowing owl have no impact on these species and are not further discussed. Covered activities with no impact to western burrowing owl include bicycling and golfing (CA-4), fishing (CA-5), boating and surfing (CA-8), SNPL and CLTE management (CA-12a and 12b), tidewater goby and salmonid surveys (CA-13), CRLF surveys and management (CA-14), water quality monitoring (CA-19), campground maintenance (CA-20), routine riparian maintenance (CA-26), cable fence maintenance and replacement (CA-28), Pismo Beach Golf

Course operations (CA-37), natural history/interpretation (CA-39), vehicle crossing of creeks (CA-40), CDPR ag land management (CA-46), and bioreactor maintenance (CA-47).

Impacts from existing covered activities in suitable burrowing owl winter habitat can occur within any terrestrial habitat in the HCP area. Most covered activities in suitable burrowing owl winter habitat have minor impacts on the species. Pesticide use and invasive plant and animal control in the HCP area have beneficial effects on burrowing owl by improving habitat and reducing the non-native, invasive species.

Existing covered activities affecting burrowing owl are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized recreation (CA-1), camping (CA-2), pedestrian recreation (CA-3), dog walking (CA-6), equestrian recreation (CA-7), aerial/wind driven activities (CA-9). Although infrequent, burrowing owls have been observed in the HCP area in the winter in areas where vehicles are permitted, including Oso Flaco Lake parking lot, Grand Avenue ramp, and the open riding area. Burrowing owls within areas where motorized vehicles are permitted could be struck by vehicles and injured or killed or burrows/winter habitat cover could be crushed or destroyed. However, as stated previously, western burrowing owl is uncommon in the areas open to motorized vehicles and, to date, has only rarely been observed in these areas. In addition, most birds fly out of harm's way and; therefore, this risk of this impact occurring is low. As a result, lethal impacts from motorized activities on western burrowing owl within the HCP area are minor. This trend is expected to continue in the future.

Pedestrians are allowed in other areas where motorized vehicles are not, including the Oso Flaco area. Human foot traffic in the HCP area can disturb burrowing owls, potentially resulting in the abandonment of burrows/cover locations. Pedestrians moving through habitat occupied by burrowing owl can disturb burrowing owl individuals. Foraging burrowing owls interrupted by humans stop foraging and move away from the area until the disturbance has passed. Burrowing owl in burrows, dune vegetation, and/or behind wooden debris may flush from these locations and be exposed to predators and inclement weather. Stationary activities, such as picnicking and sunbathing, can displace burrowing owl for longer periods. Although burrowing owls are uncommon in the HCP area, this non-lethal impact is considered minor to moderate, depending on the duration of impacts. This trend is expected to continue in the future.

Covered activities could alter suitable wintering habitat by temporarily changing the microtopography or removing organic material (e.g., woody debris) that wintering owls use for cover. However, most covered activities are associated with recreation activities where burrowing owl are less likely to occur due to the ongoing level of disturbance. In addition, suitable habitat is available in other locations in the HCP area, so burrowing owls can move from the area of disturbance to a more suitable location. As a result, impacts to habitat are considered negligible or minor. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2) for SNPL and CLTE. CDPR implements SNPL AMMs 32 to 42 and CLTE AMMs 24 through 33 to reduce the effects of trash, which also benefits species such as burrowing owl. Therefore, this indirect lethal impact is moderate. This trend is expected to continue in the future.

Holidays (CA-10) and Special Events (CA-11). Potential impacts to burrowing owl from visitor activities are likely exacerbated during periods of high visitor use, such as holidays (CA-10) and special events (CA-11) that occur during the wintertime. Holidays that increase visitor presence in the HCP area during this time include, but are not limited to, Thanksgiving, Christmas, New Years, and Martin Luther King holidays. Holidays do not increase the number of day use or camping vehicles or OHV allowed on the beach; however, additional pedestrian activity could occur during holidays, which could exacerbate the effects of pedestrian activities described above depending on the location and number of visitors. As a result, risk of non-lethal impacts from holidays on burrowing owls is minor to moderate, depending on the duration of activities and number of visitors. This trend is expected to continue in the future.

Park Maintenance, Visitor Services, and Natural Resources Management

Listed plant management (CA-15), habitat restoration (CA-16), invasive plant and animal control (CA-17), habitat monitoring system (CA-18), general facilities maintenance (CA-21), trash control (CA-22), wind fencing (CA-23), sand ramp/other vehicle access (CA-24), street sweeping (CA-25), perimeter and vegetation island fencing (CA-27), heavy equipment response (CA-29), minor grading (CA-30), boardwalk/other pedestrian maintenance (CA-31), life guard and ranger patrols (CA-32), emergency response (CA-33), access by non-CDPR vehicles (CA-34), ASI courses (CA-35), beach concessions (CA-36), and cultural resources management (CA-45). Park operation and natural resource management covered activities within the vicinity of a burrowing or foraging burrowing owl are not expected to result in injury or mortality of a burrowing owl but can temporarily displace individuals from their winter habitat or from foraging, altering their normal behavior patterns. Activities can also flush individuals from optimal habitat to less suitable habitat where they could be exposed to inclement weather or predation. However, the risk of these impacts occurring is low since western burrowing owl is uncommon with the HCP area. In addition, many park operation and natural resource management covered activities are temporary and short in duration. Finally, pre-construction surveys are conducted, as determined to be necessary by CDPR Environmental Scientist staff, prior to park operation and natural resource management activities to reduce impacts to wintering burrowing owl that are known to occur in the HCP area. If a wintering burrowing owl is observed, activities are delayed until the individual has moved from the area or until appropriate AMMs (e.g., biological monitoring) are in place. As a result, non-lethal impacts from park operation and natural resource management disturbance are considered minor. This trend is expected to continue in the future.

Other Activities

Dust Control Activities (CA-44). Dust control activities in the HCP area are already occurring as part of the Dust Control Program EIR. Impacts from future dust control activities are discussed in EIR section 6.4.1.8. Dust control activities require pre-construction surveys for burrowing owl in the backdunes during the winter season (September 1 through February 28). If any burrows are found and determined to be occupied, dust control activities cannot occur within 100 feet of the burrow location. As a result, lethal impacts to burrowing owl are negligible.

Disturbance impacts to burrowing owl within burrows from dust control activities do not occur due to the 100 foot no disturbance buffer. Dust control activities can temporarily displace foraging individuals or individuals using woody debris or dune vegetation for cover, altering their normal behavior patterns. Dust control activities can also displace birds from safe resting

locations and move them into areas where they are vulnerable to predation and recreation disturbance. As a result, non-lethal impacts on burrowing owl within the HCP area are moderate.

Little is known about the burrowing owl habitat in the HCP area during the winter. Planting vegetation associated with dust control activities within the HCP area may reduce available suitable wintering habitat for burrowing owl, including reducing areas with woody debris or reducing open areas with suitable small mammal burrows. However, burrowing owls may also use dune vegetation for cover during the winter and dust control activities could increase the amount of vegetative cover. Overall, the habitat impacts are unknown and could range from minor to moderate.

Use of Pesticide (CA-51). Pesticide use occurs by CDPR staff or by contractors working under the direction of CDPR staff who are trained in avoidance and minimization protocols. Burrowing owl can be impacted by drift from herbicide. However, as part of the natural resource management program in the HCP area, measures are implemented to reduce impacts from drift, which include not spraying if wind speed is over 10 miles per hour and ensuring all workers are trained to work in sensitive habitat. In addition, best management practices are implemented when applying pesticides. Pesticides used in the HCP area do not result in lethal impacts to birds. This trend is expected to continue in the future.

Pesticide application can result in disturbance of individual burrowing owl by deterring them from resting or foraging. Helicopter sprayers flying within the HCP area can be highly disruptive to birds and may cause burrowing owl to flush from the cover. However, as part of their standard practice, CDPR conducts surveys for special-status species, including burrowing owl, prior to conducting ground application of herbicides if the activities are determined by a CDPR Environmental Scientist to have potential to impact burrowing owl. If a burrowing owl individual is observed, activities are delayed until appropriate AMMs are in place. AMMs include establishing a no disturbance buffer, as determined by a qualified biologist, and/or conducting biological monitoring. Helicopter spraying in the HCP area is infrequent and is conducted quickly (e.g., 90 acres in approximately 2.5 hours). As a result, any impacts to burrowing owl from helicopter activity are infrequent and short in duration. As a result, non-lethal impacts from pesticides are minor. This trend is expected to continue in the future.

Nesting Birds

The existing risk of impact to nesting birds, including special-status species such as least bittern (*Ixobrychus exilis*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), American peregrine falcon (*Falco peregrinus*), loggerhead shrike (*Lanius ludovicianus*), California horned lark (*Eremophila alpestris actia*), and yellow warbler (*Setophaga petechia*) from covered activities is summarized in EIR Table 6-4.

Existing park operations, including recreation, natural resources management, park maintenance, visitor services, and other existing activities could impact nesting birds in different ways depending on their preferred nesting habitat. As a result, impacts could occur anywhere in the HCP area. For example, activities that take place on the beach, could impact nesting shorebirds or other ground nesting birds, including the special-status species California horned lark. Activities at Oso Flaco Lake and within riparian areas could impact nesting songbirds, waterbirds, and raptors, including the special-status species such as yellow warbler, least bittern, white-tailed kite, and northern harrier. Activities adjacent to trees or other perches in the HCP area could impact nesting songbirds or raptors, including special-status species such as white-tailed kite and loggerhead shrike. Many common bird species are also impacted by covered

activities in developed areas, such as the designated campgrounds. Any impacts that occur to nesting birds only occur during the nesting season (generally February 1 through September 15 for raptors and March 1 through August 31 for passerines and other non-raptors).

Existing covered activities affecting nesting birds are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized Recreation (CA-1), Camping (CA-2), Bicycling and Golfing (CA-4), Dog Walking (CA-6), Equestrian Recreation (CA-7), and Aerial/Wind Driven Activities (CA-9). These recreation activities occur on a daily basis in the HCP area, including during the breeding and non-breeding season. Due to the high level of disturbance from the existing recreation activities, only those birds adapted to nesting in urban areas, such as American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), are thought to be impacted by these activities. Nests for these species are typically located in trees and shrubs that are not directly impacted by these activities. As a result, lethal impacts from these recreational activities on nesting birds within the HCP area are considered negligible. This trend is expected to continue in the future.

Covered activities within the vicinity of a nesting bird can temporarily displace individuals from their nest or from foraging, altering their normal behavior patterns. However, birds that nest in this area are adapted to a high level of disturbance from existing recreation activities. In addition, many covered activities are temporary and short in duration and only disturb the nesting bird during the period that activity is located within the vicinity of the nest. As a result, non-lethal impacts from disturbance are considered minor. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2) for SNPL and CLTE. CDPR implements SNPL AMMs 32 to 42 and CLTE AMMs 24 through 33 to reduce the effects of trash and these AMMs also protect nesting birds. This indirect lethal impact is moderate. This trend is expected to continue in the future.

Pedestrian Activities (CA-3), Holidays (CA-10), and Special Events (CA-11). Pedestrians are permitted areas that motorized vehicles are not (e.g., vegetation islands, South Oso Flaco) where suitable habitat for nesting birds (e.g., shrubs, trees) are located. In addition, pedestrians occur in developed areas (e.g., campgrounds) where common, urban adapted birds are known to nest. Nests for most avian species occur above the ground in a tree or shrub and are not impacted by pedestrians. Pedestrians can inadvertently crush/kill eggs or chicks in a nest within a low-lying shrub or on the ground, although this is unlikely since any birds that use low-lying shrubs for nesting or nest on the ground are not found in areas that are regularly disturbed by pedestrian activity. As a result, this lethal impact is negligible. This trend is expected to continue in the future.

Recreationists increase the presence of trash as described above for motorized recreation (CA-1) and camping (CA-2) for SNPL and CLTE. CDPR implements SNPL AMMs 32 to 42 and CLTE AMMs 24 through 33 to reduce the effects of trash and these AMMs benefit other nesting birds in the HCP area as well. Despite this, generalist predators still remain the area and this indirect lethal impact is moderate. This trend is expected to continue in the future.

Potential impacts to nesting birds from visitor activities may be exacerbated during periods of high visitor use, such as holidays (CA-10) or special events (CA-11) the same as described for

SNPL. As a result, non-lethal impacts from holidays and special events on nesting birds are moderate. This trend is expected to continue in the future.

Fishing (CA-5), Boating/Surfing (CA-8). Fishing and/or boating could disturb riparian and aquatic nesting individuals in the HCP area, including special-status species such as yellow warbler and least bittern. Nesting adults could be driven from the nest and, ultimately, neglect or abandon the eggs or chicks. Foraging adults interrupted by humans stop foraging and move away from the area until the disturbance has passed. Fishing can displace individuals for long periods if the visitor remains in the same place for a long period of time. However, within the HCP area fishing occurs along the shoreline or at Oso Flaco Lake. Impacts to nesting birds along the shoreline are similar to those discussed under impacts to CLTE and SNPL above since these birds are known to nest near the shoreline. Oso Flaco Lake is currently posted with fish advisory signs. As a result, fishing at Oso Flaco Lake is not common and impacts are minimal when a visitor does fish at this location. As a result, the non-lethal impact is minor. This trend is expected to continue in the future.

Natural Resources Management

SNPL and CLTE Management (CA-12a and 12b). Most nesting birds are not impacted by SNPL management activities since these activities occur on the open beach where SNPL and CLTE nest. Ground nesting birds, including California horned lark and killdeer (*Charadrius vociferous*), are known to nest in the HCP area in similar habitat to SNPL and CLTE and may be injured or killed or a nest may be crushed by a CDPR staff vehicle during SNPL and CLTE management activities. However, the activities occur by CDPR staff who are trained in avoidance and minimization protocols. As a result, lethal impacts to ground nesting birds from SNPL and CLTE management activities, including, monitoring, erecting exclosures, salvage and rescue, and banding have not been documented in the HCP area and are not thought to occur. Therefore, lethal impacts from SNPL and CLTE management activities are negligible. This trend is expected to continue in the future.

SNPL and CLTE management activities could disturb foraging or nesting individuals if nests are located adjacent to areas where SNPL and CLTE nest. Nesting adults could be driven from the nest and, ultimately, neglect or abandon the eggs or chicks. Foraging adults and chicks (if precocial) interrupted by humans stop foraging and move away from the area until the disturbance has passed. Because CDPR staff are trained in avoidance and minimization protocols, all CDPR staff surveys for nesting birds, as appropriate. In addition, most activities are short in duration and only result in temporary disturbances to any nearby nesting birds. As a result, non-lethal disturbance impacts to nesting birds from these activities are considered minor. This trend is expected to continue in the future.

Raptors and other potential avian predators, such as American peregrine falcon, loggerhead shrike, and northern harrier, that are observed targeting SNPL and CLTE are either trapped and removed or killed as authorized under the USFWS depredation permit number MB25976A-0 and in coordination with the CDFW. As a result, predator management program activities could result in mortality or removal of adult raptors or other potential SNPL and CLTE avian predators during the nesting season, which ultimately leads to the abandonment of eggs or chicks. CDPR implements all measures in the depredation permit prior to targeting a potential predator for removal, including attempting to determine if the bird is associated with a nest by observing behavior, in order to minimize this impact. Harassment of potential avian predators using hazing techniques could disturb foraging or nesting individuals. Nesting adults could be driven from the

nest and, ultimately, neglect or abandon the eggs or chicks. Foraging adults and chicks (if precocial) interrupted by hazing activities could stop foraging and/or become stressed until the disturbance has passed. As a result, lethal and non-lethal impacts from predator management activities on nesting raptors or other potential SNPL and CLTE avian predators are moderate. This trend is expected to continue in the future.

CRLF Surveys and Management (CA-14). CRLF surveys and management do not result in lethal impacts to nesting birds. CRLF surveys and management occur adjacent to and within waterbodies from February to October, some of which occurs during the avian nesting season. CRLF surveys conducted during the breeding season could disturb riparian or aquatic nesting birds, including, but not limited to, special-status species such as yellow warbler and least bittern. CRLF surveys are conducted by qualified biologists experienced in recognizing breeding behavior and familiar with nesting bird AMMs, however, some disturbance of nesting birds could still occur. As a result, this non-lethal impact is minor. This trend is expected to continue in the future.

Tidewater Goby and Salmonid Surveys (CA-13), Listed Plant Management (CA-15), Habitat Restoration Program (CA-16), Invasive Plant and Animal Control (CA-17), Habitat Monitoring System (CA-18), and Water Quality Monitoring (CA-19). Lethal impacts to nesting birds are not known to occur from these activities and are not thought to occur since these activities do not remove trees or other structures that birds typically nest in. These activities occur by CDPR staff who are trained in avoidance and minimization protocols. However, despite this, these activities, if they occur in suitable habitat for nesting birds, can result in non-lethal impacts to nesting birds. Specifically, activities during the breeding season can disturb nesting birds and deter them from incubating eggs or chicks during the period of disturbance. These activities can also disturb foraging birds by displacing them from foraging habitat during the period of disturbance and/or deterring them from foraging. As part of their standard practice, CDPR conducts a nesting bird survey prior to conducting the activity if any activities are determined by a CDPR Environmental Scientist to have potential to impact nesting birds. If a nest is observed, activities are delayed until appropriate AMMs are in place. AMMs include establishing a no disturbance buffer, as determined by a qualified biologist, and/or conducting biological monitoring. As a result, the non-lethal impact from these activities on nesting birds is considered minor. In addition, habitat restoration and invasive plant and animal control benefit many nesting birds by improving habitat and reducing potential predators or competing species in the HCP area. The habitat monitoring system also benefits nesting birds by providing additional information on nesting bird species and distribution in the HCP area. This trend is expected to continue in the future.

Park Maintenance

Campground maintenance (CA-20), General Maintenance Activities (CA-21), Trash Control (CA-22), Wind Fencing (CA-23), Sand Ramp/Other Vehicle Access (CA-24), Street Sweeping (CA-25), Perimeter and Vegetation Island Fencing (CA-27), Cable Fence Maintenance/Replacement (CA-28), Heavy Equipment Response (CA-29), Minor Grading (CA-30), and Boardwalk/Other Pedestrian Maintenance (CA-31). The activities occur by CDPR staff who are trained in avoidance and minimization protocols. Trash control, street sweeping, wind fencing, perimeter fencing, cable fencing, heavy equipment response, minor grading, and boardwalk/pedestrian maintenance, and general facilities maintenance generally occur in open sand areas or within developed areas of the park, where only common, urban adapted species are known to nest. Lethal impacts to nesting bird species from these activities don't occur since trees

and other structures where birds nest are not removed by these activities. Therefore, the lethal impact from these activities is negligible. This trend is expected to continue in the future.

Some ground nesting birds are known to nest in the HCP area, including California horned lark and killdeer. Ground nesting birds are sensitive to disturbance and are not known to nest in areas of high recreational or vehicle activity. However, vegetation island fencing occurs in suitable habitat for these species away from recreation activities and can result in destruction of a ground nesting bird nest during the breeding season. As part of the natural resource management program, precautions for SNPL and CLTE are taken when driving in areas where SNPL or CLTE could nest that also protect other ground nesting birds in these areas. In addition, as part of their standard practice, CDPR conducts a nesting bird survey prior to conducting the activity if any activities are determined by a CDPR Environmental Scientist to have potential to impact nesting birds. If a nest is observed, activities are delayed until appropriate AMMs are in place. AMMs include establishing a no disturbance buffer, as determined by a qualified biologist, and/or conducting biological monitoring. As a result, this lethal impact is minor. This trend is expected to continue in the future.

All of these activities, when conducted during the breeding season, can disturb nearby nesting birds and deter them from incubating eggs or chicks during the period of disturbance. These activities can also disturb foraging birds by displacing them from foraging habitat during the period of disturbance and/or deter them from foraging during the period of disturbance. However, any activities, are relatively short in duration. In addition, as part of their standard practice, CDPR conducts a nesting bird survey prior to conducting the activity if any activities are determined by a CDPR Environmental Scientist to have potential to impact nesting birds. If a nest is observed, activities are delayed until appropriate AMMs are in place. AMMs include establishing a no disturbance buffer, as determined by a qualified biologist, and/or conducting biological monitoring. As a result, the non-lethal impact from these activities on nesting birds is considered minor. This trend is expected to continue in the future.

Routine Riparian Maintenance (CA-26). Riparian maintenance activities only impact riparian or aquatic nesting birds, including special-status species least bittern and yellow warbler. Riparian maintenance activities can result in destruction of a bird nest if they are present within the work area. Riparian maintenance activities can also disturb nearby nesting birds and drive adult birds from the nest and, ultimately, lead to neglect or abandonment of eggs or chicks. However, riparian maintenance activities generally occur outside the recognized nesting season and if they are within the nesting season, the Streambed Alteration Agreement (1600-2012-0001-R4) lays out pre-project survey requirements. If a nesting birds is found, a buffer zone is required around the nest until the young have fledged. With implementation of this project requirement, the non-lethal impact on nesting birds is minor. This trend is expected to continue in the future.

Visitor Services

Ranger, Lifeguard, Park Patrols (CA-32), Emergency Response (CA-33), Access by Non-CDPR Vehicles (CA-34), ASI Courses (CA-35), Beach Concessions (CA-36), Pismo Beach Golf Course operations (CA-37), and Natural History/Interpretation (CA-39). Many of these activities, including CA-32, CA-33, CA-34, CA-35, CA-36, and CA-37 occur in areas of high disturbance where only common, urban adapted species nest. Natural history/interpretation (CA-39) occurs in areas of the park where other birds, including riparian birds and waterbirds are known to nest.

Lethal impacts to nesting species do not occur from these activities since trees and other structures, where birds are known to nest, are not removed by these activities. Therefore, the lethal impact from these activities is negligible. This trend is expected to continue in the future.

These activities and associated vehicle travel during the breeding season can disturb nesting birds and deter them from incubating eggs or chicks during the period of disturbance. These activities can also disturb foraging birds by displacing them from foraging habitat during the period of disturbance and/or deter them from foraging during the period of disturbance.

However, any activities, including, but not limited, vehicle travel to the beach concessions, vehicle travel and park patrol stops, and emergency response are relatively short in duration and last only the period of time that a vehicle travels through. In addition, natural history/interpretation programs are conducted by CDPR staff trained to identify nesting bird behavior and are conducted away from areas where birds nest. As a result, the non-lethal impact from these activities on nesting birds is considered minor. This trend is expected to continue in the future.

Medevac helicopters are sometimes used in the HCP area during emergencies. Medevac helicopters flying low over or landing within the HCP area can cause significant disturbance to nesting birds. The noise from the helicopter can be highly disruptive to nesting birds and the helicopter itself could be seen as a threat, especially to nesting raptors. Adults may flush from the nest and leave the eggs unattended, and wind generated by the rotors may move enough sand to bury any ground nests in the area. Nests or chicks can also be abandoned if the adult is disturbed enough it does not return to the nest or chicks. In addition, helicopters can lead to increased vigilance in adults which could lead to them being energetically stressed or to reduced foraging. However, helicopter activity in the HCP area is a sporadic event; therefore, this non-lethal impact is rarely (if ever) expected to occur and is minor. This trend is expected to continue in the future.

Other Activities

Vehicle Crossing of Creeks (CA-40). Vehicle crossing of creeks occurs close to the shore where birds do not nest. A vehicle crossing a creek can injure or kill an adult or juvenile, or chick (if precocial) foraging in the area. This has not been documented in the HCP area but may be difficult to observe. However, it is unlikely that an individual is struck by a vehicle crossing a creek since few nesting birds in the HCP area forage for long periods within the portion of the creek crossed by vehicles and vehicles crossing creeks are expected to follow the posted speed limits. In addition, most foraging birds typically fly out of harm's way. Vehicles crossing creeks can also disturb foraging birds by displacing them from foraging habitat during the period of disturbance and/or deter them from foraging during the period of disturbance. However, most vehicle crossings are expected to be temporary and short in duration. As a result, lethal and non-lethal impacts from vehicles crossing creeks in the HCP are considered minor. This trend is expected to continue in the future.

Dust Control Activities (CA-44). Dust control activities do not impact aquatic or riparian nesting birds, since these activities do not occur in aquatic or riparian habitat. Dust control activities can result in destruction of a bird nest if they are present within the work area. Dust control activities can also disturb nearby nesting birds and drive adult birds from the nest and, ultimately, lead to neglect or abandonment of eggs or chicks. However, dust control activities already require pre-construction surveys for nesting birds from February 1 to August 15 in accordance with the Oceano Dunes SVRA Dust Control Program MMRP (CDPR 2017). If a nesting birds is found, a

buffer zone is established around the nest until the young have fledged. With implementation of this project requirement, impact on nesting birds is minor. Impacts from future dust control activities are discussed in EIR section 6.4.1.7.

Planting vegetation associated with dust control activities within the HCP area can reduce available suitable nesting habitat for some ground nesting birds, including California horned lark, by decreasing the amount of bare ground. However, California horned lark is thought to be an uncommon nester in the HCP area. As a result, the habitat impacts are minor. Impacts from future dust control activities are discussed in EIR section 6.4.1.7.

Cultural Resources Management (CA-45). Cultural resource management activities typically occur within open sand areas, although can occur anywhere in the HCP area except aquatic habitat. Since cultural resource management activities do not occur in aquatic habitat, they do not impact riparian or aquatic nesting birds. Cultural resource management activities do not directly impact any trees or vegetation. As a result, lethal impacts to nesting birds do not occur. This trend is expected to continue in the future.

Testing, data recovery, stabilization, or restoration of a cultural resource site during the breeding season, can result in disturbance to nesting individuals during the breeding nearby the cultural resource work area. As part of their standard practice, CDPH conducts a nesting bird survey prior to conducting the activity if any activities are determined by a CDPH Environmental Scientist to have potential to impact nesting birds. If a nest is observed, activities are delayed until appropriate AMMs are in place. AMMs include establishing a no disturbance buffer, as determined by a qualified biologist, and/or conducting biological monitoring. Therefore, the non-lethal impact of these cultural resource management on nesting birds is minor. This trend is expected to continue in the future.

CDPH Ag Land Management (CA-46) and Bioreactor Maintenance on Ag Land (CA-47). Activities in agricultural lands do not impact nesting birds.

Use of Pesticide (CA-51). This activity occurs by CDPH staff who are trained in avoidance and minimization protocols. Nesting birds can be impacted by drift from herbicide. However, as part of the natural resource management program in the HCP area, measures are implemented to reduce impacts from drift, which include not spraying if wind speed is over 10 miles per hour and ensuring all workers are trained to work in sensitive habitat. In addition, best management practices are implemented when applying pesticides. Pesticides used in the HCP area do not result in lethal impacts to nesting birds.

Pesticide application can result in disturbance of nesting birds and nesting birds can be deterred from incubating eggs or brooding chicks. However, as part of their standard practice, conducts a nesting bird survey prior to conducting any ground herbicide application activity if any activities are determined by a CDPH Environmental Scientist to have potential to impact nesting birds. If a nest is observed, activities are delayed until appropriate AMMs are in place. AMMs include establishing a no disturbance buffer, as determined by a qualified biologist, and/or conducting biological monitoring. Helicopters sprayers flying within the HCP area can cause significant disturbance to nesting birds. The noise from the helicopter can be highly disruptive to nesting birds and the helicopter itself could be seen as a threat, especially to nesting raptors. Adults may flush from the nest and leave the eggs unattended. However, helicopter spraying is not conducted within 200 feet of a riparian area or wetland; therefore, riparian nesting birds are not impacted. In addition, helicopter application is conducted infrequently and can be conducted quickly (e.g., 90 acres in about 2.5 hours); therefore, any disturbance from helicopters is infrequent and short in

duration. Overall, non-lethal impacts from pesticides are minor. Ultimately, pesticide use in the HCP area is beneficial to many nesting birds by reducing the spread of invasive plant species into breeding habitat. This trend is expected to continue in the future.

Bats

The existing risk of impact to bats, including special-status species such as pallid bat, Townsends' big-eared bat, western red bat, and common bat species, from covered activities is summarized in EIR Table 6-4.

Existing park operations including recreation, natural resources management, park maintenance, visitor services, and other existing activities can impact roosting and/or foraging bats. Most impacts, if any, occur near wooded or aquatic areas and do not result in injury or mortality of bats. As a result, only activities that occur within in these areas are discussed further. Bats can be disturbed by activities in the HCP area; however, disturbance to roosting or foraging bats is uncommon in the HCP area since most activities do not occur at night when bats are most active and are out in the open, and any disturbances are typically temporary and short in duration. As a result, impact to foraging or wintering bats within the HCP area is negligible or minor, depending on the duration, timing, and location of the activity. In addition, some activities have beneficial impacts on foraging and roosting bats, including invasive plant and animal control (CA-17), habitat monitoring system (CA-18), water quality monitoring (CA-19), and pesticide use (CA-51) since they provide important information on bat activity in the HCP area and/or improve the quality of foraging and roosting habitat.

Existing covered activities with the greatest potential to impact bats are discussed further below.

Park Visitor Activities

Motorized Recreation (CA-1) and Camping (CA-2). Motorized recreation and camping are allowed within the HCP area 24 hours per day. Therefore, these activities can impact foraging and/or roosting bats, including by striking foraging bats. Motorized recreation and camping are not known to have injured or killed bats since bats are typically flying over water to forage and/or roosting in trees and are not typically susceptible to vehicle strike. Therefore, this lethal impact is negligible. This trend is expected to continue in the future.

Bats are particularly susceptible to perturbations from human activities which have contributed to the decline in several species. Disturbance from recreation during hibernation and rearing can result in roost abandonment. Noise associated with overnight camping and nighttime motorized activity can lead to roost abandonment and exposure. Introducing sources of light and glare from camping and/or motorized recreation at night could disrupt bats and deter them from normal foraging and/or mating behavior or disrupt normal circadian/hibernation cycles). Lights in unpopulated areas could also affect the ability of bats and many insects (i.e., bat prey) to navigate at night indirectly leading to increased stress and/or mortality. The specific disturbance related impacts to bats in the HCP area from motorized recreation and camping are not known; however, the non-lethal impacts to bats is considered minor to moderate depending on the location and timing. This trend is expected to continue in the future.

Holidays (CA-10) and Special events (CA-11). Potential impacts to bats from visitor activities may be exacerbated during periods of high visitor use, such as holidays (CA-10) or special events (CA-11). As a result, non-lethal impacts from holidays and special events on bats is moderate. This trend is expected to continue in the future.

Park Maintenance

Routine Riparian Maintenance (CA-26). Routine riparian maintenance activities last for several hours or several days. Maintenance activities associated with the removal of trees can kill or injure bats. However, as part of their standard practices, CDPR conducts pre-construction surveys for bat roosts, as necessary, prior to the removal of any trees to avoid harm and injury to bats. If a roost is observed during the pre-construction survey or during riparian maintenance activities, activities are delayed until the appropriate AMMs are in place. AMMs can include postponing the removal of trees, establishing buffers around roost sites, or exclusion of bats from the roost site. As a result, lethal impacts to roosting bats are minor. This trend is expected to continue in the future.

Riparian maintenance activities can also temporarily displace foraging bats, altering their normal behavior patterns and/or flush foraging and/or roosting bats from optimal habitat to less suitable habitat. These impacts are typically temporary and short in duration and last only the time of the riparian maintenance activity. As a result, non-lethal impacts from routine riparian maintenance on bats is minor. This trend is expected to continue in the future.

American Badger

American badgers are known to occur in the HCP area; however, due to their secretive behavior, very little is known about the American badger in the HCP area. To date, American badger is known to occur in the vegetation islands and Phillips 66 leasehold within the HCP area. Overall, American badger is most likely to use areas that are further away from urban areas and connected to other open space habitat.

Although little is known about American badger in the HCP area, this section discusses potential impacts that could occur if an American badger is present. The existing risk of impact to American badger from covered activities is summarized in EIR Table 6-4. Because American badger has only infrequently been observed in the HCP area, these impacts are thought to be unlikely, but possible.

Existing covered activities occurring outside of American badger habitat and/or have no or negligible risk of impacts on American badger and are not further discussed. Existing covered activities with no impact to American badger include bicycling and golfing (CA-4), fishing (CA-5), dog walking (CA-6), equestrian recreation (CA-7), boating/surfing (CA-8), aerial/wind driven activities (CA-9), special events (CA-11), SNPL and CLTE management (CA-12a and 12b), tidewater goby and salmonid surveys (CA-13), CRLF surveys and management (CA-14), water quality and monitoring (CA-19), campground maintenance (CA-20), general facilities maintenance (CA-21), trash control (CA-22), wind fencing (CA-23), sand ramp/other vehicle access (CA-24), street sweeping (CA-25), routine riparian maintenance (CA-26), cable fence maintenance and replacement (CA-28), boardwalk/other pedestrian maintenance (CA-31), ranger, lifeguard, and park patrols (CA-32), access by non-CDPR vehicles (CA-34), ASI courses (CA-35), beach concessions (CA-36), Pismo Beach Golf Course operations (CA-37), natural history/interpretation (CA-39), vehicles crossing creeks (CA-40), CDPR ag land management (CA-46), and bioreactor maintenance (CA-47).

Some activities have beneficial impacts on American badger, including habitat restoration program (CA-16), invasive plant and animal control (CA-17), habitat monitoring system (CA-18), and pesticide use (CA-51) since they provide important information on badger activity in the HCP area and/or improve the quality of habitat.

Existing covered activities that can impact American badger are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized Recreation (CA-1), Camping (CA-2), Pedestrian Activities (CA-3), and Holidays (CA-10). Recreation activities are not permitted in the Phillips 66 Leasehold; therefore, American badgers in this area are not impacted by these park visitor activities. In addition, motorized recreation and camping are generally limited to the open sand beaches and dunes in the HCP area. American badger tracks have been observed in areas open to vehicles one time. Although unlikely, if a badger does use an area open to vehicles to move from one location to another or to forage, it could be injured or killed by a vehicle or disturbed by the noise from vehicle or camping activity. Since badgers do not typically occur in open beach or dune areas, these lethal and non-lethal impacts are negligible. This trend is expected to continue in the future.

American badgers are sensitive to repeated human activities, particularly actions that alter soil integrity. Repeated human visitation associated with recreation activities in the HCP area in areas where American badger can affect the routine behavior of American badgers and ultimately result in den abandonment. In addition, pedestrians in the project area could destroy American badger dens if they are located within the dune vegetation or vegetation islands where pedestrians can walk. However, American badgers are uncommon in the HCP area and most likely avoid areas where recreation is allowed. As a result, this non-lethal impact is considered minor. This trend is expected to continue in the future.

Natural Resources Management

Listed Plant Management (CA-15), Habitat Restoration Program (CA-16), Invasive Plant and Animal Control (CA-17), and Habitat Monitoring System (CA-18). Lethal impacts to American badger from these activities has never been documented and is unlikely to occur. Listed plant management, habitat restoration, habitat monitoring, and invasive plant and animal control activities in the Phillips 66 Leasehold or vegetation islands could result in disturbance to American badger and ultimately result in den abandonment if they are present within or near the work area. As part of CDPR's standard practice, pre-construction surveys are conducted, as determined to be necessary by CDPR Environmental Scientist staff, prior to conducting listed plant management, habitat restoration, habitat monitoring, or invasive plant management in suitable habitat (e.g., areas where American badger or badger dens have been observed previously) to avoid disturbance to American badger. If an individual is observed during the pre-construction survey, activities are delayed until the individual has moved from the area or until appropriate AMMs are in place (e.g., a no disturbance buffer). With implementation of this measure, the non-lethal impacts on American badger is considered minor. Overall, habitat restoration and invasive plant and animal control creates additional vegetated and/or cover habitats for American badger is, therefore, beneficial to this species. In addition, the Habitat Monitoring System has beneficial impacts on this species by providing useful information on the species distribution and habitat in the HCP area. This trend is expected to continue in the future.

Park Maintenance

Perimeter and Vegetation Island Fencing (CA-27), Heavy Equipment Response (CA-29), and Minor Grading (CA-30). Lethal impacts to American badger from these activities has never been documented and is unlikely to occur. Vegetation island and perimeter fencing occur adjacent to vegetation islands, which is considered suitable habitat for American badger. Installation and

maintenance of vegetation island fencing and/or perimeter fencing and any grading or heavy equipment use associated with these activities could disturb American badger if they are present nearby. Vegetation island and perimeter fencing occurs within areas open to recreation activities, including motorize recreation. Because they are highly sensitive to disturbance, no American badgers have been observed in the open riding area or other areas open to recreation and American badger tracks have only been observed one time in the open riding area. As a result, the non-lethal impact on American badger is considered negligible. This trend is expected to continue in the future.

Visitor Services

Emergency Response (CA-33). CDPR emergency responders sometimes have to travel quickly throughout the HCP area; however, emergency responders very rarely travel through vegetated areas. Therefore, American badger have not been documented as being struck by emergency vehicles and dens have not been observed being crushed by emergency vehicles. As a result, this lethal impact is considered negligible. This trend is expected to continue in the future.

If emergency occurs adjacent to a vegetation island or other areas where American badger could occur, it can be highly disruptive to American badger. However, such events are rare and do not occur in most years. In addition, emergency response typically occurs quickly. Due to event infrequency and short-term duration of disturbance, the non-lethal impact of these covered activities is considered minor. This trend is expected to continue in the future.

Other Activities

Dust Control Activities (CA-44). Dust control already occurs in the HCP area in accordance with the Dust Control Program EIR. Dust control activities can crush an American badger den or result in disturbance to American badger if they are present within or near the work area and ultimately result in burrow abandonment and relocation. However, dust control activities require pre-work surveys for American badger and American badger dens no more than 7 days prior to installation of project features. If dens are found, a 100-foot buffer zone is required. As a result, lethal and non-lethal impacts on American badger within the HCP area are minor.

Planting vegetation associated with dust control activities within the HCP area may reduce available suitable foraging or denning habitat for American badger by installing dust control measures such as wind fencing. However, dust control activities are thought to have an overall beneficial impact by increasing the amount of vegetation and, thus, suitable habitat for American badger in the HCP area. Impacts from future dust control activities are discussed in EIR section 6.4.1.8.

Cultural Resource Management (CA-45). Cultural resource management activities typically involve minimal disturbance and do not typically require ground disturbance. As a result, lethal impacts to American badger are considered negligible. This trend is expected to continue in the future.

Should a cultural resource site be located in suitable American badger habitat, testing, data recovery, stabilization, or restoration of the site can disturb individuals within or near the cultural resource work area. However, any disturbance is temporary and short in duration and American badger are typically not present in these areas. As a result, this non-lethal impact is considered minor. This trend is expected to continue in the future.

Pesticide Use (CA-51). Pesticides used in the HCP area do not result in lethal impacts to American badger. Ground pesticide application does not occur in areas where American badger

typically occur (e.g., Phillips 66 Leasehold). Aerial spraying could disturb American badger since it is conducted in the backdunes and Phillips 66 Leasehold where American badgers are more likely to occur. Specifically, aerial spraying has the potential to flush American badger from dens or other cover. However, helicopter application is conducted infrequently and can be conducted quickly (e.g., 90 acres in about 2.5 hours). As a result, non-lethal impacts from helicopter are short term in duration. Overall, pesticide use benefits American badger by improving habitat for American badger in the HCP area.

Special-Status Plant Species

Existing covered activities are ongoing visitor use or park operation activities occurring within the HCP area. No changes to these activities are proposed by the HCP, therefore, the proposed project would have no new impact generated by these activities. Effects to special-status plant species from these activities are existing environmental conditions.

Impacts to HCP covered special-status plant species (i.e., marsh sandwort [*Arenaria paludicola*], surf thistle [*Cirsium rothophilum*], beach spectaclepod [*Dithyrea maritima*], La Graciosa thistle [*Cirsium scariosum* var. *loncholepis*], Nipomo Mesa lupine [*Lupinus nipomensis*], and Gambel's watercress [*Nasturtium gambelii*]) from covered activities are described in the HCP section 4.7. The risk of impact to these six HCP covered plant species as well as 19 additional special-status plants potentially impacted by existing HCP covered activities is summarized in EIR Table 6-5. Although the remaining 19 special-status species are not covered by the HCP, some of these species are expected to directly benefit from the HCP's conservation program for listed species through the implementation of AMMs for covered activities if they occur in areas where covered species are known to occur. Specifically, Blochman's groundsel (*Senecio blochmaniae*), Bochman's leaf daisy (*Erigeron blochmaniae*), California spineflower (*Mucronea californica*), coastal goosefoot (*Chenopodium littoreum*), Nuttall's milkvetch (*Astragalus nuttallii* var. *nuttalli*), dune larkspur (*Delphinium parryi* ssp. *blochmaniae*), crisp monardella (*Monardella undulata* ssp. *undulata*), dunedelion (*Malacothrix incana*), fuzzy prickly phlox (*Linanthus californicus*), red sand verbena (*Abronia maritima*), suffrutescent wallflower (*Erysimum suffrutescens*), southern spiny rush (*Juncus acutus* ssp. *leopoldii*), Monterey coast paintbrush (*Castilleja latifolia*), sand almond (*Prunus fasciculata* var. *punctata*), San Luis Obispo monardella (*Monardella undulata* ssp. *undulata*), and Douglas' spineflower (*Chorizanthe douglasii*) occur in the same coastal dune and foredune habitat as surf thistle, Nipomo Mesa lupine, and/or beach spectaclepod. AMMs that protect special-status plant species include, but not are limited to, installation of protective fencing (Listed Plant AMM-2), closure of informal trails (Listed Plant AMM-3), habitat restoration (Listed Plant AMM-4), water quality monitoring (Listed Plant AMM-10), and invasive plant control (Listed Plant AMMs 15 through 22). A description of the Listed Plant AMMs can be found in HCP section 5.3.

Existing covered activities occurring outside of special-status plant species habitats and/or that have no risk of impacting special-status plant species are dismissed from further discussion. Covered activities that have no impact on special-status plant species include bicycling and golfing (CA-4), surfing (CA-8), aerial/wind driven activities (CA-9), water quality monitoring projects (CA-19), campground maintenance (CA-20), street sweeping (CA-25), American Safety Institute courses (CA-35), Pismo Beach Golf Course operations (CA-37), motorized vehicle crossing of Pismo/Carpenter, Arroyo Grande Creek, and Oso Flaco Creeks (CA-40), CDPR management of agricultural lands (CA-46), and maintenance of a bioreactor on agricultural lands (CA-47).

Existing covered activities that can impact special-status plants are described below and are part of the baseline environmental setting.

Park Visitor Activities

Motorized vehicle recreation (CA-1) and Camping (CA-2). Motorized recreation already occurs in the HCP area year-round on a daily basis within areas open to motorized recreation. A portion of the open riding is closed to motorized recreation from March 1 through September 30 during the SNPL and CLTE breeding season. Impacts on special-status plants due to motorized recreation in the past have been difficult to assess and have not been documented in the open riding area. Direct impacts to special-status plants in the vegetation islands are not known to occur since these areas are fenced off and motorized recreation is prohibited from entering these areas. In general, areas open to motorized recreation (and areas where most non-designated camping occurs) almost entirely consist of bare sand and are not known to contain special-status plant species. Although unlikely, some special-status plant species including, but not limited to, Blochman's groundsel, Bochman's leaf daisy, California spineflower, coastal goosefoot, crisp monardella, dunedelion, fuzzy prickly phlox, red sand verbena, and suffrutescent wallflower, could occur within sand dune areas and/or areas with sparse vegetation open to motorized recreation and may go undetected. If special-status plant species occur in the areas where motorized recreation is allowed, these activities can crush or destroy special-status plant species individuals. However, the direct impact on special-status plant individuals is considered to be negligible due to lack of occurrences and lack of suitable habitat in those areas. This trend is expected to remain the same in the future.

Indirect impacts to special-status plants due to motorized recreation in the past have been difficult to assess and have not been documented in the open riding area. Numerous special-status plant species including Blochman's groundsel, Bochman's leaf daisy, southern spiny rush, Monterey coast paintbrush, Douglas' spineflower, crisp monardella, dunedelion, red sand verbena, and suffrutescent wallflower have been observed in the vegetation islands throughout the open riding area. Motor vehicles are known to inadvertently spread invasive plants (e.g., on tires) by moving seeds or plant segments if they move from one place with invasive species to a less impacted area. Therefore, motorized recreation adjacent to vegetation islands can introduce invasive plants that compete with special-status plants in the area. As a result, motorized recreation indirect impacts on special-status plant individuals adjacent to motorized activities is minor. This trend is expected to continue in the future.

Motorized vehicles recreation and camping degrades or modifies potentially suitable habitat for special-status plant species that might otherwise occur in sparsely vegetated or coastal dune habitat, including listed plant species such as surf thistle and beach spectaclepod, and prevents these species from establishing within the foredunes. As a result, motorized recreation has likely kept some special-status plants from growing in the open riding area and; therefore, has had a moderate impact on special-status plant species habitat within areas open to recreation. This trend is expected to continue in the future.

Pedestrian activities (CA-3), Dog walking (CA-6), Equestrian recreation (CA-7), Holidays (CA-10), and Special events (CA-11). Pedestrians are allowed with the HCP area 24 hours a day and the HCP area has had up to 670,000 day use visitors in a year. Impacts to special-status plants due to pedestrian recreation in the past have been difficult to assess and have not been documented in the HCP area. Pedestrians are allowed within the vegetation islands and the Oso Flaco area where motorized vehicles are not allowed. Special-status plants have been

documented in the vegetation islands and Oso Flaco area. In general, pedestrians walking through areas where special-status plants can occur may trample special-status plant individuals in these areas and disturb their habitat. Pedestrians can also inadvertently facilitate the spread of invasive species (e.g., on shoes or clothing) by moving seeds or plant segments if they move from one place with invasive plants to a less impacted area. Invasive species could outcompete special-status plant species. Impacts to special-status plants from visitor activities may be exacerbated during periods of high visitor use, such as holidays (e.g., July 4). To reduce impacts to special-status plants, fencing is installed around vegetation islands, which often deters pedestrians from entering and trampling special-status plant species in the vegetation islands. In addition, informal trails within known special-status plant habitat are also closed and restored to pre-trail conditions. Vegetation in many of the vegetation island areas is also dense and pedestrians typically do not walk through vegetated areas. The seasonal exclosure is also in place during the typical blooming period for many special-status plants in the open riding area and/or Oso Flaco, including, but not limited to, surf thistle and beach spectaclepod, and, thus, prohibits pedestrians from entering these areas and trampling special-status plant species. As a result, direct and indirect impacts to special-status plants from pedestrian activities are considered to be minor. This trend is expected to continue in the future.

Dogs (other than service dogs) are not allowed in the Dunes Preserve or Oso Flaco area. Therefore, special-status plant species in these areas are not be impacted by dogs. Impacts to special-status plants in areas where dogs are allowed are similar to pedestrian activities (described above) since all dogs are required to be kept on a leash and with their owner at all times. As a result, direct and indirect impacts to special-status plants from dogs are considered to be minor. This trend is expected to continue in the future.

Impacts to special-status plants due to equestrian recreation in the past have been difficult to assess and have not been documented in the HCP area. Equestrians activity typically occurs the northern HCP area including beaches and trails at Pismo State Beach and the Dunes Preserve. Equestrians traveling through the Dunes Preserve can disturb designated La Graciosa thistle critical habitat, as well as suitable habitat for other special-status plant species in this area. In addition, although unlikely, equestrian recreation in bare sand could impact special-status plant species that might grow in these areas (see CA-1 above). Equestrians travelling through areas where special-status plants are present could trample or crush individuals. However, to date, equestrians travelling through these areas typically stay on sandy trails where special-status plant species do not occur and rarely travel off-trail. As a result, direct and indirect impacts from equestrians are considered negligible. This trend is expected to continue in the future.

Fishing (CA-5) and Boating (CA-8). Fishing and boating are allowed within the HCP area year-round. Shore fishing and boating within the ocean do not impact special-status plant species since these activities occur on the wet sand subject to tidal flows and/or the ocean where no suitable habitat for special-status plant species is present. Fishing and non-motorized boating does occur within Oso Flaco Lake where special-status plant species, including marsh sandwort, La Graciosa thistle, and Gambel's watercress are known to or have potential to occur. Impacts on special-status plants from fishing and boating in Oso Flaco Lake are not known. In general, people fishing along the lake shoreline and/or launching boats from the lake shoreline can trample special-status plant individuals in these areas. In addition, people and boats can inadvertently facilitate the spread of invasive species (e.g., on shoes, clothing, or boats) by moving seeds or plant segments if they move from one place with invasive plants to a less impacted area. Invasive species can outcompete special-status plant species. Fish consumption

advisories are posted at Oso Flaco Lake due to high levels of pesticides. As a result, fishing in Oso Flaco Lake is not a regular activity. In addition, marsh sandwort, Gambel's watercress, and La Graciosa thistle are not known to occur in areas where fishing boats typically enter the water or along the shoreline areas where visitors might fish. As a result, direct and indirect impacts from fishing and boating on special-status plants are considered to be minor. This trend is expected to continue in the future.

Natural Resources Management

SNPL and CLTE management (CA-12a and 12b), Tidewater goby and salmonid surveys (CA-13), CRLF surveys and management (invasive species control) (CA-14). SNPL and CLTE management already occur within the HCP area on a daily basis during the breeding season from March 1 through September 30. In addition, regular monitoring for wintering SNPL occurs during the non-breeding season from October 1 through February 29. Tidewater goby and salmonid surveys already occur approximately four times per year in Arroyo Grande Creek and lagoon and at least annually in Pismo Creek and lagoon/Carpenter Creek and Oso Flaco Creek. Finally, CRLF surveys occur multiple times per year between January and September, including numerous daytime and nighttime surveys. Impacts on special-status plants from these activities are similar to those described above for pedestrian activities (CA-3) and/or fishing (CA-5) since CDPR staff enter areas, including vegetation islands and Oso Flaco Lake and/or Oceano (Meadow Creek) Lagoon, where special-status plants are known to or could occur. However, CDPR staff are trained in avoidance and minimization protocols and are aware of the locations of known special-status plant species. As a result, these activities are considered to have a negligible direct and indirect impact on special-status plants. This trend is expected to continue in the future.

Listed plant monitoring and habitat enhancement (CA-15), Habitat restoration program (CA-16), and Invasive plant and animal control (CA-17), and Habitat Monitoring System (HMS) implementation (CA-18). CDPR already manages and restores vegetation in areas occupied or potentially occupied by listed plant species to benefit these and other native species, including other special-status plant species. These management measures include controlling invasive plant species, restoring foredune and dune scrub habitat that has been overwhelmed by invasive plant species, and monitoring listed plant species populations, including response of the listed plant species to habitat restoration. Impacts from pesticide use are described in Pesticide Use (CA-51).

Areas occupied by marsh sandwort, Gambel's watercress, and Nipomo Mesa lupine do not receive prescribed fire treatments and, therefore, are not affected by prescribed fire activities. Prescribed fire is currently used infrequently in the HCP area to manage invasive plant species in the foredunes and could present a threat to special-status plants, including, but not limited to, beach spectaclepod, surf thistle, La Graciosa thistle, Blochman's groundsel, Blochman's leaf daisy, southern spiny rush, Monterey coast paintbrush, Douglas' spineflower, crisp monardella, dunedelion, red sand verbena, suffrutescent wallflower found within foredune habitat. While conducting prescribed fire activities, special-status plants could be damaged or burned, despite best efforts to exclude the fire from the occupied special-status plant habitat. In addition, a special-status plant could be accidentally broken or trampled during any activities within occupied habitat. To reduce these impacts, CDPR implements Listed Plant AMMs 11 through 14, including establishing a fire line of mineral soils around known populations of special-status plant species and a trained botanist remains on-site during all fire activities. In addition, heavy equipment, including fire engines, are required to stay out of known sensitive habitat and locations for the placement and staging of heavy equipment are clearly marked on a map. As a

result, direct impacts from fire treatments are considered to be negligible. This trend is expected to continue in the future.

Yearly vegetation planting for habitat restoration can directly affect special-status plant species, including by trampling individuals during vegetation planting activities. However, vegetation is not planted directly in areas known to be occupied by special-status plants and is instead planted primarily in bare sand areas adjacent to existing vegetated areas, including vegetation islands, where special-status plants are less likely to occur. As a result, the risk of these activities damaging existing special-status plant populations is low. Restoration projects are also designed to match the existing plant community composition in the area to ensure that additional species planted are compatible with special-status plant species and that any additional species will not out compete existing special-status plant species. CDPR also implements Listed Plant AMMs 7 through 9, as appropriate. As a result, direct impacts from habitation restoration are negligible. This trend is expected to continue in the future.

The greatest threats during invasive plant and animal control activities are trampling and physical disruption to special-status plants while manually removing invasive vegetation. CDPR implements AMMs 15 through 22, as appropriate, including conducting pre-project surveys, implementing buffer zones, and using hand pulling methods are utilized, as necessary, to avoid any unnecessary impacts. In addition, biological monitors are present at all phases of the work to ensure that precautions and prohibitions regarding avoiding damage to special-status plant species are observed. The biological monitor can also stop work if unanticipated damage to special-status plant species occurs. As a result, direct impacts from invasive plant and animal control are negligible. This trend is expected to continue in the future.

Overall, monitoring, invasive species removal, and habitat restoration activities provide a net benefit for the listed plants and other native special-status plant species by removing invasive weedy species and thereby reducing competition from these species for space, light, water, and nutrients, as well as by providing additional suitable habitat for special-status species throughout the HCP area.

Park Maintenance. General Facilities Maintenance (CA-21), Trash control (CA-22), Wind fencing installation, maintenance, and removal (CA-23), Sand ramp and other vehicular access maintenance, including roadway resurfacing (CA-24), Cable fence maintenance and sand movement (CA-28), and Minor grading (less than 50 cubic yards) (CA-30). These activities already occur regularly within the HCP area. Impacts from these activities are similar to those described for motorized vehicle (CA-1) described above, especially since these activities occur on open sand beach. As a result, direct and indirect impacts are considered to be negligible to minor. This trend is expected to continue in the future.

Routine riparian maintenance (CA-26). Riparian habitat at the Oso Flaco Lake causeway, parking lot, and boardwalk; Meadow Creek access road, ranger station, and maintenance yard; Meadow Creek and Carpenter Creek, Pismo Lake, and Oceano Lagoon is maintained regularly. Routine riparian maintenance already occurs regularly in the HCP area and has not resulted in the loss of special-status plant species to date. Special-status plants, including marsh sandwort and Gambel's watercress are, however, known to occur at some or all of the routine riparian maintenance locations. Therefore, riparian maintenance can directly impact special-status plant species if they occur in an area designated for maintenance activities. However, CDPR implements AMM 23 as a part of conducting riparian maintenance, which requires conducting pre-activity surveys annually prior to commencing activities, flagging any observed special-

status plants, and avoiding flagged areas. As a result, direct impacts from routine riparian maintenance on special-status plants are negligible.

To date marsh sandwort and/or Gambel's watercress have not been observed within the Oso Flaco Lake culvert. However, the possibility still exists that either marsh sandwort or Gambel's watercress could be attached to plants or root balls that are clogging the culvert at Oso Flaco Lake. Should this happen, it will require the individual(s) to be removed from the culvert. Every effort will be made to identify special-status plants before removal of vegetation in the culvert occurs to allow the opportunity to salvage the plant by moving it to another location. Although marsh sandwort or Gambel's watercress will be salvaged if possible, some individuals could be destroyed. However, any special-status plant left in the culvert will likely be damaged anyway due to high winter flows. As a result, any Gambel's watercress or marsh sandwort individuals that are blocking the culvert will be lost regardless of culvert maintenance activities. Therefore, direct impacts from culvert maintenance at Oso Flaco Lake on special-status plants are minor.

Perimeter and vegetation island fence installation, maintenance, and removal (CA-27). Perimeter and vegetation island fence are currently present in the HCP area and need to be maintained or replaced on regular basis to ensure their integrity. Numerous special-status plant species including Blochman's groundsel, Blochman's leaf daisy, southern spiny rush, Monterey coast paintbrush, Douglas' spineflower, crisp monardella, dunedelion, red sand verbena, and suffrutescent wallflower have been observed in the vegetation islands throughout the HCP area. Although unlikely, special-status plant species could be crushed or destroyed individuals during installation or maintenance of vegetation island fencing or perimeter fencing near vegetated areas, especially if the fencing encroaches on existing vegetation. However, as part of CDPR's standard practices, a pre-activity clearance survey is conducted, if determined to be necessary by CDPR Environmental Scientist staff, prior to installing or maintaining the fence to ensure special-status species are not present in the work area. If a special-status plant species is observed during the pre-activity survey, they are flagged and/or fenced and avoided during covered activities. As a result, direct impacts to special-status plant species from perimeter and vegetation island fence installation and maintenance is considered to be negligible. This trend is expected to continue in future.

Heavy equipment response (CA-29). Heavy equipment (e.g., tractors, loaders) response is used throughout the HCP area, as needed, for things such as removing stranded vehicles to burying deceased marine life. Heavy equipment response does not occur within open water habitat; therefore, Gambel's watercress and marsh sandwort are not impacted. Beach spectaclepod, surf thistle, and other special-status plant species can be directly harmed during a heavy equipment response in occupied habitat anywhere within the HCP area. Special-status plants could be driven over or crushed by vehicles or attendant personnel and habitat could be temporarily damaged. To reduce any impacts from heavy equipment response, CDPR implements standard practices and Listed Plant AMMs as a component of utilizing heavy equipment, including conducting pre-activity clearance surveys, if determined to be necessary by CDPR Environmental Scientist staff, and flagging areas that may support special-status plant species. Heavy equipment response operations are also rare in areas where special-status plants are known to occur; thus, the potential direct impact of these operations on special-status plants is considered be negligible. This trend is expected to continue in future.

Boardwalk and other pedestrian access maintenance (CA-31). Most boardwalk and other pedestrian access maintenance occur within the HCP area once a year. Special-status plant species are not typically located directly adjacent to these areas. However, if special-status plant

species occupy habitat requiring clearing for pedestrian access purposes, they can be damaged and/or removed or trampled by field crews. Most work only includes trimming vegetation encroaching on footpaths with hand tools, therefore, special-status plants are unlikely to be impacted since they do not typically encroach on the boardwalks or trails. In addition, these impacts are avoided through the implementation of CDPR's standard practices and Listed Plant AMMs. Specifically, pre-activity clearance surveys are conducted, if determined to be necessary by CDPR Environmental Scientist staff, and areas that may support special-status plant species are flagged. Thus, the potential direct impact of these operations on special-status plants is negligible.

The Oso Flaco boardwalk will be replaced and/or maintained both on land and within aquatic habitat. Impacts from Oso Flaco Lake boardwalk in aquatic habitat are described in Oso Flaco Lake Boardwalk Replacement (CA-48) in EIR Section 6.4.1.9. Special-status plant species that can be impacted in upland habitat include those species that have been found within South Oso Flaco and the Oso Flaco Lake area, including, but not limited to, La Graciosa thistle, beach spectaclepod, surf thistle, Blochman's leafy daisy, crisp monardella, San Luis Obispo monardella, dune larkspur, Nuttall's milkvetch, red sand verbena, Suffrutescent wall flower, fuzzy prickly phlox, California spineflower, Blochman's groundsel, Monterey Coast paintbrush, and dunedelion. Maintenance activities such as vegetation trimming, replacing damaged sections of boardwalk, and minor trail realignment can have direct impacts on special-status plants that occur within the project area. Project activities can affect these plants through direct disturbance of vegetation, modification or destruction of habitat, or through damage to underground root structures. Vehicle traffic and worker foot traffic can result in the injury or mortality of individual special-status plants. Excavation activities can result in the mechanical or physical removal of vegetation and modification of the seed bank. However, as part of CDPR's standard practices for this type of construction, measures are developed to protect special-status plant species and their habitat, including, but not limited to, conducting pre-activity clearance surveys, as necessary, to protect individual plant species from construction related impacts. With implementation of these measures, the direct impact on special-status plants is minor.

Project activities within terrestrial habitats can also cause an increase in invasive weed cover. Invasive plants degrade habitat quality for native plants and animals by altering vegetative structure and/or outcompeting native plants. However, CDPR actively removes invasive plants from the HCP area as part of the invasive plant and animal control activity (CA-17). As a result, indirect impacts to special-status plants from boardwalk and/or pedestrian access activities is minor.

Visitor Services

Ranger, lifeguard, and park aide patrols (CA-32) and Natural history and interpretation programs (CA-39). Guided hikes associated with the natural history and interpretation programs are located on existing trails and do not impact special-status plant species. Impacts from vehicles associated with these activities are similar to those described for motorized vehicle (CA-1) described above. Although, CDPR staff are trained in avoidance and minimization protocols and are aware of the locations of known special-status plant species. As a result, direct impacts to special-status plants are negligible. This trend is expected to continue in the future.

Access by non-CDPR vehicles (CA-34) Concessions (CA-36). Impacts from vehicles associated with these activities are similar to those described for motorized vehicle (CA-1) described above,

especially since vehicles associated with these activities occur on open sand beach. As a result, direct impacts are considered to be minor. This trend is expected to continue in the future.

Emergency response by CDPR staff (CA-33). Emergency response activities already occur within the HCP area and can occur anywhere where an emergency response is required. Emergency response activities by nature require a quick response for public safety, therefore, protection of natural resources may not be possible during an emergency response. Effects on special-status plant species from emergency response activities is similar to those listed under heavy equipment response (CA-29) except that implementing protection measures is often not possible and emergency response, although extremely rare, can occur within aquatic habitats as well and impact aquatic special-status plant species such as marsh sandwort and Gambel's watercress. Within the HCP area, emergency response activities within known special-status plant species habitats are extremely rare and destruction of sensitive habitat has not been documented to date. As a result, the potential direct impact of these activities on special-status plants is considered minor. This trend is expected to continue in the future.

Other Activities

Dust Control Activities (CA-44). Dust control activities currently occur in the HCP area. Dust control activities can directly impact special-status plant species and their habitat. Direct effects include trampling or removing special-status plants during work activities. Indirect effects include habitat alteration (e.g., changing species composition as a result of altered wind, sand transport, or moisture content). The potential magnitude of impacts on special-status plants and their habitat varies depending on where activities take place. However, dust control project requirements identified in the Dust Control Program MMRP (CDPR 2017) include AMMs, such as conducting pre-work surveys for special-status plants within 100 feet of the work areas, flagging and protection for special-status plants, establishment of 25-foot avoidance areas around special-status plants, and restoration of disturbed habitat to avoid impacts to special-status plant species. In addition, planting of native dune vegetation for dust control activities may benefit special-status plants. Therefore, direct impacts to special-status plants as a result of dust control activities are negligible. Impacts from future dust control activities are described in EIR Section 6.4.1.9.

Cultural Resources Management (CA-45). Cultural resources management does not occur within the HCP area aquatic habitats (e.g., Arroyo Grande Creek, Oso Flaco Lake, Pismo Creek); therefore, special-status plants found in aquatic habitat (e.g., Gambel's watercress and marsh sandwort) are not impacted by these activities. Cultural resources management currently occurs in terrestrial habitats in the HCP area and is not known to have directly impacted special-status plants to date. However, cultural resource sites have been located in areas adjacent to known occurrences of special-status plants. To minimize the potential to indirectly impact special-status plants, as part of their standard practice and/or Listed Plant AMMs, prior to the start of any cultural resources management activities adjacent to special-status plant species habitat, a CDPR biologist flags and/or fences the work area and ensures any nearby special-status plant habitat is avoided. Therefore, the direct impact on special-status plant species is negligible. This trend is expected to continue in the future.

Use of pesticides (CA-51). Herbicide use by aerial spraying may impact non-target, native vegetation, including special-status plant species. Truck mounted spraying and manual removal does not affect non-target vegetation because invasive vegetation is clearly identified for removal. However, herbicide application conducted on foot or from truck mounted sprayers can

result in trampling or inadvertent damage to special-status plant species if they occupy the same area as target plant species. Contamination of special-status plants from herbicides can also result from application drift, rainfall runoff, or residue leaching through the soil into groundwater. For any weed control activities, listed plants are flagged and avoided. Herbicide application does not occur during inclement weather to reduce impacts to non-target vegetation, including special-status species. In addition, only trained applicators apply herbicides and all label rates and other CDPR standard practices are followed. CDPR also takes extra precautions applying herbicides near open water and wetlands and other sensitive habitats that support native habitats and special-status plant species. Timing of herbicide application takes into account wind speed and moisture in the air to reduce the potential of transfer of herbicide to non-target plants. As a result, direct and indirect impacts from herbicide are considered minor. Overall, the use of herbicides results in reduced non-native vegetation and allow for expansion of native plant communities; therefore, herbicide application is expected to result in a net benefit to native vegetation, including special-status plant species. This trend is expected to continue in the future.

Sensitive Natural Communities

Covered activities occurring outside sensitive natural communities and/or that have no risk of impacting sensitive natural communities are dismissed from further discussion. Covered activities with no impact on sensitive natural communities golfing (CA-4); boating/surfing (CA-8); aerial/wind driven activities (CA-9); campground maintenance (CA-20); street sweeping (CA-25); ASI courses (CA-35); Pismo Beach Golf Course operations (CA-37), CDPR agricultural land management (CA-46); bioreactor on agricultural lands (CA-47), and CDPR UAS use for park activities (CA-52).

Some existing covered activities occur in sensitive natural communities as defined by the USFWS, CDFW, and/or CCC. However, many of these recreation related activities, park maintenance activities, and/or natural resource management activities do not remove or destroy sensitive natural vegetation communities and/or result in significant impacts to sensitive natural communities. These activities include bicycling (CA-4), fishing (CA-5), dog walking (CA-6), SNPL and CLTE Management (CA-12a and 12b), tidewater goby and salmonid surveys (CA-13), CRLF surveys and associated management (CA-14), listed plant monitoring and propagations (CA-15), habitat restoration (CA-16), invasive plant and an animal control (CA-17), habitat monitoring system (CA-18), water quality monitoring (CA-19), general facilities maintenance (CA-21), trash control (CA-22), wind fencing (CA-23), sand ramp and other vehicular maintenance (CA-24), perimeter and vegetation island fencing (CA-27), cable fence maintenance (CA-28), heavy equipment response (CA-29), minor grading (CA-30), boardwalk and other pedestrian maintenance (CA-31), ranger and lifeguard patrols (CA-32), emergency response by CDPR staff (CA-33), access by non-CDPR vehicles (CA-34), ASI courses (CA-35), concessions (CA-36), natural history and interpretation programs (CA-39), and cultural resource management (CA-45). In addition, habitat restoration (CA-16), invasive plant and animal control (CA-17), and water quality monitoring (CA-19) improve habitat by planting native plants, improving water quality, removing invasive plants, and ultimately restoring native vegetation and sensitive natural communities in the HCP area. Perimeter and vegetation island fencing (CA-27) also benefits sensitive natural communities by restricting vehicles from entering native vegetation areas and/or driving out of the HCP area into off-site sensitive areas. Because these

activities do not have a substantial adverse impact on any riparian habitat or sensitive natural community they are dismissed from further discussion.

A discussion of existing park operations that could result in impacts to sensitive natural vegetation communities follows.

Motorized Recreation (CA-1), Camping (CA-2), Pedestrian Activities (CA-3), Equestrian Recreation (CA-7), Holidays (CA-10) and Special Events (CA-11). Human uses, including motorized recreation, camping, pedestrian activities, and equestrian recreation, can alter vegetation within sensitive natural communities. Human visitors in the area can trample vegetation and/or disturb soils making them less suitable for native vegetation. Human visitors and horses can also introduce non-native, invasive plant species that can out-compete native vegetation, thus, changing the composition of natural communities. These impacts can be exacerbated during holidays and special events when more visitors may be in the HCP area. However, within the HCP area, most of these recreation activities occur on bare sand. In addition, CDPR provides educational content and posts signs to keep visitors from entering sensitive areas and CDPR closes and restores informal trails in sensitive natural communities. As a result, direct and indirect impacts to sensitive natural communities from these activities are minor. This trend is expected to continue in the future.

Routine Riparian Maintenance (CA-26). Routine riparian maintenance activities routinely occur in HCP area. These activities include ongoing maintenance of trails, infrastructure, or other projects designed to facilitate access while still providing the greatest protection possible to riparian and aquatic maintenance areas. Routine riparian maintenance impacts Oso Flaco Lake, Meadow Creek, Carpenter Creek, Pismo Lake, and/or Oceano Lagoon during culvert maintenance; removal of sediment, vegetation, and/or debris from the spillway at Pismo Lake; removal of emergent species; removal of exotic species; and/or trimming of riparian trees and vegetation. CDPR currently has a Lake or Streambed Alteration Agreement (1600-2012-0001-R4) for these activities in compliance with Section 1600 of the California Fish and Game Code. The Lake and Streambed Alteration Agreement includes measures to protect riparian vegetation including, minimizing the amount of riparian vegetation removed (including trees and shrubs) to the minimum necessary to complete the project, leaving roots and stumps in place to facilitate regrowth and prevent erosion, replacing all woody plants/trees with a diameter breast height (DBH) of four inches at a 3:1 ratio, replacing all heritage trees with a DBH of 24 inches or greater at a 10:1 ratio, and submitting a revegetation plan to the CDFW for review and approval. As a result, direct impacts to riparian vegetation are minor. This trend is expected to continue in the future. Impacts to jurisdictional waters associated with the riparian maintenance activities are discussed in more detail below under jurisdictional waters.

Motorized Vehicle Crossing of Pismo/Carpenter, Arroyo Grande Creek, and Oso Flaco Creeks (CA-40). Impacts to sensitive natural communities from this activity are discussed below under jurisdictional waters below since the sensitive natural communities are aquatic resources.

Dust Control (CA-44). Dust control activities currently occur in the HCP area. Dust control activities have the potential to directly and indirectly impact sensitive natural vegetation communities, including by altering habitat (e.g., changing species composition as a result of altered wind, sand transport, or moisture content). The magnitude of impacts on sensitive vegetation communities varies depending on where activities take place. In general, the magnitude of impacts on sensitive vegetation communities are lowest when dust control activities take place in open sand habitat because these areas support little to no dune vegetation

and any impacts to this habitat are not significant. As program activities approach the edge of vegetation islands and other vegetated areas, such as parts of the program area within the Phillips 66 leasehold area, the impact to sensitive plant communities increases. Some dust control activities (e.g., deployment of temporary monitoring sites) require a minor amount (e.g., less than 0.5 acre) of native vegetation removal. However, dust control project requirements (CDPR 2017) include AMMs, such as impacting the minimum area necessary and clearly defining the project boundary. In addition, planting native dune vegetation for dust control activities generally benefits the sensitive natural vegetation communities within the dune system. Therefore, direct and indirect impacts to sensitive natural communities as a result of dust control activities are negligible. Impacts associated with future dust control activities are included in EIR Section 6.4.2.

Use of Pesticides (CA-51). CDPR controls infestations of terrestrial invasive plant species, including Russian wheatgrass (*Elymus farctus ssp. boreali-atlanticus*), veldt grass (*Ehrharta calycina*), European beachgrass (*Ammophila arenaria*), cape ivy (*Delairea odorata*), and pampas grass (*Cortaderia selloana*) within the HCP area, including within sensitive natural vegetation communities where invasive plant species are prevalent. Herbicide use by aerial spraying, truck mounted spraying, and manual removal may impact native vegetation communities by trampling or inadvertently damaging native vegetation within the community. Contamination of non-target, native species from herbicides could also result from application drift, rainfall runoff, or residue leaching through the soil into groundwater. However, herbicide application does not occur during inclement weather to reduce impacts to non-target vegetation. In addition, only trained applicators apply herbicides and all label rates and other CDPR standard practices are followed. Timing of herbicide application takes into account wind speed and moisture in the air to reduce the potential of transfer of herbicide to non-target plants. CDPR also applies all algaecides and aquatic pesticides in accordance with the Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for Residual Aquatic Pesticide Discharges to Waters of the United States from Algae and Aquatic Weed Control Application. Currently, CDPR is developing an Aquatic Pesticide Application Plan for the NPDES Permit. All algaecides and aquatic herbicides used by CDPR are registered for use on aquatic sites by the California Department of Pesticide Regulation. As a result, direct and indirect impacts from herbicide are considered minor. Overall, the use of herbicides results in reduced non-native vegetation and allow for expansion of native plant communities; therefore, herbicide application is expected to result in a net benefit to native vegetation. This trend is expected to continue in the future.

Jurisdictional Waters and Wetlands

Many existing covered activities do not occur within or near jurisdictional waters, including wetlands and have no risk of impacting these resources. As a result, these activities are dismissed from further discussion. Covered activities with no impacts on jurisdictional waters include camping (CA-2), bicycling and golfing (CA-4), special events (CA-11), SNPL/CLTE habitat protection/fencing (CA-12a), SNPL/CLTE management (CA-12b), habitat restoration (CA-16), campground maintenance (CA-20), general facilities maintenance (CA-21), trash control (CA-22), wind fencing installation/maintenance/removal (CA-23), sand ramp and other vehicular access maintenance (CA-24), street sweeping (CA-25), perimeter and vegetation island fence installation/maintenance/removal (CA-27), heavy equipment response (CA-29), minor grading (CA-30), boardwalk and other pedestrian access maintenance (CA-31), range, lifeguard, and staff patrols (CA-32), access by non-CDPR vehicles (CA-34), American Safety Institute courses (CA-35), concessions (CA-36), natural history and interpretation programs (CA-39), dust control

activities (CA-44), cultural resources management (CA-45), CDPR management of agricultural lands (CA-46), and maintenance of a bioreactor on agricultural lands (CA-47).

Some existing covered activities occur in or adjacent to jurisdictional waters, including wetlands, creeks, lakes, and/or the ocean. However, many of these activities are recreation-related or park maintenance activities that cause temporary impacts (e.g., increased turbidity) and are not subject to Section 404/401 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, or Section 1600 of California Fish and Game Code. These activities include motorized recreation (CA-1), pedestrian activities (CA-3), fishing (CA-5), dog walking (CA-6), equestrian recreation (CA-7), boating/surfing (CA-8), aerial/wind driven activities such as kiteboarding (CA-9), holidays (CA-10), tidewater goby and salmonid surveys (CA-13), CRLF surveys and associated management (CA-14), listed plant monitoring and propagations (CA-15), invasive plant and an animal control (CA-17), habitat monitoring system (CA-18), water quality monitoring (CA-19), cable fence maintenance (CA-28), emergency response by CDPR staff (CA-33), and Pismo Beach Golf Course operations (CA-37). Because these activities are not subject to Section 404/401 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, or Section 1600 of California Fish and Game Code and do not have a substantial adverse impact on federally or state protected wetlands they are dismissed from further discussion.

A discussion of existing park operations that could result in impacts to jurisdictional waters follows.

Routine Riparian Maintenance (CA-26). Routine riparian maintenance activities impact Oso Flaco Lake, Meadow Creek, Carpenter Creek, Pismo Lake, and/or Oceano Lagoon during culvert maintenance; removal of sediment, vegetation, and/or debris from the spillway at Pismo Lake; removal of emergent species; removal of exotic species; and/or trimming of riparian trees and vegetation. CDPR currently has a Lake or Streambed Alteration Agreement (1600-2012-0001-R4) for these activities in compliance with Section 1600 of the California Fish and Game Code and measures from the LSAA are implemented, as appropriate, during all riparian maintenance activities. Therefore, direct and indirect impacts from routine riparian maintenance on jurisdictional resources are minor. This trend is expected to continue in the future.

Motorized Vehicle Crossing of Pismo/Carpenter, Arroyo Grande Creek, and Oso Flaco Creeks (CA-40). Vehicles crossing Pismo/Carpenter, Arroyo Grande, and Oso Flaco Creeks can temporarily affect water quality by exposing water to hazardous materials (e.g., fuel, lubricants) and/or stirring up sediment. However, these impacts are typically localized and minimal, if they occur at all. As a result, direct and indirect impacts from motorized vehicles crossing are negligible. This trend is expected to continue in the future.

Use of Pesticides (CA-51). CDPR controls infestations of terrestrial invasive plant species Russian wheatgrass, European beachgrass, veldt grass, and giant reed present within the HCP area including along riparian corridors, lagoons and wetlands. Aerial application of pesticides is not conducted within 100 feet to reduce impact to aquatic resources. Contamination of water from pesticide application can occur from application drift, rainfall runoff, or residue leaching through the soil into groundwater. However, herbicide application does not occur during inclement weather to reduce impacts from drift. In addition, only trained applicators apply herbicides and all label rates and other CDPR standard practices are followed. Timing of herbicide application takes into account wind speed and moisture in the air to reduce the potential of transfer of herbicide to adjacent waterbodies. CDPR also applies all algacides and aquatic in accordance with the Statewide General NPDES Permit for Residual Aquatic Pesticide

Discharges to Waters of the United States from Algae and Aquatic Weed Control Application. Currently, CDPH is developing an Aquatic Pesticide Application Plan for the NPDES Permit. In addition, CDPH applies all algaecides and aquatic herbicides according to label directions. All algaecides and aquatic herbicides used by CDPH are registered for use on aquatic sites by the California Department of Pesticide Regulation. As a result, direct and indirect impacts to aquatic resources from pesticide use are considered to be minor. This trend is expected to continue in the future.

Wildlife Movement and Nursery Sites

The effect of existing covered activities on wildlife movement and nursery sites is described below. No changes are proposed to existing activities. Therefore, these effects are considered part of the environmental baseline conditions within the HCP area.

Park Visitor Activities

Park visitor activities (CA-1 to CA-11) are recreational uses that generally do not involve activities that restrict wildlife movement. Motorized recreation deters wildlife from moving through areas open to motorized use, including small and large mammals, birds, reptiles, and amphibians. Some park visitor activities can also impede wildlife movement during Special Events (CA-11). However, these impacts are temporary, are not substantial, and do not cause the population decline of any wildlife species in the HCP area. The existing impact of park visitor activities on wildlife movement and nursery sites is minor.

Natural Resources Management

The natural resources program helps mitigate for potential impacts to wildlife movement from visitor activities by monitoring and protecting HCP covered animal species (CA-12 through CA-14), plant monitoring and vegetation planting (CA-15), restoring and enhancing wildlife habitat (CA-16), controlling invasive species (CA-17), monitoring wildlife populations in the HCP area (CA-18), and monitoring water quality (CA-19). The existing impact of natural resources management activities on wildlife movement and nursery sites is beneficial.

Park Maintenance and Visitor Services

Park maintenance activities (CA-20 to CA-31) and visitor services (CA-32 to CA-39) do not impede wildlife since they do not create permanent barriers to wildlife movement within the HCP area. In addition, most park maintenance activities are temporary and relatively short in duration and only deter wildlife from moving through the area during the period of disturbance. As a result, park maintenance and visitor services have negligible to minor impact on wildlife movement.

Other Activities

Existing covered activities such as creek crossings (CA-40), agricultural land management (CA-46), bioreactor maintenance (CA-47), and pesticide use (CA-51) do not involve activities or structures that impede wildlife movement or affect nursery sites.

Dust Control activities (CA-44) do not substantially interfere with the movement of native fish or wildlife species or established wildlife corridors or impede the use of native wildlife nursery sites because activities are installed on open sand areas and do not represent a substantial barrier to wildlife migration or movement.

Wintering/Migratory Birds

Existing park operations, including recreation, natural resources management, park maintenance, visitor services, and other existing activities are known to impact wintering and/or migratory birds. Impacts can occur anywhere in the HCP area depending on the type of bird. For example, activities that take place on the wet sand portion of the beach, can impact shorebirds and other birds foraging along the wrack line or intertidal areas. Activities at Oso Flaco Lake can impact foraging or roosting waterbirds and songbirds. The HCP area contains numerous birding hotspots, including areas used by birds during spring and fall migrations. The primary birding hotspots in the HCP area include Oso Flaco Lake, Oceano Lagoon, and Oceano Campground. The risk of impact on migratory birds is considered higher at the birding hotspots.

Many covered activities have been observed temporarily displacing foraging or wintering birds, altering their normal behavior patterns. Covered activities have also been observed flushing wintering or foraging birds from optimal habitat to less suitable habitat. However, most disturbances are temporary and short in duration and/or birds fly to other areas to forage/roost and avoid disturbance. As a result, impacts of most covered activities on wintering/migratory birds are negligible or minor and do not result in mortality or injury (CA-2 through CA-9; CA-12 through CA-40; CA-44 through CA-47; CA-51). These activities are not discussed further. In addition, some activities have beneficial impacts on wintering/migratory birds, including invasive plant and animal control (CA-17), habitat monitoring system (CA-18), and pesticide use (CA-51) since they provide important information on migratory activity in the HCP area and/or improve the quality of foraging habitat. This trend is expected to continue in the future.

Impacts to wintering/migratory birds, including special-status species with some exceptions such as the western burrowing owl, do not require permits, authorizations, or implementation of AMMs during the non-breeding season timeframe to ensure that impacts are less than significant. As a result, only specific existing covered activities thought to have lethal impacts to wintering/migratory birds are discussed further below.

Park Visitor Activities

Motorized Recreation (CA-1). Most birds fly out of harm's way when vehicles approach. However, foraging or roosting birds within areas where motorized vehicles are permitted have been struck by vehicles and injured or killed, including individuals and flocks along the shoreline. As a result, the lethal impacts from motorized recreation on wintering or migratory birds within the HCP area are moderate. This trend is expected to continue in the future.

Holidays (CA-10) and Special events (CA-11). Impacts to wintering and migratory birds from visitor activities are likely exacerbated during periods of high visitor use, such as holidays (CA-10) or special events (CA-11) the same as described for SNPL. As a result, risk of lethal impacts from holidays and special events on wintering and migratory birds is moderate. This trend is expected to continue in the future.

Oceano Dunes District
Habitat Conservation Plan EIR

Appendix E: Native American Communications

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STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



June 4, 2018

Jay Baker
California Department of Parks and Recreation

Sent by Email: jay.baker@parks.ca.gov

Re : Pismo SB and Oceano Dunes SVRA Public Works Plan, San Luis Obispo County

Dear Mr. Baker,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results indicate Native American cultural sites are present. Please contact the San Luis Obispo County Chumash Council, 1030 Ritchie Road, Grover Beach, CA 93433; 805-481-2461. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native American tribes who may also have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at frank.lienert@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to be 'Frank Lienert', written over a horizontal line.

Frank Lienert
Associate Governmental Program Analyst

Native American Heritage Commission**Native American Contacts****6/4/2018**

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 kkahn@santaynezchumash.org
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(805) 686-9578 Fax

Barbareno/Ventureno Band of Mission Indians
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 Ojai, CA 93023
 itumamait@hotmail.com
 (805) 646-6214

Salinan Tribe of Monterey, San Luis Obispo Counties
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 Atascadero, CA 93422
 info@salinantribe.com
 (805) 858-8199

(805) 423-5195 Cell

Xolon-Salinan Tribe
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Coastal Band of the Chumash Nation
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vak titvu titvu - Northern Chumash Tribe
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Northern Chumash Tribal Council
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Salinan Tribe of Monterey, San Luis Obispo Counties
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 831-385-1490

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed **Pismo SB and Oceano Dunes SVRA Public Works Plan, San Luis Obispo County**

Native American Heritage Commission

Native American Contacts

6/4/2018

Xolon-Salinan Tribe
Donna Haro, Tribal Headwoman
P.O. Box 7045 Salinan
Spreckels, CA 93962
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(925) 470-5019

Northern Chumash Tribal Council
Violet Cavanaugh
P.O. Box 6533 Chumash
Los Osos, CA 93412
760-549-3532

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State of California • The Resources Agency

Edmund G. Brown, Jr., Governor

DEPARTMENT OF PARKS AND RECREATION

Lisa Ann L. Mangat, Director

Off Highway Motor Vehicle Division HQ
1725 23rd Street, Suite 200
Sacramento, CA 95816-7100
916-323-8392 – Fax: 916-324-1610

April 12, 2017

Northern Chumash Tribe
Chairwoman
Mona Olivas Tucker
660 Camino Del Rey
Arroyo Grande, CA 93420

Dear Chairwoman Tucker:

The California Department of Parks and Recreation (CDPR) is in the process of preparing a Habitat Conservation Plan (HCP) for the Oceano Dunes State Vehicle Recreation Area (ODSVRA). The HCP is a guidance document that provides a framework for promoting the protection and recovery of natural resources, including endangered species, while streamlining the permitting process for recreation management, natural resource management, maintenance, and planned development. Below please find a description of the proposed project, maps showing the project location (attached), and the name of our project points of contact, pursuant to PRC § 21080.3.1 (d).

In conjunction with the HCP, an environmental review will be conducted, including identifying any potential impacts to cultural resources as well as natural resources. In general, operations at the Park will remain unchanged, with a few possible exceptions. The amount of land closed off seasonally to allow for bird nesting may be reduced. Additionally, trails-only OHV riding may be allowed in a previously off limits area (known as "40 Acres". See attached map for location). If CDPR decides to explore these options in the future, they will be subject to further environmental review in compliance with CEQA.

The California Native American Heritage Commission (NAHC) has previously been contacted regarding traditional cultural properties and sacred sites within Oceano Dunes State Vehicle Recreation Area. A search of the NAHC sacred lands file did not indicate the presence of any such resources within the project area.

You are identified by DPR as the point of contact for consultation under AB52. Pursuant to PRC § 21080.3.1 (b), you have 30 days from the receipt of this letter to request consultation, in writing, with the California Department of State Parks. If you have any comments or questions, or would like further information about this project, please contact me (916-628-0966 or jay.baker@parks.ca.gov, or address above) or ODSVRA Tribal Liaison Stephanie Little (805-610-6229, stephanie.little@parks.ca.gov).

Thank you for your time and assistance. I look forward to hearing from you.

Sincerely,

Jay Baker
Associate State Archaeologist
OHMVR Sacramento, CA
California Department of Parks and Recreation