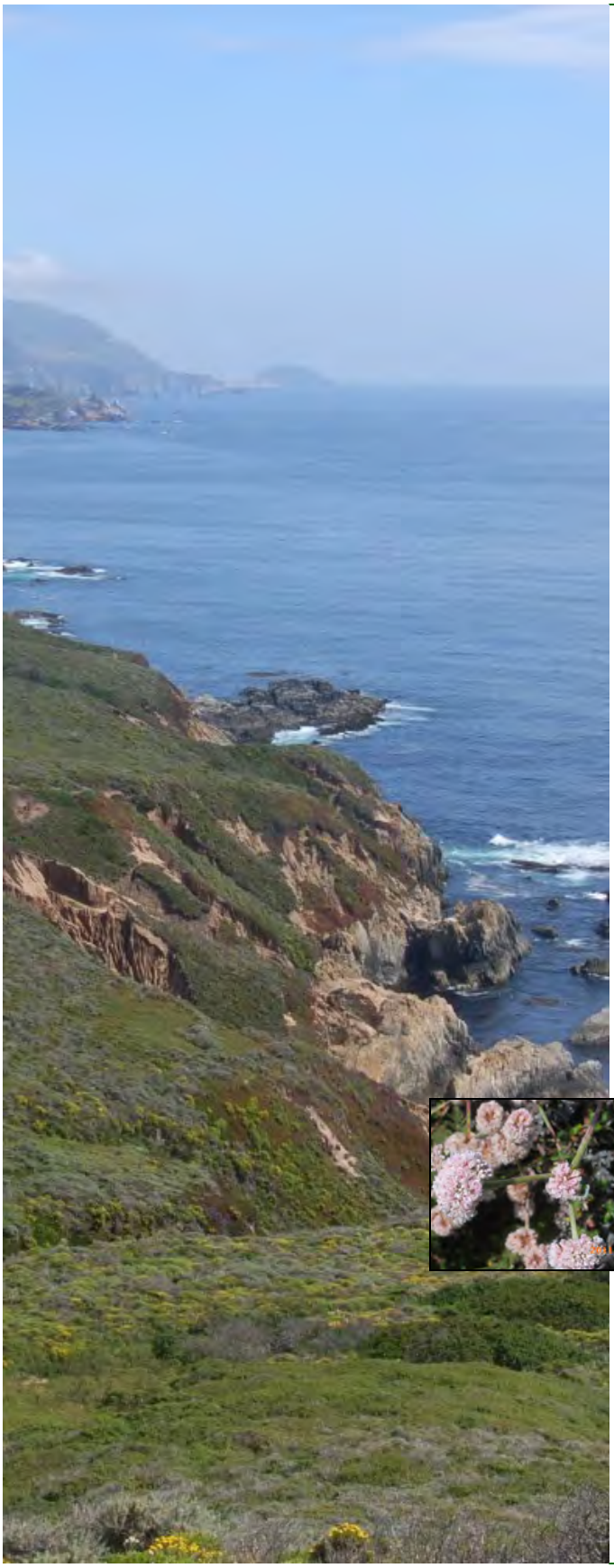

COASTAL HABITAT RESTORATION AND COASTAL TRAIL IMPROVEMENT PROJECT

Garrapata State Park

Initial Study Mitigated Negative Declaration

Draft

State of California
Department of Parks and Recreation
Monterey District

June 13, 2012

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CHAPTER I
INTRODUCTION AND PROJECT DESCRIPTION

Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to evaluate the potential environmental effects of the proposed Coastal Habitat Restoration and Coastal Trail Improvement Project at Garrapata State Park, Monterey County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et. seq*., and the State CEQA Guidelines, California Code of Regulations (CCR) Section 15000 *et. seq*.

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

The lead agency is the public agency with primary approval authority over the proposed project. The lead agency for the project is the California Department of Parks and Recreation (DPR). The Monterey District of DPR would carry out the project.

Purpose and Document Organization

The purpose of this document is to evaluate the potential environmental effects of the proposed Coastal Habitat Restoration and Coastal Trail Improvement Project at Garrapata State Park. Mitigation measures have been incorporated into the project as needed. This document is organized as follows:

- **Chapter I - Introduction and Project Description**
  This chapter includes the need, objectives, and description of the project.

- **Chapter II - Environmental Checklist**
  This chapter includes a description of the setting and a discussion of the environmental issues (Aesthetics, Agriculture and Forestry, Air Quality,

Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Service Systems). For each of these issues, the potential environmental impacts are identified. Mitigation measures are incorporated, where appropriate, to reduce the potential impacts to a less-than-significant level. This Chapter also includes the Mandatory Findings of Significance, which summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impacts to human beings, as identified in the Initial Study.

- **References**
  This section includes the references and sources used in the preparation of this IS/MND.

- **Report Preparation**
  This section provides a list of those involved in the preparation of this document.

- **Appendix A – Site Maps**
  This appendix includes maps of the regional location, Garrapata State Park, the project area, Coastal Trail alignments and overlooks, trail closures, and biotic resources.

- **Appendix B – Site Photos**
  This appendix includes photos depicting the setting of the trail alignments, overlooks, and proposed pedestrian bridges.

- **Appendix C – Trail Closure and Removal Measures**
  This appendix includes a table outlining non-system trail segment closure and removal measures.

- **Appendix D – Trail Improvement Design Guidelines**
  This appendix includes design guidelines for the Coastal Trail improvements, including trail surfacing, overlooks, pedestrian bridges, steps, and other trail features.

- **Appendix E – Mitigation and Monitoring Reporting Program**
  This appendix includes the program for monitoring and reporting the revisions required in the project and the measures imposed to mitigate or avoid significant environmental effects.

Summary of Findings

Chapter II of this document includes the Initial Study (IS) Environmental Checklist. This checklist identifies the potential environmental impacts by issue and a discussion of each impact that could result from the proposed project.

Based on the IS and supporting environmental analysis provided in this document, the proposed Coastal Habitat Restoration and Coastal Trail Improvement Project would result in less-than-significant impacts or no impacts for the following issues: Aesthetics, Agriculture and Forestry, Air Quality, Greenhouse Gas Emissions, Geology and Soils, Hazards and Hazardous Materials, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Service Systems. With implementation of mitigation measures, the proposed project would result in less-than-significant impacts for the following issues: Biological Resources, Cultural Resources, and Hydrology and Water Quality.

In accordance with Section 15064(f) of the CEQA Guidelines, a Mitigated Negative Declaration (MND) would be prepared if the proposed project would not have a significant effect on the environment after the inclusion of mitigation measures. Based on the available information and the environmental analysis presented in this document, there is no substantial evidence that, after incorporation of the mitigation measures, the proposed project would have a significant effect on the environment. It is proposed that a Mitigated Negative Declaration be adopted for this project, in accordance with CEQA Guidelines.

Project Location

The proposed project includes coastal habitat recovery and improvements to existing trail segments within Garrapata State Park (SP), which is situated on the Central California coast south of Carmel and to the north of the community of Big Sur (See Appendix A – Figure 1). The project area is located within a narrow strip of land on the seaward (west) side of State Highway 1, featuring approximately 7 miles of coastline. This westernmost portion of Garrapata SP totals 277 acres. The entire park unit encompasses approximately 2,902 acres, most of which is located to the east of State Highway 1 (See Appendix A – Figure 2).

The project area is accessed from State Highway 1. There are a total of 21 existing vehicle turnouts/trail access gates along the western side of the highway. The access gates (trailheads) are currently numbered by DPR as Gates 1 through 19 (two gates have north and south turnouts/access points). Although existing Coastal Trail segments provide connections between some of the access gates, most of the trail segments are non-continuous due to terrain constraints.

Project Need

Numerous trail segments, totaling approximately 9.4 miles, presently exist within the project area. Trail use is limited to pedestrian only. Over the years, many of these trail segments were created by park users. User-created trails are considered non-system trails by DPR. Approximately 67% of the existing trails are considered non-system trails. There is presently no directional trail signage within the project area. As a result, park visitors continue to use non-system trails, many of which are located within areas featuring sensitive biotic and cultural resources.

The existing non-system trails and associated visitor use results in greater disturbance to seacliff buckwheat (*Eriogonum parvifolium*), which provides food for the federally endangered Smith's blue butterfly (*Euphilotes enoptes smithi*). Field surveys conducted in 2011 identified seacliff buckwheat along most of the existing trail segments. Field surveys conducted in 2010 confirmed the presence of Smith's blue butterfly within the project area. Adult butterfly emergence and seasonal activity is synchronized with the blooming period of the buckwheat. The buckwheat blooming period generally occurs from June to September, which also coincides with periods of higher summer visitor use at Garrapata SP.

Some of the existing system and non-system trails are also located within identified archaeological sites. Several of these trails have evidence of accelerated erosion and soil loss, which is presently impacting the archaeological sites. Most of the existing trails are earthen trails, with no improved surfacing. Thus, within archaeological sites the soil surface is directly exposed to disturbance by pedestrian trail use.

The project proposes to close 6.3 miles of non-system trails in order to protect and restore Smith's blue butterfly habitat, protect archaeological sites, and address on-going erosion. The project also proposes to clearly designate and improve California Coastal Trail (Coastal Trail) segments, totaling 3.1 miles, to protect biotic and cultural resources, provide erosion control, and enhance coastal public access. Proposed Coastal Trail improvements include capping the existing trail bed with an aggregate base, installing a new footbridge at Soberanes Creek, installing a new foot bridge and one puncheon (a low bridge with no hand railings) crossing at Doud Creek, replacing wood and cable steps, designating and improving overlook sites, and installing signage. These trails would be accessed from a total of 17 trailheads. Table 1 (Page 10) summarizes the Coastal Trail improvements and length of trail closures at each trailhead. As part of project implementation, DPR would likely renumber the existing trail gates (trailheads) so there are no gaps in the numbering system.

Without removal of non-system trails and improvements to existing Coastal Trail segments, a greater level of disturbance to biotic and cultural resources would

continue to occur as park visitors continue to impact Smith's blue butterfly habitat and archaeological sites along non-system trails. Without improvements to the Coastal Trail segments, the archaeological sites would remain directly exposed to trail use, accelerated erosion would continue to occur, and visitors would continue to impact riparian habitat, including potential habitat for California red-legged frog (a federally threatened species) at unimproved, undesignated creek crossings.

Project Objectives

The objectives for the Coastal Habitat Restoration and Coastal Trail Improvement Project at Garrapata SP include:

- Remove non-system trails to protect biotic and cultural resources
- Protect and restore Smith's blue butterfly habitat
- Protect and enhance habitat for California red-legged frog
- Provide pedestrian bridges at existing creek crossings to minimize impacts to riparian resources, including potential habitat for California red-legged frog
- Protect archaeological sites from accelerated erosion, resulting from trailbed entrenchment, and soil disturbance resulting from trail use
- Repair eroded trailbeds, steps, and other trail features to minimize future erosion
- Clearly designate the Coastal Trail (Garrapata Segment) through signage and trail improvements
- Provide enhanced coastal public access through improved overlooks at scenic vistas

Project Description

The proposed project includes restoration of coastal habitat and improvements to the Coastal Trail within the portion of Garrapata SP located to the seaward side (west) of Highway 1. Coastal scrub is the predominant habitat type within the project area. Seacliff buckwheat, which occurs within this habitat type, serves as a host plant and provides an important food source for the federally endangered Smith's blue butterfly. A key goal of the habitat restoration is to protect and enhance the seacliff buckwheat population in order to benefit the Smith's blue butterfly.

Approximately 9.4 miles of trails currently exist within the project area. Many of these trails were created by park users and are not considered to be part of the Garrapata SP system trails by DPR. Many of these non-system trails are located within areas featuring sensitive biotic and cultural resources, including known archaeological sites and areas with known or potential presence of Smith's blue butterfly. Some of these non-system trails also show evidence of accelerated erosion and are situated along undercut coastal bluff edges. The proposed project includes removal of 6.3 miles of non-system trail segments.

The trail segments which are considered to be part of the State Park system would be improved and designated as part of the Coastal Trail - Garrapata Segment. The Coastal Trail is an on-going effort to establish a trail along the California Coast, extending 1,200 miles from Oregon to Mexico. The California Coastal Conservancy is one of the state agencies involved in promoting and developing the Coastal Trail. The Coastal Conservancy is contributing funding to this project.

Thus, the proposed project includes the following key components:

- Restoration of coastal scrub to benefit the Smith's blue butterfly
- Enhancement of suitable habitat for California red-legged frog
- Protection of archaeological sites
- Removal of user-created (non-system) trails
- Improvements to the Coastal Trail – Garrapata Segment

Each of these project components are discussed in greater detail in the following paragraphs.

Smith's Blue Butterfly Habitat Restoration. The removal of non-system trails, as well as the removal of invasive, non-native plant species and revegetation of degraded areas within the park would benefit the Smith's blue butterfly. Approximately 5.0 acres of coastal scrub habitat west of State Highway 1 would be restored and/or rehabilitated as part of the Coastal Trail project. The Coastal Trail project includes the closure/rehabilitation of approximately 6.3 miles of trail and removal of invasive, non-native plant species (approximately 3.5 acres). DPR will secure a park-wide Safe Harbor Agreement (SHA) with United States Fish and Wildlife Service (USFWS). Take of butterflies and their habitat would be minimized through the implementation of construction and maintenance measures. Closure of non-system trails, removal of invasive, non-native plant species, and revegetation of coastal scrub with buckwheat would benefit the species, such that the project results in a net benefit to the species. The SHA outlines measures to minimize impacts to the species during trail construction and long-term trail maintenance. In addition, the Coastal Trail project includes habitat restoration to achieve measureable benefit to the species concurrent with coastal trail improvements.

California Red-legged Frog Habitat Enhancement. The removal of unimproved creek crossings, as well as habitat enhancement actions within Soberanes Creek would benefit the California red-legged frog. Prior to implementing the Coastal Trail project, DPR will secure a park-wide Safe Harbor Agreement (SHA) with USFWS. Take of California red-legged frogs and their habitat would be avoided and/or minimized through the implementation of construction and maintenance measures. The SHA outlines measures to avoid impacts to the species during trail construction and long-term trail maintenance.

Protection of Archaeological Sites. The project area features over 40 prehistoric archaeological sites along the approximately 7-mile coastline of Garrapata SP. These sites are primarily shellfish processing sites located at the edge of the coastal bluffs. Many of these archaeological sites are presently affected by accelerated and severe erosion caused by natural processes, excessive soil loss within existing trailbeds, and human disturbance from trail use and fishing access. The proposed project includes capping of designated Coastal Trail segments and closure of non-system trail segments. The project also includes capping of designated overlooks and relocation of overlooks outside of identified archaeological sites where feasible.

Non-system Trail Closure and Removal. The proposed closure and removal of 6.3 miles of non-system trail segments would require different methods depending on the potential presence of cultural resources, the condition of the trail surface, and vegetation along the trail segment. The Trail Closure and Removal Measures Table in Appendix C provides detailed guidance regarding trail removal methods. The issues involved in trail removal are discussed briefly below and in the Initial Study Environmental Checklist. Appendix A includes trail maps which depict the location of the non-system trail segments proposed to be closed and removed.

In areas with evidence of cultural resources, disturbance of the trail bed would be minimized. DPR will cap eroded trail segments as needed to avoid future accelerated erosion of archaeological sites. Where there is no evidence of cultural resources and the trailbed is heavily compacted or highly eroded, the soil surface within the existing trailbed may need to be rehabilitated in order to ensure successful revegetation of the trail alignment. In areas where the existing trail bed is not eroded, or heavily compacted, and native vegetation exists along the trail alignment, the trail may be closed at the entrance and allowed to revegetate naturally. Trail closure methods may include temporary installation of cable and rod fencing and/or placement of vegetation trimmings.

California Coastal Trail. The proposed project includes improvements to 3.1 miles of existing system trails, which would be designated as Coastal Trail segments. The proposed project also includes approximately 750 linear feet of new sustainable trail construction to reroute around a highly eroded areas or sensitive resource. These trail segments are located at 17 different trailheads, located on the west side of Highway 1. The Coastal Trail within Garrapata SP is non-continuous due to the rugged terrain in some areas, though there is connectivity between several of the trailheads. DPR would continue to limit the trails to pedestrian use only. Due to the topography of the area and level of funding available, the trail improvements would not make the trail accessible. Appendix A includes trail maps which depict the location of the existing trail gates (trailheads) and proposed Coastal Trail alignments within the project area.

The specific trail improvements would include the following:

- Designated Coastal Trail trailheads (17)
- Coastal Trail trailbed repairs and surfacing (3.1 miles)
- Overlooks (22)
- Pedestrian bridges (2 wood bridges/1 puncheon style crossing)
- Trail feature repairs (wood steps, cable steps, etc.)

These proposed improvements are summarized in Table 1 and described in greater detail in the following paragraphs. DPR Design Guidelines for the proposed improvements are included in Appendix D.

Trail Gates (Trailheads)**.** The existing trail entrance gates are presently not clearly signed or standardized. Some of the access gates have deteriorated fencing and signage, while other gates have no signage or fencing. All of the gates have existing unimproved turn-out parking on the west side of State Highway 1, though the size of the turnouts varies. According to DPR staff, these turnouts are located within the California Department of Transportation (Caltrans) right-of-way for State Highway 1. No improvements to the turnout parking are proposed as part of this project.

The proposed project includes repairs to 17 existing trail gate areas and installation of new signage. Repairs to existing fencing would be made as needed. Where fencing does not presently exist, small boulders may be placed as needed to prevent unauthorized motorized vehicle access and to demarcate the trail entrances. New signs would be installed which clearly designate the trailhead number and the California Coastal Trail emblem. DPR regulatory/warning signage would be repaired or replaced as needed. Trash receptacles would continue to be provided. All boulders and sign posts would be located within State Park property, outside of the Caltrans right-of-way. At four of the existing vehicle turnouts existing trail signage and any other trail features would be removed. Trailbeds at these locations would be rehabilitated and revegetated as needed. The existing vehicle turnouts would remain.

Trailbed Repairs and Surfacing**.** The Coastal Trail segments, which are presently soil surface, would be capped with an aggregate base to a width of 48 inches. Where the existing trailbed is in stable condition, the aggregate base would be approximately 6 to 8 inches in depth. In locations where the existing trailbed is substantially eroded, aggregate base would be used to fill the eroded sections. The aggregate base surfacing would be crowned to allow water to drain off the trailbed and prevent future accelerated erosion down the trail alignment. Cable and rod fencing may be used along the trail alignments where needed to protect sensitive resources and prevent access to closed trails. Appendix B includes photos of an existing trail segment with aggregate base surfacing.

Overlooks. Trail overlooks presently exist within the project area. These overlooks are located primarily along the coastal bluffs, providing scenic views of the coastline, rock outcroppings, and coves. Several of the overlooks have existing benches. Some of the existing overlooks are located within archaeological sites. Other overlooks are located on eroding bluff edges.

The project would install improvements at a total of 22 existing and relocated overlooks. Improvements would include installation of a low rock wall and aggregate base. Benches would be included at some of the overlook sites. Wood railing may also be installed at some of the overlooks as needed. The intent of the improvements is to clearly demarcate the overlook areas and minimize park user disturbance to bluff edges and archaeological sites. Appendix D includes DPR Design Guidelines for overlook improvements.

Where the existing overlook is located within a previously identified archaeological site or area with evidence of surface cultural resources, the overlooks would be relocated to an area outside of the archaeological site. Where relocation is not feasible and there is existing accelerated erosion and disturbance to the archaeological site, the overlook site would be capped with aggregate base to protect the cultural resource and prevent continued accelerated erosion.

Pedestrian Bridges. The existing trails cross Soberanes Creek and Doud Creek. No bridges presently exist. There is evidence of user-created pathways crossing within the Soberanes Creek corridor as there is no clear designated trail route. At Doud Creek, the existing stairs descend to the creek channel. A wood plank provides a temporary crossing.

The existing crossing at Soberanes Creek is located to the south of Trail Gate 8. Existing trails lead down to the incised creek corridor. Without a designated crossing or bridge, park users have created various pathways down into the creek corridor. The project at Soberanes Creek includes a new approximately 50-foot long pedestrian bridge spanning the creek corridor. A photo simulation of the proposed wood bridge, as viewed from State Highway 1, is included in Appendix B. DPR Design Guidelines for this type of bridge are included in Appendix D.

A new pedestrian bridge is also proposed at Doud Creek, which is located between Gates 18 and 19. Existing wood steps lead down to the creek channel on both sides of the creek and an existing trail along the creek provides access to Garrapata Beach. A temporary small wood plank provides an existing creek crossing. Toward the west, there is also evidence of user created pathways crossing the creek. The proposed project includes a wood bridge and puncheon at this location. The new bridge and puncheon would provide a connection between the two primary trail

segments and to the west to allow beach access. DPR Design Guidelines for the wood bridge and puncheon are included in Appendix D.

Trail Feature Repairs. The existing trail segments include wood steps, cable steps and a hillside walkway. While some of these trail features are in good condition, many of the features are deteriorated and in need of repair or replacement. In some locations where the trail alignments are relatively steep and there is evidence of erosion, new steps would be installed.

Access down the bluffs to the intertidal zone presently exists at Trail Gates 2 and 5. The steps have severely deteriorated and all that remains is exposed rebar. Park users continue to descend the bluffs, creating several pathways down the slope. It is not feasible to prevent park users from using these access routes. The proposed project includes installation of new wood steps at Trail Gate 2 and new cable steps at Trail Gate 5. The cable steps would be anchored at the top of the bluff, with no anchoring required down the slope face. Installation of the wood steps and cable steps would provide a designated route and minimize erosion along the user-created pathways. Appendix D includes DPR Design Guidelines for the wood and cable steps.

A wood walkway presently provides a trail connection between Trail Gates 8 and 10 at Soberanes Point. The slope below the walkway is severely eroding. It is not feasible to stabilize the slope at this location. The project proposes to remove the walkway and create a new trail connection further away from eroding bluff edges and higher on the slope above the eroded section. The trail reroute would not exceed 10% gradient and would not require installation of a new walkway or steps.

Project Implementation

The coastal habitat restoration would be conducted by DPR Trail Crews from the Statewide Trails Program, Monterey District DPR personnel, and California Conservation Corps crews. Habitat restoration would adhere to the Trail Closure and Removal Measures included in Appendix C and DPR's Safe Harbor Agreement with USFWS.

Removal of non-system trails would be performed using hand tools. The work would be performed by DPR Trail Crews from the Statewide Trails Program, Monterey District DPR personnel, and California Conservation Corps crews. Trail removal would adhere to the Trail Closure and Removal Measures included in Appendix C.

The Coastal Trail improvements would be constructed using hand tools, power tools, and gas powered tote carriers. The trail work would be performed by DPR Trail Crews from the Statewide Trails Program, Monterey District DPR personnel, and California Conservation Corps crews. Trained trail crews would construct the

pedestrian bridges, wood and cable steps, and overlooks under the supervision of qualified DPR personnel. The construction staging area(s) would be located at the existing vehicle turnouts at the trailheads. The staging areas would be utilized for material delivery and support. DPR would coordinate with Caltrans regarding any temporary use of existing turnouts for materials and equipment.

The proposed project would be phased, depending on funding availability. Phase I, funded through the Coastal Conservancy, would be conducted in 2012 through 2015. The proposed project is anticipated to be completed within a 3 to 15 year period. Trail construction would adhere to special status species avoidance and minimization measures outlined in the SHA. In addition, the project includes habitat restoration to achieve measureable benefits to the species concurrent with Coastal Trail improvements.

Project Requirements
The following Project Requirements will be incorporated into the project.

Air Quality Standard Project Requirements:
All trucks hauling aggregate base materials, or other loose materials, will be covered or required to maintain at least two feet freeboard (the distance from the top of the loose materials to the top of the trailer compartment). All equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.

Cultural Resources Standard Project Requirements:
In the event human remains are discovered, work will cease immediately in the area of the find and project manager/site supervisor will notify the State's representative and other appropriate DPR personnel. The DPR Sector Superintendent (or authorized representative) will notify the County Coroner in accordance with Section 7050.5 of the California Health and Safety Code. If the Coroner determines the remains represent a Native American interment and so notifies the Native American Heritage Commission in Sacramento, the Commission will identify the Most Likely Descendants, who will make recommendations for appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is agreed upon, per Public Resources Code (PRC) Section 5097.98.

Geology and Soils Specific Project Requirement:
Final design and construction of the interlocking steps at Trail Gate 2 and the cable steps at Trail Gate 5 will be reviewed and approved by a qualified DPR representative.

Table 1
Proposed California Coastal Trail Improvements and Non-System Trail Closures

Trail Gate (Trailhead)	Coastal Trail (Linear feet)	Non-system Trail Closure/Removal (Linear feet)	Overlooks	Designated Shoreline Access	Pedestrian Bridges
1	270	1,163	1	-	-
2	780	2,981	1	Install wood steps	-
3	150	329	2	-	-
4	462	1,824	1	-	-
5	450	1,583	1	Replace cable steps	-
6	0	2.704	-	-	-
7	759	2,809	1	-	-
8	2,061	2,645	1	-	Bridge at Soberanes Creek
9	1,933	1,685	2	-	-
10	2,952	2,724	2	-	-
11	314	1.022	2	-	-
12	486	3,076	1	-	-
13	0	1,072	-	-	-
14 North	111	737	1	-	-
14 South	0	367	-	-	-
15	0	343	-	-	-
16	143	500	1	-	-
17 North	587	1,668	2	-	-
17 South	1,395	1,224	1	-	-
18	1,419	1,725	1	Existing trail along creek	Bridge and puncheon at Doud Creek
19	1,571	774	1	Existing stairs	-
Total	15,545 l. ft. (3.1 miles)	33.425 l. ft. (6.3 miles)	22 Overlooks	4 Shoreline Access Points	3 Pedestrian Bridges/ Puncheons
Ratio of Closed: Improved Trails					2:1

CHAPTER II
ENVIRONMENTAL CHECKLIST

1. **Project Title:** Garrapata State Park-Coastal Habitat Restoration and Coastal Trail Improvement

2. **Lead Agency Name and Address:**
California Department of Parks and Recreation
Monterey District
2211 Garden Road
Monterey, CA 93940

3. **Contact Person and Phone Number:**
Larry Tierney, Monterey District Facilities Manager, (831) 649-2863

4. **Project Location:** Garrapata State Park

5. **Project Sponsor's Name and Address:**
California Department of Parks and Recreation (Monterey District)
2211 Garden Road
Monterey, CA 93940

6. **General Plan Designation:** No approved State Park General Plan.
Monterey County General Plan and Local Coastal Program Land Use Designations –
Outdoor Recreation, Watershed and Scenic Conservation

7. **Zoning:** Monterey County Zoning Designation – Open Space Recreation (Coastal Zone)

8. **Description of Project:** The project would include restoration of coastal habitat, removal of non-system trails, and improvements to the California Coastal Trail (Coastal Trail) within the portion of Garrapata State Park located to the west of Highway 1. Trail use would continue to be limited to pedestrian use only. Project objectives also include protection and enhancement of the seacliff buckwheat population to benefit Smith's blue butterfly, protection and enhancement of habitat for California red-legged frog, and protection of archaeological sites.

A total of 6.3 miles of user created (non-system) trails would be closed and removed. The trail beds would be rehabilitated and revegetated as needed, or allowed to revegetate naturally. Coastal Trail improvements would include surfacing approximately 3.1 miles of existing trail segments with an aggregate base (trail width 48 inches). Approximately 750 linear feet of new trail construction would be required to avoid a highly eroded area or sensitive resource. The project would also include a new pedestrian bridge at Soberanes Creek, a new pedestrian bridge and one puncheon at Doud Creek, repairs and replacement of wood steps and cable steps, overlook improvements, and repairs and installation of signage at 17 existing trail gates (trailheads). The project would also include habitat restoration such that there is measureable benefit to the Smith's blue butterfly and California red-legged frog concurrent with Coastal Trail improvements.

9. Surrounding Land Uses and Setting:

The project site is located within a natural setting along approximately seven miles of coastline. To the east of the project site is State Highway 1, Garrapata State Park and private undeveloped lands. Private residential properties exist at the north and south project boundaries. A California Department of Fish and Game facility is situated between Trail Gates 12 and 13.

10. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

- United States Fish and Wildlife Service (Safe Harbor Agreement)
- California Department of Fish and Game (Notification of Streambed Alteration)
- California Regional Water Quality Control Board (Section 401 water quality certification, Soberanes and Doud creek pedestrian bridges)
- U.S Army Corps of Engineers (Section 404 Nationwide Permit, Doud Creek pedestrian bridge)
- California Coastal Conservancy (Project Funding)
- Monterey County (Coastal Development Permit)
- Caltrans (Temporary encroachment permit during construction)

Environmental Factors Potentially Affected:

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

❒ Aesthetics	❒ Agriculture & Forestry Resources	❒ Air Quality
■ Biological Resources	■ Cultural Resources	❒ Geology, Soils, and Seismicity
❒ Greenhouse Gas Emissions	❒ Hazards & Hazardous Materials	H ■ Hydrology & Water Quality
❒ Land Use & Land Use Planning	❒ Mineral Resources	❒ Noise
❒ Population & Housing	❒ Public Services	❒ Recreation
❒ Transportation & Traffic	❒ Utilities & Service Systems	■ Mandatory Findings of Significance

Determination: On the basis of this initial evaluation:

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

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

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

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

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

Signature	Date
Printed Name	For

I. AESTHETICS

AESTHETICS. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	❒	❒	■	❒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	❒	❒	■	❒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	❒	❒	■	❒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	❒	❒	❒	■

Setting

The project area features outstanding scenic views of the Big Sur coastline, including rock outcroppings, coves, and Garrapata Beach. Located to the west of State Highway 1, the approximately seven-mile long project area is visible from State Highway 1. This section of State Highway 1 is designated as a State Scenic Highway and is also part of the Big Sur Coast Highway, which is designated as an "All American Road" under the National Scenic Byways Program.

Monterey County's *Big Sur Coast Land Use Plan and Local Coastal Program* (certified 1986) identifies the project area as being located within a critical viewshed. The Big Sur Coast LCP defines the critical viewshed as including everything within sight of State Highway 1 and major public viewing areas including turnouts, beaches, Soberanes Point, Garrapata Beach, and other specific locations. The *Monterey County Coastal Implementation Plan – Regulations for Development in the Big Sur Coast Land Use Plan* provides development standards to preserve Big Sur's scenic resources (Section 20.145.030).

The project area includes approximately 9.4 miles of system and non-system trails, benches, wood steps, and unimproved overlooks. Nineteen unimproved vehicle turnouts with trail entrances exist along the west side of State Highway 1. The trail gates (trailheads) include fencing, DPR signage, and trash receptacles.

Impact Discussion

a) Several of the existing vehicle turnouts along State Highway 1 within the project area offer scenic vistas, while other turnouts are primarily used for parking to

access the trail system. The project area also features numerous overlook sites along the coastal bluffs, most of which are presently unimproved. The overlook sites offer scenic views of the open ocean, coves, and the Big Sur coastline. The project does not include any improvements or changes to the existing vehicle turnouts. At 17 of the vehicle turnouts, existing DPR-owned deteriorated wood fencing and posts would be replaced as needed at the trail entrances. Where fencing presently does not exist, boulders may be used to demarcate the trail entrance and to prevent unauthorized motorized vehicle access on the trails. DPR signage regarding public safety and park regulations would continue to be displayed. These trailhead improvements would likely enhance rather than adversely affect scenic vistas from the vehicle turnouts as many of the trail entrance features are presently in disrepair.

Improvements to existing overlook sites are also proposed. The overlooks provide locations for the public to enjoy scenic vistas of the ocean, coves, offshore sea stacks, Garrapata Beach, and the Big Sur coastline. Overlook improvements would feature the use of natural materials (aggregate base cap and low rock walls). New wood benches and wood railings are proposed for some of the overlooks. The proposed Overlook Design Guidelines are included in Appendix D. The improvements would not adversely affect the scenic vistas, but instead would more clearly demarcate the optimal viewing areas and provide seating.

Existing wood steps would also be repaired and replaced. The improvements include interlocking wood steps at Trail Gate 2 and cable steps at Trail Gate 5 to provide public access to the shoreline/intertidal zone. The wood steps would be located on the coastal bluffs below the view of the overlooks and the vehicle turnouts.

The project would include new pedestrian bridges at Soberanes Creek and Doud Creek. The approximately 50-foot wood bridge spanning Soberanes Creek would be located between the vehicle turnouts/Trail Gates 7 and 8. The Soberanes Creek bridge would not be easily visible from the turnouts, though it would be more visible to motorists traveling on State Highway 1 (see discussion under item b below). At Doud Creek, the bridge and puncheon would be located within the incised creek corridor and would generally not be visible from the vehicle turnouts, though they would be minimally visible to motorists on State Highway 1 as discussed in item b.

Thus the trail improvements would be minimally visible from the existing vehicle turnouts along State Highway 1. The overlook improvements are intended to enhance the scenic vista opportunities for visitors. The visual impacts associated

with trail improvements would be less-than-significant and would not have a substantial adverse effect on the scenic vistas within the project area.

b) The project area is visible from a State Scenic Highway (Highway 1). The project would not affect any trees, significant rock outcroppings, or historic features. Most of the proposed improvements (surfacing with aggregate base, wood steps, and low rock walls at overlooks) would not be easily visible from State Highway 1 due to the scrub vegetation and terrain. Park signage, fencing, and trash receptacles exist at the trail entrances and are visible from State Highway 1. The project would repair existing deteriorated signs, fencing, and posts.

   The wood bridges at Soberanes Creek and Doud Creek would be visible to motorists traveling on State Highway 1. The approximately 50-foot long bridge at Soberanes Creek would span the top of the creek corridor. Please see Appendix B for a photo simulation of this bridge as viewed from State Highway 1. While the bridge structure is visible from Highway 1, the scale of the bridge and natural wood materials would minimize the effect on scenic resources.

   At Doud Creek, an approximately 32-foot long bridge is proposed for the primary crossing, providing a connection between existing steps down into the creek corridor. A smaller 27-foot long puncheon-style crossing (a low bridge with no hand railings) would provide a connection to an existing trail to Garrapata Beach. Both the bridge and puncheon would be constructed of wood and would be designed to be minimally visually intrusive. Please refer to Appendix B fro a photo simulation of the bridge and puncheon at Doud Creek as viewed from Highway 1. The bridge and puncheon would be minimally visible to motorists since they are located at the bottom of the creek corridor.

   The improvements, including the wood pedestrian bridges at Soberanes Creek and Doud Creek, would have a less-than-significant impact on scenic resources within State Highway 1. No substantial adverse visual impacts to State Highway 1 would occur as a result of the proposed project.

c) The trail and overlook improvements would utilize natural materials and are designed to blend with the natural surroundings. These improvements include surfacing the Coastal Trail segments (3.1 miles) with aggregate material to a width of 48 inches and removal of non system trails (6.3 miles). Appendix B includes a photo of a trail segment with the aggregate surfacing. Where trails are removed, the trailbed would revegetate over time. No fencing is proposed along the trails except at locations where temporary fencing is needed for trail closures. DPR would use cable and rod fencing only when needed to discourage continued park visitor use on the closed trails.

The low rock walls, wood railing and benches at the overlooks, use of rustic-style wood steps, and wood pedestrian bridges are sensitive to Big Sur's aesthetic values and are typical of trail features within State Park units along the Big Sur coast. The materials and design of the trails and trail features are consistent with the *Monterey County Big Sur Coast Land Use Plan Visual Resource Development Standards* (Section 20.145.030). The project would also include removal of 6.3 miles of trails, which would allow the non-system trails to revegetate and restore the natural setting. Therefore, the minimal improvements proposed would have a less-than-significant impact and would not substantially degrade the existing visual character or quality.

d) The proposed project does not include any lighting and would not produce glare. No impact would occur.

II. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use?	❒	❒	❒	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	❒	❒	❒	■
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	❒	❒	❒	■
d) Result in the loss of forest land or conversion of forest land to non-forest use?	❒	❒	❒	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	❒	❒	❒	■

Setting

The project area is entirely situated within Garrapata SP, which is located within Monterey County. The existing zoning for the project area is Open Space Recreation (Coastal Zone). Historically, much of Garrapata SP was part of the Doud Ranch. Grazing or agricultural use no longer occurs within the project area.

Impact Discussion

a) The project area is presently not used for agriculture. The project includes improvements to the existing trail system and would not involve converting the land to a non-agricultural use. No impact to prime or unique farmland, or farmland of statewide importance, would occur.

b) The Monterey County zoning is Open Space Recreation (OR-D) within the Coastal Zone (CZ). The purpose of this zoning district is to provide for the establishment, enhancement and maintenance of outdoor recreation uses in Monterey County. The project features hiking trails, which is one of the principal uses allowed within this zoning district. Crop and tree farming and grazing of horses, cattle, sheep and goats are also allowed principal uses. The project would not conflict with the zoning or preclude any future agricultural use within the project area. The project area is not subject to a Williamson Act contract. Therefore, no conflicts or impacts to agricultural zoning or Williamson Act contracts would occur as a result of the proposed project.

c) Timberland harvesting is not identified as a permitted use within the Open Space Recreation Zoning District. The vegetation type within the project area is predominantly coastal sage scrub. No impact to timber resources would occur.

d) The vegetation type within the project area is predominantly coastal scrub. No forest land exists within the project site. No impacts to forest land would occur.

e) The project includes improvements to existing hiking trails and removal of non-system trails. No farmland or forest land is present within the project area. The project would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

III. AIR QUALITY

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	❒	❒	❒	■
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	❒	❒	■	❒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	❒	❒	■	❒
d) Expose sensitive receptors to substantial pollutant concentrations?	❒	❒	■	❒
e) Create objectionable odors affecting a substantial number of people?	❒	❒	■	❒

Setting

The project site is located in Monterey County, which lies within the North Central Coast Air Basin. This Basin is under the jurisdiction of the Monterey Bay Unified Air Pollution Control District (MBUAPCD) and United States Environmental Protection Agency (EPA) Region IX. The MBUAPCD is responsible for air monitoring, permitting, enforcement and long-range air quality planning for Monterey, Santa Cruz, and San Benito counties. The EPA is the federal agency responsible for establishing standards and emission limits for sources of air pollutants. The California Air Resources Board (CARB) is the State Agency responsible for coordinating the State and federal air pollution programs within California.

CARB has established State ambient air quality standards for criteria pollutants, including ozone, carbon monoxide (CO), suspended particulate matter (PM_{10}), and fine suspended particulate matter ($PM_{2.5}$). The State Area Designation Maps for Ambient Air Quality Standards 2010 show that Monterey County is in attainment (air quality as good as, or better than, the California ambient air quality standards) for

$PM_{2.5}$ and CO, and in non-attainment (not meeting California ambient air quality standards) for ozone and PM_{10}. The National Area Designation Maps for Ambient Air Quality Standards 2010 show that Monterey County is in attainment for ozone and PM_{10}, and in unclassified/attainment for $PM_{2.5}$ and CO. Unclassified refers to areas that do not have monitoring data but are assumed to achieve national ambient air quality standards due to the generally low emission sources.

Garrapata SP is located within a generally undeveloped area that does not generate air pollution, with the exception of wildfire events. Prevailing ocean winds and the lack of industrial uses and high traffic levels within the vicinity of Garrapata SP result in relatively clean air levels. The closest air monitoring stations to the project site within Monterey County are the Carmel Valley –Ford Road site and the Salinas site. Within the past three years (2008 -2010), the measurements for ozone, CO, $PM_{10,}$ and $PM_{2.5}$ have not exceeded the State or national standards.

Impact Discussion

a) The project includes trail improvements and habitat restoration within an existing State Park unit. The project would not conflict with or obstruct implementation of any applicable air quality management plan for the MBUAPCD or Monterey County. No impact would occur.

b) The project, in and of itself, would not result in any criteria air pollutant emissions at a level that would violate any local, state, or federal ambient air quality standards or contribute substantially to any air quality violations. However, the project would require the temporary use of equipment for construction and transport of materials that would emit ozone precursors. As standard practice, DPR will comply with the following Project Requirements:

   <u>Standard Project Requirements</u>:
   All trucks hauling aggregate base materials, or other loose materials, will be covered or required to maintain at least two feet freeboard (the distance from the top of the loose materials to the top of the trailer compartment). All equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.

   As a result of the temporary short term nature of the construction emissions and compliance with these Standard Project Requirements, the potential adverse air quality impacts would be less-than-significant.

c) The proposed project, in and of itself, would not result in a significant increase in the emission of any criteria pollutant. The project site, however, is located within

a region of non-attainment for State Ambient Air Quality Standards for ozone and PM_{10}. DPR's compliance with measures listed above would result in a less-than-significant impact.

d) The proposed project would primarily involve capping of existing trail alignments, and therefore would require minimal excavation. Hand-steered motorized totes would be utilized to transport materials. The dust and equipment exhaust emissions during construction would be minimal. Thus, park visitors would not be exposed to substantial pollutant concentrations and the impact would be less-than-significant.

e) The project would not result in the long-term generation of odors. Construction related emissions could result in short-term generation of odors; however, only small mechanized equipment would be utilized to transport materials within the project area. The work would primarily be completed using hand tools. The project would have minimal objectionable odor impacts to a substantial number of people. The impact would be less-than-significant.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	❒	■	❒	❒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	❒	❒	■	❒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❒	❒	■	❒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❒	❒	■	❒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	❒	❒	■	❒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?	❒	❒	❒	■

Setting

The project area supports five plant community types: northern coastal scrub, coastal bluff scrub, willow thicket, oatgrass prairie, and planted trees/tree groves. The project is located on the USGS Soberanes Point 7.5' quadrangles. Site visits were conducted in May, June, July, and August 2011 by Biotic Resources Group to document plant communities and botanical resources. Site visits were conducted in July and August 2011 by Dana Bland & Associates and Entomological Consulting Services to document wildlife resources. Occurrence of Smith's blue butterfly within the project area was determined from previous surveys in 2010 and observations by

DPR biologists. All plant species observed were identified and recorded in a field notebook. Botanical nomenclature follows *An Illustrated Field Key to the Flowering Plants of Monterey County* (Matthews, 1997) and *The Jepson Manual- Higher Plants of California (*Hickman, 1993).

The California Natural Diversity Database (CNDDB Rare Find, Commercial Version 3.1.0, 2011) and the California Native Plant Society's (CNPS) Rare Plant Inventory (CNPS, 2011) were searched for records of special status species within the project quadrangle (Soberanes Point) and surrounding quadrangles (i.e., Monterey, Point Sur, Seaside, Mt. Carmel, and Big Sur). Mapped data on vegetation types and special status species as maintained by DPR was also reviewed and utilized to document resources within the project area.

Northern Coastal Scrub and Coastal Bluff Scrub
The majority of the project area supports coastal scrub and/or coastal bluff scrub. Coastal scrub is characterized by the dense growth of shrubs and herbs. The coastal bluff scrub occupies bluff faces and terraces with often windswept shrubs and salt-spray tolerant herbs.

Shrubs commonly observed within the scrub habitat include California sagebrush (*Artemisia californica)*, lizard tail (*Eriophyllum staechadifolium)*, yellow bush lupine (*Lupinus arboreus)*, seacliff buckwheat (*Eriogonum parvifolium)*, poison oak (*Toxicodendron diversilobum)*, mock heather (*Ericameria ericoides)*, and sticky monkey flower (*Mimulus aurantiacus*). Other species include California fuchsia (*Epilobium canum)*, coffee berry (*Frangula californica),* and blue blossom (*Ceanothus thrysiflorus)*. A small patch of Little Sur manzanita *(Arctostaphylos edmundsii)* grows north of Gate 19 amid common coastal scrub shrubs. Little Sur manzanita is endemic to the Big Sur region and is a locally rare species.

Sub-shrubs and herbaceous species are numerous in the coastal scrub; species observed within the project area include hedge nettle (*Stachys bullata)*, stinging phacelia (*Phacelia malvaefolia)*, yellow yarrow (*Eriophyllum confertiflorum)*, common yarrow (*Achillea millefolium)*, California bee plant (*Scrophularia californica)*, California horkelia (*Horkelia californica)*, and Monterey paintbrush (*Castilleja latifolia)*. Openings in the canopy also provide areas that support low-growing herbs such as yerba buena (*Satureja douglasii),* common beach aster (*Lessingia filaginifolia),* and seaside daisy (*Erigeron glaucus)*. Low-growing bluff scrub areas were found to support soap plant (*Chlorogalum pomeridianum)*, Gray's locoweed (*Astragalus nuttallii)*, sea pink (*Armeria maritima)*, sea lettuce (*Dudleya ceaspitosa)*, seacliff buckwheat, sandmat (*Cardionema ramoissisium)*, and California poppy (*Eschscholzia californica)*.

The scrub habitat was found to support invasive non-native plant species; the most prominent species are iceplant (*Carpobrotus spp.)*, mustards (*Brassica spp.* and *Hershfeldia sp.)*, poison hemlock (*Conium maculatum),* and Cape ivy (*Deleairea odorata).* Naturalized landscape plants were also observed, such as pride of Madeira *(Echium sp.)* and Monterey cypress (*Hesperocyparis macrocarpa)*.

The berries of shrubs and the seeds of herbaceous plants in the coastal scrub habitat provide important forage for wildlife. Wildlife may perch on the outer perimeter of mixed scrub to take advantage of hunting opportunities in adjacent openings, and take cover in the denser shrub patches as needed. The dense shrub patches also provide nesting habitat for birds. Where the coastal scrub abuts riparian and wetland habitat, the diversity of the fauna is expected to be higher because of the presence of water and foraging opportunities and the increased complexity of habitat providing additional niches for nesting, foraging and cover.

Common wildlife species observed in the coastal scrub within the project area include western fence lizard (*Sceloporus occidentalis*), Anna's hummingbird (*Calypte anna*), western scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), California thrasher (*Taxostoma redivivum*), California quail (*Callipepla californica*), spotted towhee *(Pipilo maculatus*), California towhee (*Pipilo crissalis*), and white-crowned sparrow (*Zonotrichia leucophrys*). One special status species is known to inhabit this coastal scrub habitat, the Smith's blue butterfly (*Euphilotes enoptes smithi*).

Oatgrass Prairie
Patches of oatgrass prairie occur in openings within the coastal scrub. These grassland areas are characterized by the presence of native perennial bunchgrasses, most notably California oatgrass (*Danthonia californica)* and purple needlegrass (*Nassella pulchra)*. Other herbaceous species include sea lettuce, Monterey paintbrush, beach aster, shamrock clover (*Trifolium dubium)*, and scattered dune buckwheat.

The patches of prairie within the project area are relatively small and the use of these areas by wildlife is expected to be similar to the surrounding coastal scrub habitat.

Trees and Tree Groves
The project area supports scattered individual trees and small tree groves. The trees are Monterey pine (*Pinus radiata)* and Monterey cypress. Although Monterey pine and Monterey cypress are native to Monterey County, the trees within the project area are located outside the species' native stands; the trees likely became established through plantings or natural colonization from nearby planted windbreaks that occur along State Highway 1.

The tree groves provide perching, roosting, cover, foraging and nesting opportunities for native wildlife. Because the tree groves lack a natural stratified understory, the habitat does not provide the variety of niches for wildlife usually found in a natural forest habitat. Common wildlife species that may occur in the tree groves include mourning dove (*Zenaida macroura*), western scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), chestnut-backed chickadee (*Poecile rufescens*), California thrasher (*Taxostoma redivivum*), and California towhee (*Pipilo crissalis*).

WillowThicket
The project area supports nine blue-line streams as per the USGS maps. Six of the nine streams have perennial flow and three streams have intermittent flow. Of the perennial streams, three are unnamed; the others are Soberanes Creek, Granite Creek, and Doud Creek. All of the creeks support willow thickets. These wet areas are characterized by arroyo willow (*Salix lasiolepis)* and understory plants adapted to the stream conditions. Vegetation observed along Doud and Soberanes creeks include willows, common horsetail (*Equisetum arvense)*, sedge (*Carex sp.),* spreading rush (*Juncus patens)*, bog rush (*Juncus effusus)*, and nut sedge (*Cyperus sp.)*. Water hemlock (*Cicuta douglasii)*, pacific silverweed (*Potentilla anserina ssp. pacifica),* and watercress (N*asturtium officinale)* are also present. Some areas support common monkey flower (*Mimulus guttatus)* where it grows on rocky outcrops near the creek. Invasive, non-native plant species were also observed at some watercourses; species include calla lily (*Zantedeschia aethiopica)*, Cape ivy, nasturtium (*Tropaeolum majus)*, and iceplant.

The willow thickets provide native wildlife with habitat for perching, foraging, nesting, cover, and a source of seasonal drinking water. Common wildlife species that may utilize willow thickets in the project area include Anna's hummingbird (*Calypte anna*), pacific-slope flycatcher (*Empidonax difficilis*), black phoebe *(Sayornis nigricans*), yellow-rumped warbler (*Dendroica coronata*), Townsend's warbler (*Dendroica townsendi*), Brewer's blackbird *(Euphagus cyanocephallus*), and brush rabbit (*Sylvilagus bachmani*). Nests of the Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*) were observed in the willow patch at the crossing of the intermittent creek near Gate 1 and they may occur in other willow patches. California red-legged frog (*Rana draytonii*) are known from Garrapata Creek (Garrapata Creek is located south of the park boundary) and may occur occasionally in creeks within the project area, although no suitable breeding habitat was observed.

Invasive, Non-native Plant Species
The establishment of invasive, non-native plant species, such as iceplant and Cape ivy, impacts native habitat by outcompeting native plants, often to the exclusion of native species. In Garrapata SP invasive, non-native plants occupy the habitat supporting seacliff buckwheat (host plant of the Smith's blue butterfly) and areas

supporting Monterey paintbrush and Little Sur manzanita (two special status plant species). The removal of invasive, non-native plant species is an on-going project within Garrapata SP.

Sensitive Biological Resources

California Department of Fish and Game (CDFG) is a trustee agency that has jurisdiction under Section 1600 et seq. of the CDFG Code. Under Sections 1600-1603 of the California Fish and Game Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife. Along watercourses, CDFG jurisdictional limits typically extend to the top of bank or to the edge of riparian habitat if such habitat extends beyond top of bank (outer drip line), whichever is greater. The proposed project proposes clear span foot bridges over Soberanes Creek and Doud Creek, two perennial watercourses. Footings for the foot bridge over Soberanes Creek would be placed outward of the top-of-bank. A wood foot bridge and puncheon is proposed at Doud Creek to replace two informal at-grade crossings. These bridge features would span the creek, which is within the jurisdiction of CDFG.

Water quality in California is governed by the Porter-Cologne Water Quality Control Act and certification authority under Section 401 of the Clean Water Act, as administered by the Regional Water Quality Control Board (RWQCB). The Section 401 water quality certification program allows the State to ensure that activities requiring a Federal permit or license comply with State water quality standards. Water quality certification must be based on a finding that the proposed discharge would comply with water quality standards which are in the regional board's basin plans. The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the waters of the state to file a report of waste discharge. The RWQCB issues a permit or waiver that includes implementing water quality control plans that take into account the beneficial uses to be protected. Waters of the State subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features and saline waters. The proposed foot bridges over Soberanes and Doud creeks would occur within the jurisdiction of the RWQCB.

The US Army Corps of Engineers (USACE) regulates activities within waters of the United States pursuant to congressional acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (1977, as amended). Section 10 of the Rivers and Harbors Act requires a permit for any work in, over, or under navigable waters of the United States. Navigable waters are defined as those waters subject to the ebb and flow of the tide to the Mean High Water mark (tidal areas) or below the Ordinary High Water mark (freshwater areas). The proposed foot bridge over Soberanes would not be located within the jurisdiction of the USACE. The new

bridge at Doud Creek would span the creek; however, construction access may temporarily affect wetland vegetation that is within the jurisdictional of the USACE.

Sensitive Habitats
Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. CDFG classifies and ranks the State's natural communities to assist in determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (CDFG, 2007 and 2010). The project area was observed to support one vegetation type with an imperiled status. Oatgrass prairie is ranked S3.

Monterey County's *Big Sur Coast Land Use Plan and Local Coastal Program* (LUP/LCP) identifies policies for acceptable activities within environmentally sensitive habitats areas. It also outlines objectives for managing the natural resources of the Big Sur coast for the long-term benefit of both visitors and residents. Protection of these natural resources is the primary objective with definite precedence over land use development. Under the LUP/LCP, environmentally sensitive habitats are areas in which plant or animal life or their habitats are rare or particularly valuable because of their special nature or role in an ecosystem. Environmentally sensitive habitats are also areas susceptible to disturbance or degradation by human activities and developments.

Examples of environmentally sensitive habitat areas are riparian corridors and Areas of Special Biological Significance identified by the State Water Resources Control Board; rare and endangered species habitat; all coastal wetlands and lagoons; all marine wildlife haul-out, breeding and nesting area; education, research and wildlife reserves, including all tideland portions of the California Sea Otter State Fish and Game Refuge; nearshore reefs; tidepools; sea caves; islets and offshore rocks; kelp beds; indigenous dune plant habitats; Monarch butterfly mass overwintering sites; and wilderness and primitive areas. The California Coastal Act limits uses to those which are dependent on such resources; examples include nature education and research, hunting, fishing, and aquaculture. The states that development, including vegetation removal, excavation, grading, filing, and the construction of roads and structures, would not be permitted in the environmentally sensitive habitat areas if it results in any potential disruption of habitat value. To approve development within any of these habitats the County must find that disruption of a habitat caused by the development is not significant. Public access in areas of environmentally sensitive habitats would be limited to low-intensity recreational, scientific, or educational uses.

Access would generally be controlled and confined to the designated trails. No access would be approved which results in significant disruption of the habitat.

Access routes including recreational trails and roads would be sited to avoid significant impacts to riparian corridors. Recreational access to scientifically important terrestrial habitat areas may be restricted when necessary to protect the habitat. The LUP/LCP also encourages residents and public agencies to undertake restoration of Big Sur's natural environment by removal of non-native plants. The proposed project is consistent with policies contained in the County's LUP/LCP in that the project would not cause significant disruption of habitat. DPR's adherence to construction measures would limit disturbances to habitat adjacent to the proposed rehabilitated trails and overlooks and minimize adverse impacts to special status species and their habitat. Degraded areas would be restored, including the removal of invasive, non-native plant species, to benefit rare and endangered species consistent with LUP/LCP policies. DPR would have a SHA for the Smith's blue butterfly and California red-legged frog with USFWS prior to implementing Coastal Trail improvements.

Special Status Plant Species
Plant species of concern include those listed by either the Federal or State resource agencies and species identified as rare (on List 1B) by CNPS. Special status species searched for within the project area are listed in Table 2, based on species recorded for the region by CNDDB and CNPS. The survey was conducted within the appropriate identification period for these species.

No federal or state listed plant species were detected within the project area during the spring and summer 2011 field surveys, as presented in Table 2. The closest recorded occurrence of a state or federally-listed species are Yadon's rein orchid (*Piperia yadonii)* (federally listed as endangered), and seaside bird's beak (*Cordylanthus rigidus ssp. litoralis)* (state listed as endangered). Yadon's rein orchid is known from the Palo Corona and Palo Colorado areas, approximately three miles east and south of the Garrapata SP project area, respectively. Seaside bird's beak is known from a ridge dividing Palo Colorado and Las Peidras Canyon, approximately four miles south of the Garrapata SP project area.

Individuals of Monterey pine (CNPS List 1B.1) are present within the project area; however these are planted or naturalized specimens located outside their native stands. A patch of Little Sur manzanita (*Arctostaphylos edmundsii)* (List 1B.2) grows north of Garrapata Creek (near Gate 19). The project also supports suitable habitat (and recorded occurrences) for Jolon clarkia (*Clarkia jolonensis)* (List 1B.2) and Hutchinson's larkspur (*Delphinium hutchinsoniae)* (List 1B.2) east of Highway 1 in the Soberanes Point area (east of Gate 8-11), yet none were observed during 2010 or 2011 field surveys.

Table 2
List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area

Species	Status	Habitat Type Plant Characteristics	Closest Known Occurrence(s) Observed on Site?
Soberanes Point Quadrangle			
Little Sur manzanita *(Arctostaphylos edmundsii)*	CNPS: List 1B.2 State: None Federal: None	Coastal bluff scrub, sandy terraces Evergreen shrub	In the vicinity of Garrapata Creek, N of bridge along Highway 1. Recorded from near Gate 19; observed east of existing trail near Gate 19.
Hooker's manzanita *(Arctostaphylos hookeri ssp. hookeri)*	List 1B.2 State: None Fed: None	Sandy soils, maritime chaparral/oak woodland mosaic Evergreen shrub	Lobos Ridge E of Carmel Highlands; E side of Hwy 1 near Gibson Creek. Not observed within project area.
Jolon clarkia *(Clarkia jolonensis)*	List 1B.2 State: None Fed: None	Dry grasslands Annual; blooms April - July	2 miles S of Malpaso Creek, possibly near Soberanes Point (1950). Record is from east of Highway 1 in the Soberanes Point area; however, the species was not observed during surveys conducted in 2011.
Seaside birds-beak *(Cordylanthus rigidus ssp. littoralis)*	List 1B.1 State: E Fed: None	Dry slopes, grasslands, closed cone forests; coastal scrub; sandy substrate Annual; blooms May - September	Ridge dividing Palo Colorado Canyon and Las Piedras Canyon; 3 miles southeast of project area. Not observed within project area.
Hutchinson's larkspur *(Delphinium hutchinsoniae)*	List 1B.2 State: None Fed: None	Broadleaf upland forest, coastal prairie, coastal scrub; usually moist slopes Annual; blooms April – May	SE of Soberanes Point, E of Hwy 1 and N of Granite Canyon; Rocky Ridge about 1.25 mi E of Hwy 1 Record is from east of Highway 1 in the Soberanes Point area and Rocky Ridge area; not observed within project area W of Hwy 1; potential along Rocky Ridge Trail east of Hwy 1.

Table 2
List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area

Species	Status	Habitat Type Plant Characteristics	Closest Known Occurrence(s) Observed on Site?
Pinnacles buckwheat *(Eriogonum nortonii)*	List 1B.3 State: None Fed: None	Chaparral, valley and foothill grassland; sandy openings often after burns Perennial shrub; blooms May-June.	Head of Gibson Creek; Palo Corona Regional Park; E of Carmel Highlands. Not observed within project area.
Yadon's rein orchid (*Piperia yadonii)*	List 1B.1 State: None Fed: E	Closed cone pine forest, scrub, coastal bluff scrub Annual, blooms May - June	Pt. Lobos Ranch, E of Hwy 1 in Gibson Creek area; near summit of Lobos Ridge E of Pt. Lobos State Reserve; Palo Colorado area Record is from east of Highway 1 in Palo Corona and Palo Colorado areas, 3 miles E and SE of the project area, respectively; not observed within project area W of Hwy 1; potential along Rocky Ridge Trail east of Hwy 1.
Pine rose (*Rosa pinetorum)*	List 1B.2 State: None Fed: None	Closed cone pine forest Perennial, blooms May - June	Malpaso area above Coast Ridge Road, Gibson Creek Not observed within project area
Maple-leaved checkerbloom (*Sidalcea malachroides)*	List 4.2 State: None Fed: None	Coastal canyons Perennial, blooms May - June	2 miles up Rocky Creek from Hwy 1 Not observed within project area; potential along Rocky Ridge Trail east of Hwy 1.
Surrounding Quadrangles (Monterey, Point Sur, Seaside, Mt. Carmel, Big Sur)			
Bristlecone fir *(Abies bracteata)*	CNPS: List 1B.3 State: None Federal: None	Coniferous forests, rocky sites.	Historic record from Big Sur (1926); Logwood Canyon, about 0.6 mi SE of PBSSP. Not observed in project area.
Hickman's onion *(Allium hickmanii)*	List 1B.2 State: None Fed: None	Openings in forest, woodlands, or chaparral, grassland Sandy damp ground and vernal swales; blooms April - May	Slopes N of Carmel Valley Road, E side Hwy 1 at Carpenter Road. Not observed within project area.

Table 2
List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area

Species	Status	Habitat Type Plant Characteristics	Closest Known Occurrence(s) Observed on Site?
Toro manzanita *(Arctostaphylos montereyensis)*	List 1B.2 State: None Fed: None	Sandy soils, maritime chaparral/oak woodland mosaic Evergreen shrub	Monterey Airport; Ft. Ord Not observed within project area.
Sandmat manzanita *(Arctostaphylos pumila)*	List 1B.2 State: None Fed: None	Closed cone forest, Sandy soils, maritime chaparral, dunes Evergreen shrub	Gibson Canyon, N of Carmel Highlands. Not observed within project area.
Coastal dunes milk-vetch *(Astragalus tener var. titi)*	List 1B.1 State: E Fed: E	Coastal bluff scrub, moist sandy depressions on bluffs or dunes; blooms April – May	Along 17-mile Drive near Ocean Road. Not observed within project area.
Compact cobwebby thistle (*Cirsium occidentale var. compactum)*	CNPS: List 1B.2 State: None Federal: None	Chaparral, coastal dunes, coastal scrub, prairie	Recorded from near mouth of Little Sur River, N of Point Sur Not observed in project area.
Tear drop moss *(Dacryophyllum falcifolium)*	CNPS: List 1B.3 State: None Federal: None	Redwood forest, restricted to limestone substrates /rock outcrops	Records from Grimes Creek upstream of Hwy 1 between PBSSP and JPBSP; along Juan Higuera Creek upstream of Hwy 1. Not observed in project area. Low potential on site due to lack of calcareous rock outcrops.
Gowen cypress *(Hesperocyparis goveniana)*	List 1B.2 State: None Fed: T	Closed cone pine forest; coast terraces, usually in sandy soil Evergreen tree	Pt. Lobos along N side of Gibson Creek, E of Hwy 1. Not observed within project area.
Monterey cypress *(Hesperocyparis macrocarpa)*	List 1B.2 State: None Fed: None	Closed cone pine forest; coast terraces, usually on granitic soils Evergreen tree	Northern portion of Pt. Lobos State Reserve. Not observed within project area.
Johnny nip paintbrush *(Castilleja ambigua ssp. insalutata)*	List 1B.1 State: None Fed: None	Coastal bluff scrub Blooms May - August	Not observed in project area.

Table 2
List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area

Species	Status	Habitat Type Plant Characteristics	Closest Known Occurrence(s) Observed on Site?
Congdon's tarplant *(Centromadia parryi ssp. congdonii)*	List 1B.2 State: None Fed: None	Moist grasslands, alkaline depressions Annual; blooms July - October	Laguna Seca Area. Not observed within project area.
Monterey spineflower (*Chorizanthe pungens var. pungens)*	List 1B.2 State: None Fed: T	Sandy soils, maritime chaparral Annual; blooms May – August	Ft. Ord, Cypress Point, Pt. Pinos. Not observed within project area.
San Francisco collinsia *(Collinsia multicolor)*	List 1B.2 State: None Fed: None	Close cone pine forest, coastal scrub on decomposed shale/mudstone Annual; blooms March - May	Pacific Grove (1903). Not observed within project area.
Umbrella larkspur *(Delphinium umbraculorum)*	CNPS: List 1B.3 State: None Federal: None	Broadleaf upland forest, mesic sites on clay	Record from Bonafacio Hill, S of Bixby Creek Not observed in project area
Eastwoods goldenbush *(Ericameria fasciculata)*	List 1B.1 State: None Fed: None	Sandy openings in maritime chaparral, pine forests, coastal scrub Perennial shrub; blooms Jul – Oct.	Carmel (1913); Morse Reserve in Del Monte Forest. Not observed within project area.
Sand-loving wallflower *(Erysimum ammophilum)*	List 1B.2 State: None Fed: None	Sandy soils, maritime chaparral; coastal dunes; scrub Biennial, blooms May - June	Ft. Ord; Naval Postgraduate School; Pt. Pinos; Seaside; Asilomar; 17-mile Drive Not observed within project area.
Menzies wallflower *(Erysimum menziesii ssp. menziesii)*	List 1B.1 State: E Fed: E	Sandy soils, coastal dunes Biennial, blooms May - June	Pt. Pinos; 17-mile Drive; Spanish Bay Not observed within project area.
Fragrant fritillary *(Fritillaria liliacea)*	List 1B.2 State: None Fed: None	Coastal scrub, grasslands near coast Perennial bulb; blooms February - April	Pebble Beach area (1931). Not observed within project area.
Sand gilia *(Gilia tenuiflora ssp. arenaria)*	List 1B.2 State: T Fed: E	Coastal dunes, coastal chaparral Annual herb; blooms April – June	Moss Beach, Del Monte Dunes, Sand City, Ft. Ord, Marina Dunes, Asilomar Not observed within project area.

Table 2
List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area

Species	Status	Habitat Type Plant Characteristics	Closest Known Occurrence(s) Observed on Site?
Kellogg's horkelia *(Horkelia cuneata ssp. sericea)*	List 1B.1 State: None Fed: None	Closed cone forest, coastal scrub, chaparral Perennial; blooms April - June	Carmel Mission, Asilomar, Del Monte area Not observed within project area.
Beach layia *(Layia carnosa)*	List 1B.1 State: E Fed: E	Coastal dunes Annual herb; blooms April – June	Pt. Pinos, Asilomar, Spyglass Hill Dunes Not observed within project area.
Tidestom's lupine *(Lupinus tidestomii)*	List 1B.1 State: E Fed: E	Coastal dunes Annual herb; blooms April – May	Pt. Pinos, Asilomar. 17-mile Drive; Spanish Bay Dunes Not observed within project area.
Carmel Valley malacothrix *(Malacothrix saxatilis var. arachnoidea)*	List 1B.2 State: None Fed: None	Chaparral, rocky areas Deciduous shrub; blooms May - Oct	Carmel Valley Road. Not observed within project area.
Carmel Valley bush-mallow *(Malacothamnus palmeri var. involucratus)*	List 1B.2 State: None Fed: None	Chaparral on rock outcrops or steep rocky road cuts, talus Perennial; blooms June - December	Carmel Valley, 2 miles from Hwy 1. Not observed within project area.
Arroyo Seco bush mallow (*Malacothamnus palmeri var. lucianus)*	CNPS: List 1B.2 State: None Federal: None	Chaparral, meadows and seeps; gravel banks and sandstone in full sun	Record from W of Pfeiffer Falls between Hwy 1 and Big Sur River in PBSSP on alluvia terrace of river. Not observed in project area
Santa Lucia bush mallow *(Malacothamnus palmeri var. palmeri)*	List 1B.2 State: None Fed: None	Chaparral, dry talus slopes Deciduous shrub; blooms May - Oct	Carmel (1985) Not observed within project area
Marsh microseris (*Microseris paludosa)*	List 1B.2 State: None Fed: None	Closed cone pine forest, scrub, woodland, grassland Annual, blooms May - June	Pt. Lobos State Reserve (1978), Del Monte Forest, Veterans Memorial Park Not observed within project area
Dudley's lousewort *(Pedicularis dudleyi)*	CNPS: List 1B.2 State: None Federal: None	Chaparral, coniferous forest, grassland; deep shady woods; alluvial terraces	N fork of Little Sur River near Pico Blanco BS Camp; Jackson Creek; Little Sur River Not observed in project area

Table 2
List of Special Status Plant Species Evaluated for Potential to Occur in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area

Species	Status	Habitat Type Plant Characteristics	Closest Known Occurrence(s) Observed on Site?
Monterey pine (*Pinus radiata)*	List 1B.1 State: None Fed: None	Closed cone pine forest Evergreen tree	Pt. Lobos State Reserve Individuals present within project area outside of native stands
Hooked popcorn flower *(Plagiobothrys uncinatus)*	List 1B.2 State: None Fed: None	Chaparral, woodlands and grasslands on sandstone outcroppings, often burned areas Annual; blooms April - May	Recorded from Hastings Reserve, approx. 3 miles SE of project. Not observed within project area.
Hickman's cinquefoil (*Potentilla hickmanii)*	List 1B.1 State: E Fed: E	Closed cone pine forest, scrub, meadows and seeps, streams Annual, blooms April - August	17-mile Drive, S of Bird Rock parking lot; Pacific Grove on road to Cypress Point. Not observed within project area
Adobe sanicle *(Sanicula maritima)*	CNPS: List 1B.1 State: None Federal: None	Meadows and seeps in grassland and prairie, moist clay or Ultramafic soils	Record from Andrew Molera SP along Panorama Trail near S. boundary of Park, serpentine grassland. Not observed in project area
Pacific Grove clover (*Trifolium polyodon)*	List 1B.1 State: R Fed: None	Closed cone pine forest Annual, blooms May - June	Pebble Beach riding stables, 17-Mile Drive near Ocean Road; S of Seal Rock Creek Not observed within project area
Monterey clover (*Trifolium trichocalyx)*	List 1B.1 State: E Fed: E	Closed cone pine forest Annual, blooms April - June	Morse Botanical Reserve; Huckleberry Hill Not observed within project area
Santa Cruz microseris (*Stebbinsoseris decipiens)*	List 1B.2 State: None Fed: None	Coastal scrub, chaparral, prairie near coast; loose disturbed soils Annual; blooms April - May	Known from Laureles Grade, Highway 68 No suitable habitat; not observed during surveys

CNPS Status:

List 1B: These plants (predominately endemic) are rare through their range and are currently vulnerable or have a high potential for vulnerability due to limited or threatened habitat, few individuals per population, or a limited number of populations. List 1B plants meet the definitions of Section 1901, Chapter 10 of the CDFG Code.

Federal and State Status:

T: Designated as a threatened species by the federal government or the California Fish and Game Commission

E: Designated as an endangered species by the federal government or the California Fish and Game Commission

Special Status Wildlife Species
Special status wildlife species known from the general project vicinity were evaluated for their potential to occur at the project site. Special status wildlife species include those proposed for listing as threatened or endangered, candidates for listing, and those listed by either the Federal or State resource agencies, as well as those identified as State species of special concern. In addition, all raptor nests are protected by Fish and Game Code, and all migratory bird nests are protected by the Federal Migratory Bird Treaty Act.

Special status wildlife species were evaluated for their potential presence in the project area as described in Table 3 below. The coastal scrub and coastal bluff scrub supports seacliff buckwheat which can be habitat for the Smith's Blue butterfly, a species federally listed as endangered. The project area provides suitable habitat, including confirmed occupied habitat, for the Smith's blue butterfly and contains several hundred thousand individual host plants distributed in various densities throughout the project area. Additional suitable habitat occurs on state park lands east of State Highway 1, wherein several hundred thousand host plants also occur. The current population the Smith's blue butterfly within the project area is not known. California red-legged frog **(**a State Species of Special Concern and federally listed as threatened), may occur in creeks along the project area, but no suitable breeding habitat is present. Monterey dusky-footed woodrat **(**a State Species of Special Concern) nests were observed under the willow patches at one intermittent creek in the project area and may occur elsewhere. No other special status wildlife species are expected in the project area.

Table 3
Special Status Wildlife Species and Potential Occurrence in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area.

SPECIES	**STATUS**[1]	**HABITAT**	**POTENTIAL OCCURRENCE ON SITE**
Invertebrates			
Monarch butterfly *(Danaus plexippus)*	*	Eucalyptus, acacia and pine trees groves provide winter habitat when they have adequate protection from wind and nearby source of water and nectar	Unlikely, trees present lack wind protection and surrounding areas lack suitable nectar plants.
Smith's blue butterfly *(Euphilotes enoptes smithi)*	FE	Coastal dunes, coastal scrub and sage scrub with host plant of buckwheat present	Known to occur; project area supports several hundred thousand host plants of seacliff buckwheat that provide suitable habitat for the species.
Fish			
Steelhead	FT, CSC	Perennial creeks and rivers with	Soberanes and Doud creeks have

Table 3
Special Status Wildlife Species and Potential Occurrence in the Vicinity of the Garrapata State Park Coastal Habitat Restoration and Coastal Trail Improvement Project Area.

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
(Oncorhynchus mykiss)		gravels for spawning.	barriers near ocean to upstream movement.
Amphibians			
California tiger salamander (*Ambystoma californiense)*	FT, ST	Ponds, vernal pools for breeding, grasslands with burrows for upland habitat	No suitable habitat on site.
California red-legged frog *(Rana draytonii)*	FT, CSC	Riparian, marshes, estuaries and ponds with still water at least into June.	Closest known occurrence is 0.5 to 1.0 mile southeast along Garrapata Creek. No suitable breeding habitat on site. May occasionally forage along creeks on site.
Reptiles			
Western pond turtle *(Actinemys marmorata)*	CSC	Creeks and ponds with water of sufficient depth for escape cover, and structure for basking; grasslands or bare areas for nesting.	Creeks on site shallow, lack basking sites and depth for escape cover. Unlikely to occur on site.
Black legless lizard *(Anniella pulchra nigra)*	CSC	Sand dunes with native vegetation	None, no suitable habitat on site.
Birds			
Ashy storm-petrel *(Oceanodroma homochroa)*	CSC	Nests in colonies on off-shore islands in crevices under loose rocks or caves	No habitat on site, closest known colony is rock complex near Castle Rock, several miles south.
California brown pelican *(Pelecanus occidentalis californicus)*	FP	Nests on coastal islands, winter coastal visitor along Central coast	May perch on bluff tops occasionally, forage in ocean. No nesting known in Monterey County.
Western snowy plover *(Charadrius alexandrinum nivosus)*	FT, CSC	Nests on sandy beach, shores of salt ponds	None, no suitable habitat on site.
Western burrowing owl *(Athene cunicularia hypugea)*	CSC	Grasslands with short grass and burrows.	No suitable habitat on site.
Black swift *(Cypseloides niger)*	CSC	Nests in small colonies on cliffs behind or adjacent to waterfalls and along sea bluffs	No suitable habitat on this site.
Mammals			
Monterey dusky-footed woodrat *(Neotoma fuscipes Luciana)*	CSC	Scrub, forest, and riparian habitats	Nests observed on site.

[1] Key to status:

FE	=	Federally listed as endangered species
FT	=	Federally listed as threatened species
ST	=	State listed as threatened species
CSC	=	California species of special concern
FP	=	Fully protected species under CDFG Code
*	=	Protected under County Local Coastal Plan

Impact Discussion

a) Special Status Plant Species: Monterey pines (CNPS List 1B) occur within the work area; however these trees are planted or have naturally established. The trees are associated with native stands. No trees would be removed yet trail construction activities may occur within the root zone of trees. The health of the trees may be adversely affected if roots are significantly affected.

A patch of Little Sur manzanita (CNPS List 1B species) grows near the existing trail north of Gate 19. DPR has signed the area for plant protection and no trail improvements are proposed that would affect this species; therefore no adverse impacts would occur to this species. Trail rehabilitation would occur within and/or in close proximity to individuals of Monterey paintbrush (CNPS List 4; species considered to be locally unique by Monterey County). Plants of this species may be removed by trail rehabilitation, removal of invasive, non-native plant species, and maintenance depending upon the extent of construction work required in each area. Impacts to this species would be minimized by DPR's existing trail construction methods, which include avoidance of the species wherever feasible. In addition the species is expected to colonize along the proposed closed/rehabilitation trails, such that no significant loss to the species population is expected. No other species status plant species has been documented from the project area.

Special Status Animal Species: All creeks within the project work area provide marginal foraging or cover habitat for California red-legged frogs, a federally listed threatened species. Construction of the bridges at Soberanes and Doud creeks may temporarily disturb some wetland vegetation, and if frogs are present in the work area, they may be injured or killed by construction. In the long-term, the bridges would benefit frogs by keeping people from walking directly through the creeks.

Project features would occur within coastal scrub that supports seacliff buckwheat which is a host plant for Smith's blue butterfly. The Smith's blue butterfly is a federally listed endangered species that has been confirmed to occur within the project area. Incidental take of Smith's blue butterflies could occur as a result of: maintaining, enhancing, and restoring habitat and associated activities (including removal of invasive, non-native plant species); conducting education and outreach and associated activities; damage and direct loss of its host plants, seacliff buckwheat; temporary habitat loss; disturbance and displacement; and conducting maintenance activities. Incidental take of Smith's blue butterflies could also occur as a result of lawful recreational and associated activities such as trail creation and maintenance and hiking on trails. As a result of these activities, incidental take could occur in the form of direct mortality or injury of eggs, larvae, pupae, and/or adults

through exposure; digging, planting, cutting, collection, distribution, and sowing of seed from host plants; and trampling by DPR or persons associated with DPR. Project activities would remove seacliff buckwheat plants for the improvement of approximately 3.1 miles of coastal trail. Habitat restoration activities implemented concurrent with trail improvements and maintenance would restore approximately 5.0 acres of coastal scrub habitat along approximately 6.5 miles of removed trail and other restored areas, resulting in a net benefit to the butterfly and its host plant.

Improvement to existing Trail 1F may result in impacts to Monterey dusky-footed woodrat nests. The species may be disturbed if trail construction occurs at nest sites.

The status of the project area as an area dedicated to open space and conservation of natural resources, and thereby protected from development, provides a benefit to listed species and other native plant and wildlife species. DPR would maintain the State Park in a natural state where the native habitats would be maintained and remain mostly undisturbed over the long-term, thereby serving as a refuge for special status species where suitable habitat exists. The project's proposal for restoration and enhancement of listed species habitats within areas dedicated to open space and conservation of natural resources further promotes the conservation and recovery of these species by providing future area for each of these species to expand its current range once habitat has been restored or enhanced.

Impact BIO-1: Trail rehabilitation would occur within and/or in close proximity to individuals of Monterey paintbrush (CNPS List 4; species considered to be locally unique by Monterey County). Plants of this species may be removed by trail rehabilitation, removal of invasive, non-native plant species, and maintenance depending upon the extent of construction work required in each area.

Mitigation Measure BIO-1: To avoid construction related impacts to Monterey paintbrush DPR will incorporate the following measures prior to commencement of all construction activities:

- Trail construction should be kept to the smallest feasible disturbance area. Material removed during trail construction should not be side cast onto adjacent coastal scrub and prairie. The limits of the work will be demarcated in the field. DPR will install flagging, fencing, and other protective measures around paintbrush plants that are to be avoided by the project.
- DPR will use salvaged plants and/or site-collected seed collected from Monterey paintbrush in the revegetation effort to re-establish the species.

- Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur adjacent to work areas should be removed/controlled to prevent their encroachment into habitat supporting the Monterey paintbrush. Care will be given to ensure the root systems of Monterey paintbrush are not dislodged while invasive, non-native plants are hand-pulled. No herbicides will be used.

Impact BIO-2: Construction of the bridges over Doud and Soberanes creeks would temporarily disturb some wetland vegetation, and if frogs are present in the work area, they may be injured or killed by construction. Construction of the bridge over Soberanes Creek may temporarily affect areas adjacent to the creek.

Mitigation Measure BIO-2. To avoid impacts to California red-legged frog, DPR will schedule construction to occur during the dry season, generally between April 15 and October 15 of any given year and implement the following measures:

- No more than 48 hours prior to start of construction of the new footbridges at Soberanes and Doud creeks, a Service-approved biologist will conduct a visual survey of the work area for frogs. If any California red-legged frogs are observed within the work area, a Service-approved biologist will relocate the frogs to other suitable creek habitat upstream of the work area. The biologist will monitor the initial ground disturbance and vegetation removal. The results of the surveys, including whether any California red-legged frogs were observed or heard, and the species of all amphibians detected, will be reported to USFWS.
- DPR will secure a Safe Harbor Agreement with USFWS for the California red-legged frog prior to trail improvements at Soberanes and Doud creeks.

Impact BIO-3: Impacts to Smith's blue butterflies could occur as a result of maintaining trails and overlooks and by enhancing and restoring habitat, including removal of invasive, non-native vegetation. Actions could damage or cause a direct loss of seacliff buckwheat, the species host plant. Trail maintenance may result in temporary habitat loss, disturbance and displacement during such activities. Incidental take of Smith's blue butterflies could occur as a result of recreation and associated activities such as hiking on trails.

Mitigation Measure BIO-3. To avoid, minimize, and compensate for impacts to Smith’s blue butterfly DPR will implement the following measures:

- Prior to implementation of project improvements within areas supporting seacliff buckwheat, DPR will secure a Safe Harbor Agreement with USFWS that outlines measures DPR will implement to achieve measurable benefit to the species. The Safe Harbor Agreement will provide DPR incidental take coverage for Smith's blue butterflies

occupying and associated with its host plant (seacliff buckwheat) that could be taken as a result of the proposed project. Incidental take coverage will be provided in this manner because detecting dead or injured individual Smith's blue butterflies in the various life stages would be difficult due to their small size and cryptic nature; however, damage to and/or loss of a host plant would be detectable. Therefore, the Safe Harbor Agreement, upon approval by USFWS, will authorize DPR to incidentally take all Smith's blue butterflies, in any life stage, occupying and associated with a pre-established number of its host plant (seacliff buckwheat), that could be killed or injured as a result of damage to and/or loss of one of those host plants. DPR will also implement measures to avoid take of the butterfly by minimizing removal of seacliff buckwheat during trail maintenance and improvement activities.

- Modifications in the trail alignment may be made to avoid dense patches of seacliff buckwheat.
- DPR will implement measures to encourage the increase in establishment of seacliff buckwheat to provide areas where additional habitat for Smith's blue butterfly could establish so as to potentially increase the abundance and distribution of the species within the project area. These measures include closure of 6.3 miles of non-system trails and restoration of approximately 5.0 acres of coastal scrub habitat through the removal and control of invasive, non-native plant species.
- DPR will collect seed from seacliff buckwheat for the purpose of planting and/or seeding of buckwheat plants to expand habitat for Smith's blue butterfly within the project area.
- Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur in coastal scrub supporting seacliff buckwheat should be removed/controlled. Care will be given to ensure the root systems of seacliff buckwheat are not dislodged if invasive, non-native plants are hand-pulled. No herbicides will be used.

Impact BIO-4: Improvement to existing Trail 1F may result in impacts to Monterey dusky-footed woodrat nests. The species may be disturbed if trail construction occurs at nest sites.

Mitigation Measure BIO-4. To avoid impacts to Monterey dusky-footed woodrat, adjust alignment of Trail 1F to avoid the existing woodrat nests. If this is not possible, implement the following measures:

- Two weeks prior to trail construction, a qualified biologist will construct a replacement woodrat nest for each nest that will be disturbed. The replacement nest will be located well outside the construction corridor in suitable habitat.

- Three days prior to disturbance of existing woodrat nests, a qualified biologist will conduct live trapping at those nests. Any woodrats caught will be relocated to the newly constructed replacement nests.
- After trapping is completed, the biologist will disassemble the existing woodrat nests by hand to allow any remaining woodrats inside to escape unharmed.
- The biologist will obtain approval from CDFG for the woodrat relocation effort, prior to implementing it.

b) Project features would occur within coastal scrub; some scrub areas support small patches of oatgrass prairie. Oatgrass prairie is a sensitive natural community as per CDFG. No trail improvements are proposed within the oatgrass prairie, therefore no impacts are anticipated. The repair of trails and bridge construction would not result in removal of riparian woodland or habitat; however, willows may be trimmed to provide trail clearance near Gate 1 (Trail section 1F) and some riparian and wetland vegetation may be temporarily impacted from worker and equipment access during bridge construction at Doud Creek.

Impact BIO-5: Willows may be trimmed to provide trail clearance near Gate 1 (Trail section 1F) and some riparian and wetland vegetation may be temporarily impacted from worker and equipment access during bridge construction at Doud Creek.

Mitigation Measure BIO-5. To avoid impacts to riparian and wetland resources within the work area, DPR will implement the following:

- Prior to construction, orange plastic construction fencing will be constructed at the limits of construction access and the work area so as to prevent injury to nearby riparian and wetland vegetation.
- During construction, excess soil, chemicals, debris, equipment or other materials will not be dumped or stored within 20 feet of the creek edge.
- If vegetation is trimmed for trail access, trimmed vegetation will be allowed to re-grow. If trimming is required periodically, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.

c) The project would not alter the flow of any watercourse or significantly affect in-stream wetlands. Bridge abutments would be placed outside the top of bank. The footbridge and puncheon crossing of Doud Creek would not require any alteration of the creek or creek flow. All bridges would avoid permanent impacts to in-stream vegetation (wetlands); however construction may cause temporary impacts to wetland (i.e., trampling) if workers access the waterway. The watercourses are subject to jurisdiction by the Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and the California Department

of Fish and Game (CDFG). Mitigation Measure BIO-6 would reduce impacts to waters of the US and Waters of the State to a less-than-significant level.

Impact BIO-6: Construction of the bridges at Soberanes and Doud creeks may cause temporary impacts to water resources if workers access the waterway.

Mitigation Measure BIO-6:

- A wetlands and waters of the U.S. delineation report will be prepared for the Doud Creek bridge area and submitted to the appropriate office of the U.S. Army Corps of Engineers (USACE) for jurisdictional determination under Section 4040 of the Clean Water Act. If required by the USACE, a 4040 permit under the Nationwide Permit Program will be obtained for the bridge project and all conditions imposed by the permitting authority will be implemented.
- A waters of the State (riparian and state waters) report will be prepared for the Soberanes and Doud Creek bridge areas and submitted to the appropriate office of CDFG and Regional Water Quality Control Board (RWQCB) for jurisdictional determination under Fish and Game Code and the Porter Cologne Act, respectively. If required by CDFG and/or RWQCB, a Streambed Alteration Agreement and/or Section 401 water quality certification will be obtained for the bridge project areas and all conditions imposed by the permitting authorities will be implemented.
- Best management practices would be implemented at watercourses; these practices include:
    - Install orange plastic construction-limit fencing to demarcate the limits of work and worker access and to protect aquatic resources.
    - Conduct construction activities during the dry season.
    - Divert concentrated runoff away from channel banks.
    - Minimize tree limbing.
    - Identify with construction fencing all areas that require clearing, grading or disturbance.
    - Implement erosion control measures as needed. Monitor effectiveness of measures during the first year's rainy season and implement remedial measures (e.g., reseeding) if sedimentation or erosion is noted.
    - If riparian vegetation (willow) is removed, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.

d) Construction activities may cause short-term impacts to nesting birds if they are present during construction. The noise from construction may cause nesting birds

to abandon eggs or chicks, resulting in their death. Mitigation Measure BIO-7 would reduce impacts to nesting birds to a less-than-significant level.

Impact BIO-7: Construction activities may cause short-term impacts to nesting birds if they are present during construction. The noise from construction may cause nesting birds to abandon eggs or chicks, resulting in their death.

Mitigation Measure BIO-7: DPR will implement the following measures:

- If possible, all noise generating construction activities will occur outside the raptor and migratory bird breeding season (August 1 – February 1).
- If construction-related activities must be scheduled during the breeding season, then focused surveys to identify active nests of migratory birds and raptor species will be conducted by a DPR-approved biologist before construction activities occur in these months.
- Surveys for active raptor nests will be conducted within a 500-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 500-foot radius of the nest until the young have fledged and the young will not be impacted by project activities (as determined by the biologist) and there is no evidence of a second nest attempt.
- Surveys for active migratory bird nests will be conducted within a 100-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 100-foot radius of the nest until the young have fledged and the young will not be impacted by project activities (as determined by the biologist) and there is no evidence of a second nest attempt.

e) The project would not conflict with area plans or policies. The project includes restoration for degraded habitats through the removal/control of invasive non-native plant species and rehabilitation of closed/removed trails.

f) The project area is not within the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other habitat conservation plan. DPR is currently working with USFWS to obtain a Safe Harbor Agreement (SHA) for the project relative to the Smith's blue butterfly and California red-legged frog. The SHA would be in place prior to Coastal Trail implementation and project activities would adhere to measures outlined in the SHA such that the project provides a net benefit to the two federally listed species and their habitat.

V. CULTURAL RESOURCES

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	❒	■	❒	❒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	❒	■	❒	❒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❒	❒	❒	■
d) Disturb any human remains, including those interred outside of formal cemeteries?	❒	❒	■	❒

Setting

The project area is located within the portion of Garrapata SP west of State Highway 1, encompassing approximately 277 acres. This area, on coastal bluffs, is largely undisturbed except for existing unpaved trails and overlooks. The entire Garrapata SP unit totals 2,902 acres; the larger eastern portion features more diverse terrain and resources. The area to the east of State Highway 1 also features historic and archaeological resources; however, this discussion focuses on historic and archaeological resources within the project area to the west of State Highway 1.

Native American Setting. A Cultural Resource Inventory was prepared for Garrapata State Park by DPR in 1990. This inventory states that the prehistory of the Central Coast, particularly the Big Sur Coast, is poorly understood compared to other areas of California. Various authors have postulated early occupation dates and economic patterns, though there has been relatively limited research of archaeological sites along the Big Sur Coast. The earliest occupation of the Big Sur Coast by Native Americans began at least 5,000 years ago. Prehistoric and historic Native American cultures within the Central Coast region can be characterized as gatherer-hunter-fisher economies.

Garrapata SP is within the territory of the Rumsen tribelet of the Costanoan (Ohlone) Indians. The preferred village locations were generally along a water course (stream or river) in an area with ample sunshine. A village site has been identified within Garrapata SP, but it is not located within the project area. The Rumsen people gathered a wide variety of plant food and shellfish. They also fished for steelhead

and other fishes, and hunted deer, antelope, bear, mountain lion, and other mammals.

Over 40 prehistoric archaeological sites have been identified within the project area along the seven-mile coastline of Garrapata SP. These sites are primarily shellfish processing sites located on the edge of the coastal bluffs and on streambanks near a creek mouth but upstream of the bluff edge. Abalone and mussel were generally harvested in the greatest quantity, with lesser amounts of other shellfish. The shell middens are generally found on the surface and are shallow in depth (0-50 cm). A few sites have fire-affected rock or faunal remains, though stone artifacts or features such as ash or burned soil are rare.

The archaeological sites within the project area are affected by accelerated and severe erosion caused by natural processes due to their location on the bluff edge, excessive erosion within the trailbeds, and by human disturbance from trail use and fishing access. Erosion is particularly damaging to the shellfish processing sites because deposits are generally on the surface or at shallow depth. In some locations, it is evident that midden from upslope has been carried downslope by surface flow during storm events. This is particularly evident where the trailbed is entrenched and storm water collects and is carried down the trail rather than flowing off the trail as sheet flow.

Historic Setting. During the late 1700s, Mission San Carlos Borromeo drew converts from the rancherias in the Big Sur coast. The rugged lands to the south within Big Sur, though owned by the Mission, were likely little used as there were ample resources within fertile Carmel Valley. After the mission was secularized in 1834, the excess property was available for land grants. All land along the coast from the Carmel River to Palo Colorado Canyon was initially granted in 1836 as Rancho San Jose y Sur Chiquito, though it was subsequently transferred. The area now Garrapata SP was likely used only for pasturing, if it was used at all during that early period.

In the 1850s, homesteads were established along the coast in what is now Garrapata SP. Andrew Wasson established a 160-acre tract to the north, while William Brainard Post claimed the adjoining parcel including Soberanes Creek. Within a few years, Andrew Wasson sold his tract to Post. The Post family continued to live at the homestead, though intermittently in the later years, until 1877. According to the Cultural Resource Inventory for Garrapata SP, the Post family occupation at Soberanes Point is both of historical interest and potential archaeological value. The property was later acquired by Ezequiel Soberanes as part of a larger ranch complex. The Soberanes family also occupied the prior-Post homestead, though the ranch was later sold in 1891.

Beginning in 1889, Francis Doud, an early pioneer in Monterey, began purchasing large tracts of land in Big Sur. He established a stock-raising and butchering business, becoming a prominent cattleman. Doud acquired the lands that encompassed Soberanes Point and the old ranch house at Soberanes Creek. The ranch house later burned to the ground and was not reconstructed.

The State of California acquired the property from the Doud family, and later other parcels, to establish the state park. The Soberanes-Post-Doud Ranch complex site is east of State Highway 1. There are no identified historic structures within the project area. Remnant fencing and posts are located within the project area. The dates and historic significance, if any, of these features are not presently recorded.

Segments of an old roadbed, believed to be an historic alignment of Highway 1, exist within the project area. Some portions of this remnant road are visible, while in other locations the roadbed is overgrown with vegetation and not readily visible. While these road remnants are not likely to be eligible for the California Register, they have not yet been documented or evaluated.

Previous Cultural Records Search and Investigations. The most comprehensive research of the Garrapata SP area was conducted by Edna Kimbro of DPR in 1987. The research built upon earlier less detailed investigations by a private consulting firm in 1979. In 1988-1989, DPR conducted a historical and archaeological background study of Garrapata SP in connection with field survey of approximately 725 acres of the 2,902-acre park unit. The field survey re-recorded 24 pre-historic sites. In addition, 25 new prehistoric sites were found and recorded within the survey area. Over 40 archaeological sites have been identified within the project area. These sites are primarily coastal bluff edge shell midden; which were used for shellfish processing by the Native Americans. The background study notes that the only information about these sites is based on this survey data. Information about temporal span, season of use, types of artifacts and features, or subsurface configuration is not known. The 1988-1989 background study conducted by DPR also involved identification of historic sites, including the Soberanes-Post home site. No identified historic sites are located within the project area.

In 2010-2011, a more detailed study of a small portion of the project area, within the vicinity of Soberanes Creek, was conducted by a DPR archaeologist as part of the project investigation. In 2011, Holman & Associates Archaeological Consultants conducted field visits of the proposed trail and overlook improvements at Gates 1 through 19. As a result of the field visits, informal presence/absence testing for archaeological resources was recommended at several of the proposed overlook and trail sites within the vicinity of identified archaeological sites. On March 8 and 9, 2012, posthole tests were completed at several overlooks (Gates 2, 10, 12 and 17 South) and at the southern terminus of the Trail 10A reroute.

Impact Discussion

a) No historic sites or structures have been identified, based on prior background studies and investigations, within the project area. The Soberanes-Post-Doud ranch complex site is east side of State Highway 1. Wood fence posts and livestock fencing exist along the boundaries of the project site. It is not known what historic significance, if any, these remnant fence lines may have. With the exception of the replacement of posts at the trail gate entrances as needed, and removal of the lookout posts at Soberanes Point, no other fence lines would be disturbed as part of the project. The posts that are proposed to be replaced or removed were likely installed by DPR as park improvements.

   The old roadbed segments that exist within the project area are believed to be remnants of the historic alignment of Highway 1. The roadbed remnants have not been documented or evaluated to determine their historic significance. DPR considers some of the roadbed segments to be non-system trails and proposes their closure and removal. In the absence of an evaluation and documentation, the roadbed segments should not be removed such that the historic alignment no longer exists. Implementation of Mitigation Measure CULT-1 would reduce the potential impacts to potential historic resources to a less-than-significant level.

   Impact CULT-1: Remnant roadbed removal, if not carried out sensitively, could result in significant disturbance to a potential historic resource.

   Mitigation Measure CULT-1: To avoid impacts to potential historic roadbed remnants when closing and removing non-system trails, the following measures will be implemented.
   - Where the remnant roadbed is relatively stable, utilize fencing, signage or vegetation debris to discourage access and lightly scarify the surface to promote revegetation in order to reduce erosion.
   - Where excessive erosion exists along the roadbed and remediation is needed to prevent further erosion of the roadbed, fill entrenched areas, install drainage dips as needed, and lightly decompact the surface to promote revegetation.
   - Mechanical grading will not be conducted to remove the roadbed.
   - If, at a later date, the roadbed segments are evaluated, documented, and determined by a qualified DPR representative not to be eligible for the California Register, the roadbed may be removed.

b) Approximately 40 archaeological sites have been identified within the project area, with potential for additional sites. Many sites have multiple loci; most feature shell midden, associated with shellfish processing, and are located along

the coastal bluff edges. Other sites are located farther from the bluff edge near stream outlets. Evidence of fire affected rock or faunal remains, other than shell, stone artifacts, and features such as ash or burned soil are rare within these sites. Although the project area has been surveyed previously, little is known about the date and span of use, season of use, and subsurface configuration of the archaeological resources. The potential of these sites to contain important information about prehistoric patterns and dates of occupation is largely unknown, though some sites likely would reveal similar information. Because the archaeological resources within the project area have not been thoroughly studied and analyzed, protection of the archaeological resources is one of the project's objectives.

Virtually all the sites show evidence of erosion, both from natural processes and human disturbance. Accelerated erosion and soil loss is presently occurring as result of entrenched trailbeds. Where trails are located within archaeological sites, ongoing disturbance is also occurring from trail use and fishing access. Where midden is exposed on the surface on trails, there is also evidence of trampling and further breaking of shell. Where trails follow closely along bluff edges within archaeological sites, there is substantial erosion along the bluff edge. At existing overlook areas on coastal promontories, there is also evidence of accelerated erosion. Because there are no designated or improved overlook features at these locations, visitors are trampling the bluff edges. While coastal bluff erosion and retreat is a natural process, trail use and overlooks along actively eroding edges can further accelerate erosion, resulting in greater disturbance and loss of archaeological resources.

Existing visitor use of overlooks, system and non-system trails is resulting in disturbance to archaeological resources. The project would reduce this ongoing disturbance by closing non-system trails within archaeological sites, stabilizing and capping Coastal Trail segments, and defining and capping overlook areas. Although it is anticipated that these improvements would reduce the level of existing disturbance to archaeological sites, the proposed project could result in impacts to archaeological resources if the project is not sensitively implemented. The potential impacts associated with the proposed trail system improvements are discussed further in the following paragraphs.

<u>Non-System Trail Closure and Removal</u>
The project includes closure and removal of approximately 6.3 miles of non-system trails, most of which were likely user-created. Table I (Chapter 1) lists the length of trails to be closed at each of the trail gates (trailheads). Some of the trails to be closed are located within identified archaeological sites. Trail removal could result in disturbance to archaeological sites if not carried out sensitively with minimal soil disturbance. Implementation of Mitigation Measure CULT-2

would reduce the potential impact to archaeological sites to a less-than significant level.

Impact CULT-2: Non-system trail closure and removal, if not carried out sensitively, could result in disturbance to archaeological sites.

Mitigation Measure CULT-2: To avoid impacts to archaeological sites when closing and removing non-system trails, the following measures will be implemented within, and within 30 feet of, identified archaeological sites.

For trail closures within the Soberanes Point area:

- The DPR District Archaeologist, or other qualified archaeologist/designee, would inspect the location of the trail removals and closures prior to any soil disturbance to confirm the locations where an archaeological monitor will be required. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.

Trail closure and removal measures where the trailbed is stable:

- Allow trail to revegetate naturally.
- Retain all open areas except at trail entrances.
- Distribute cut native vegetation at trail entrances for length of approximately 20 feet
- Install cable and rod fencing only as needed.
- Avoid installing sign posts within, or in vicinity of, archaeological sites where feasible.

Trail closure and removal measures where the trailbed is entrenched (uneven surface with substantial loss of soil within the trailbed):

- Within entrenched areas, decompact/ lightly scarify trail bed using hand tools.
- For entrenched trailbeds within, and within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site.

- For areas not located within, or within 30 feet of an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used.
- No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material.
- Install straw wattles as appropriate.

Coastal Trail Segments

The existing trails within the project area are soil surface, with the exception of trails at Trail Gate 19 which were previously capped with aggregate base. Where existing trails are located within archaeological sites, pedestrian trail use can result in disturbance to midden, which is generally at relatively shallow depths. Within trail segments where erosion has occurred and the trailbed is presently entrenched, rainfall accumulates and results in accelerated erosion along the trail alignment. This accelerated erosion can result in greater levels of disturbance to archaeological sites. Continued use of soil surface trails within archaeological sites and allowing entrenched trailbeds to remain unrepaired would likely result in continued disturbance to archaeological sites. Presently, trail use is distributed throughout the existing trails, including non-system trails. Closure of non-system trails would likely increase trail use on the designated Coastal Trail segments.

The trail segments proposed to be designated as Coastal Trail segments generally avoid previously identified archaeological sites and areas with evidence of surface midden. Where archaeological sites are located along retreating coastal bluff edges and substantial midden is evident on the surface, the project proposes closure and removal of those trail segments. In locations where the trailbed within the archaeological site has evidence of substantial prior disturbance and there is no evidence of midden within the trailbed, the trail segment has been proposed as a Coastal Trail segment if it provides access to an overlook or shoreline access.

The project proposes to widen the Coastal Trail segments to 48 inches and cap the surface with 6 to 8 inches of aggregate base material. Entrenched areas would be filled with material to create a stable trailbed prior to installing the aggregate base trailbed. The trailbed would be crowned to avoid future accelerated erosion. Without capping and filling of the entrenched areas within the trailbed, increased trail use on the Coastal Trail segments could result in greater disturbance to archaeological resources than at present. Implementation of Mitigation Measure CULT-3 would reduce the potential impact to archaeological resources to a less-than significant level.

IMPACT CULT-3: Designation and use of the Coastal Trail segments could result in greater disturbance to archaeological resources due to trampling, accelerated erosion, and increased trail use. Widening of the existing trailbed could result in exposure, disturbance, or displacement of archaeological features or artifacts.

Mitigation Measure CULT-3: To avoid impacts to archaeological resources from designating and widening the trailbed of Coastal Trail segments, the following trail improvement measures will be followed:

- Within entrenched areas, decompact/ lightly scarify trail bed using hand tools.
- For entrenched trailbeds within, and within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site.
- For areas not located within, or within 30 feet, of an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used.
- No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material.
- Delineate and lightly scrape trailbed to maximum width of 48 inches.
- Cap trail bed with an aggregate base 6 to 8 inches in depth.
- At Soberanes Point, within the Trail Gate 7 area, and on the coastal bluff to the south of Doud Creek (Trail 19A), within, and within 30 feet, of identified archaeological sites, a qualified archaeological monitor will be present during construction of Coastal Trail improvements. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.

<u>Trail Reroute at Soberanes Point</u>

The existing trail loop around Soberanes Point is one of the few locations within the project area that allows for a lengthier trail experience and distant views. Visitors can access the loop trail from Gates 8, 9, or 10, though most access is from Gate 8 due to availability of parking. An existing wood walkway is located

along this loop trail, providing a key connection between the trails leading from Gates 8 and 10. The slope below the walkway is severely eroded and the walkway supports continue to be exposed to erosion. It is not feasible to stabilize the slope at the eroded walkway. Thus, to continue to provide a loop trail at Soberanes Point a trail reroute would be required.

The project proposes a new trail alignment for a distance of approximately 750 linear feet. The reroute would begin at Overlook 10-1, proceeding northward and climbing in elevation. This realignment avoids identified archaeological sites. Holman & Associates Archaeological Consultants conducted a field reconnaissance of the proposed alignment after vegetation was thinned and surface soil made visible by DPR staff. No evidence of midden was observed along the trail alignment. Due to the sloping terrain and distance from coastal bluff edges, archaeological resources are not anticipated along most of the trail alignment. The southern terminus of the proposed new trail alignment is located on relatively level terrain and is situated within proximity of an identified archaeological site. Posthole presence/absence tests were conducted by Holman & Associates Archaeological Consultants on March 9, 2012, at the southern terminus. The posthole tests did not reveal evidence of an archaeological site. Based on resurvey, test findings and the location of the proposed trail alignment on sloping terrain away from the coastal bluff edges, the proposed trail reroute at Soberanes Point would avoid identified archaeological sites.

Steps (Wood Interlocking Steps and Cable Steps)

Wood interlocking steps are in need of replacement or repair at several locations within the project area. At some locations, new steps are needed due to the steep trail gradient and resulting accelerated erosion within the trail bed. Most of the existing steps in need of replacement or repair are located at the trailhead entrances and in other locations not within identified archaeological sites. The proposed new steps and replacement steps located in the vicinity of archaeological sites include: new wood interlocking steps to the intertidal zone (Trail Gate 2), new wood interlocking steps (Trail Gate 3), and replacement cable steps to the intertidal zone (Trail Gate 5).

At Trail Gate 2, the existing access route to the intertidal zone is heavily eroded and disturbed. Remnants of wood interlocking steps (rebar anchors) are visible but no wood steps remain. The public continues to access the intertidal zone via this route. No archaeological sites have been identified along the access route; however, some evidence of archaeological resources was visible in the vicinity of the proposed replacement steps. Due to the level of erosion and existing public use, wood interlocking steps are recommended by DPR staff. Archaeological tests were not conducted due to prior disturbance, erosion and lack of soil or surface evidence of archaeological resources. Although archaeological resources

are not anticipated along the step alignment, archaeological resources could be discovered during excavation for the interlocking steps.

The existing access route to the intertidal zone at Trail Gate 5 is also heavily eroded and disturbed. Similar to the access at Gate 2, only rebar anchors remain from the previous interlocking wood steps. The access route is located within the area of an indentified archaeological site, though much of the surface of the access route has eroded due to human disturbance and natural processes. Installation of cable steps would only require excavation at the top of the steps for the anchors within an area of thin soil. Although archaeological resources are not anticipated at the proposed location of the cable step anchors, archaeological resources could be discovered during excavation for the anchors.

A bench and overlook presently exist at Trail Gate 3. The trail providing access to the overlook is steep and entrenched, resulting in accelerated erosion. Although surface midden was evident in the vicinity of the trail alignment, the midden did not appear to originate from within the trailbed and likely eroded from the adjacent area. Unanticipated archaeological resources could be discovered during excavation for the wooden interlocking steps.

The installation of steps at Trail Gates 2, 3, and 5 could result in potential significant impacts to archaeological resources. Implementation of Mitigation Measure CULT-4 would reduce the potential impacts to archaeological resources to a less-than-significant level.

Impact CULT-4: Excavation for construction of interlocking and cable steps at Trail Gates 2, 3 and 5 could result in disturbance to archaeological resources.

Mitigation Measure CULT-4: To avoid impacts to archaeological resources from excavation during construction of steps at Trail Gates 2, 3 and 5, the following combination of mitigation measures will be implemented:

- Prior to construction, the proposed step alignment down the bluff to the intertidal zone at Gate 2 will be flagged by DPR and inspected by a qualified archaeologist.
- A qualified archaeological monitor will be present during excavation for the steps at Trail Gate 3 and the cable steps anchors at Trail Gate 5. The archaeological monitor will remain on site as warranted by the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery

measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.

Pedestrian Bridges

The project includes pedestrian bridges at Soberanes Creek and Doud Creek. Two pedestrian bridges are proposed at the Doud Creek crossing (located between Trail Gates 18 and 19). An approximately 32-foot long wood bridge and a 28-foot long puncheon style bridge are proposed. Both bridges are proposed to be located within the incised creek channel. Archaeological resources are not expected to be found within this portion of the incised, narrow creek channel. Excavation for the bridge abutments at Doud Creek would not result in impacts to archaeological resources.

The proposed pedestrian bridge at Soberanes Creek would span across the incised creek corridor. The proposed location of the bridge abutments are within the vicinity of identified archaeological sites and features. Construction of the bridge abutments could result in potential significant impacts to archaeological resources. Measure CULT-5 would reduce the potential impacts to archaeological resources to a less-than-significant level.

Impact CULT-5: Construction of the abutments for the Soberanes Creek pedestrian bridge could result in potential significant impacts to archaeological resources.

Mitigation Measure CULT-5: To avoid impacts to archaeological resources from construction of the abutments for the Soberanes Creek pedestrian bridge, the following measures shall be implemented:

- Prior to any excavation, the DPR District Archaeologist, or other qualified archaeologist/designee, will verify the location of the proposed bridge abutments to ensure the location will not result in potential significant impacts to archaeological resources.

Overlooks

Existing trail overlooks are located throughout the project area. Some of the overlooks feature benches and wood-framed aggregate-filled bases, though most of the overlooks are unimproved clearings along the coastal bluffs. Many of the overlooks are situated on actively eroding bluff edges, some of which are undercut. Several of the existing overlooks are located within identified archaeological sites.

The project proposes to install improvements at 22 overlooks, which includes existing overlook sites and relocated sites. The improvements include installation

of a low rock wall and aggregate base. Benches and wood railing are proposed at some of the overlook sites. The intent of the overlook improvements is to clearly demarcate the overlook and reduce the amount of disturbance to archaeological sites and eroding bluff edges.

Where feasible, the project proposes to relocate overlooks to locations outside of identified archaeological sites and farther inland from eroding coastal bluff edges. Presence/absence tests for archaeological materials were conducted by Holman & Associates Archaeological Consultants on March 8 and 9, 2012, to confirm the proposed relocated overlooks are not situated within archaeological sites. These tests were conducted at Trail Gates 2, 10, 12 and 17 South. No archaeological evidence was found at the overlook sites at Gates 2, 10 and 17 South. At Gate 12, impacts to archaeological resources could result if the overlook is not installed within a clearly designated area.

Presence/absence tests were not conducted at other proposed relocated overlook sites where there was prior disturbance, no archaeological indications were observed, and the relocated overlooks were not within an identified archaeological site. While archaeological resources are not expected to occur within these overlook sites, in the case where the relocated overlook is situated in proximity to an identified archaeological site, unanticipated archaeological resources could be encountered during excavation for the overlook improvements.

Where relocation is not feasible and there is existing accelerated erosion and disturbance to the archaeological sites, the project proposes to cap the overlook with an aggregate base to protect the archaeological resource and prevent continued accelerated erosion. Excavation of the overlook improvements could result in impacts to archaeological resources at these overlook sites. Implementation of Mitigation Measure CULT-6 would reduce the level of impacts to archaeological resources to a less-than-significant level.

Impact CULT-6: Excavation for overlook improvements could result in impacts to archaeological resources.

Mitigation Measure CULT-6: To avoid impacts to archaeological resources during excavation for overlook improvements, the following combination of mitigation measures will be implemented:

- Close access to existing unimproved overlooks within identified archaeological sites where feasible.
- Relocate overlooks at Trail Gates 1, 2, 10, and 17 South to the designated locations outside of identified archaeological sites. Overlooks 2, 10, and 17 South will be relocated to sites where previous

archaeological posthole tests were conducted. Any excavation for the rock wall and bench posts will be located where previously marked and recorded by DPR staff based on prior testing. The District Archaeologist, or qualified archaeologist/ designee, will verify the location of relocated overlooks at Trail Gates 1, 2, 10, and 17 South prior to any soil disturbance or excavation.

- The overlook at Trail Gate 12 will be located within the previously disturbed rock/thin soil area. The existing trail alignment leading to the overlook will be capped with aggregate base for a distance to be determined by a qualified archaeologist prior to construction of the overlook improvements.
- Excavation for overlooks will be limited to the rock wall (6 to 8 inches in depth), wood railing, and bench posts (36 inches in depth maximum).
- Overlook areas will be capped with aggregate base material.
- No new benches or wood railing will be installed within existing overlooks located within identified archaeological sites.
- A qualified archaeological monitor will be present during excavation for construction of the overlooks at Trail Gates 1, 5, and 12. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.

<u>Unanticipated Archaeological Resources</u>
Previous archaeological site visits and testing have been conducted, and mitigation measures identified, to avoid impacts to archaeological sites and reduce any potential impacts to less-than-significant. Nonetheless, the project area features numerous archaeological sites and the potential exists for other undocumented sites, thus there remains the potential for archaeological resources to be encountered in areas not anticipated. Implementation of Mitigation Measure CULT-7 would reduce the potential impact to archaeological resources to a less-than-significant level.

Impact CULT-7: Project-related activities could result in impacts to significant archaeological resources in areas not anticipated.

Mitigation Measure CULT-7: To avoid unanticipated impacts to archaeological resources from project-related activities in areas, the following mitigation measure will be implemented:

- In the event that a previously undocumented, potentially significant cultural deposit is encountered during project related activities and no archaeological monitor is present, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location of until the appropriate measures have been implemented as determined by the Archaeologist.

c) The project proposes replacement of steps down the coastal bluffs to provide access to the shoreline/intertidal zone at Trail Gates 3 and 5. At both locations, steps previously existed but have since deteriorated with only rebar anchors remaining. At both locations, there is ongoing bluff erosion from both visitor use and natural processes. The proposed interlocking steps at Gate 2 and cable steps at Gate 5 would not impact the coastal bluff in areas that have not been previously disturbed. No steps would be installed within the intertidal zone. While paleontological resources may be present within coastal bluffs and intertidal zones within the project area along the Big Sur Coast, no information was provided by DPR indicating the presence of documented significant paleontological resources at the location of the proposed improvements. The project also would not affect any unique geologic features. No impact would occur.

d) No human remains or burial sites have been documented or are expected to be found in the project area. However, the possibility always exists that human remains may be encountered. Discovery and disturbance of any human remains requires special treatment, per State codes. Incorporation of the following Standard Project Requirement would ensure the potential impacts to human remains would remain less-than-significant.

<u>Standard Project Requirement</u>:
In the event human remains are discovered, work would cease immediately in the area of the find and project manager/site supervisor would notify the State's representative and other appropriate DPR personnel. The DPR Sector Superintendent (or authorized representative) would notify the County Coroner in accordance with Section 7050.5 of the California Health and Safety Code. If the Coroner determines the remains represent a Native American interment and so notifies the Native American Heritage Commission in Sacramento, the Commission will identify the Most

Likely Descendants, who will make recommendations for appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is agreed upon, per Public Resources Code (PRC) Section 5097.98.

Table 4.Summary of Cultural Resources Mitigation Measures by Trailhead

Trailhead	Coastal Trail Improvements	Non-system Trail And Roadbed Closure/Removal	Overlooks	Mitigation Measures
1-19	X	X	X	CULT -7 Unanticipated Resources
1	X	X	X	CULT-1 Roadbed Closure CULT-2 Trail Closure/Removal CULT -3 Coastal Trail CULT -6 Overlooks
2	X	X	X	CULT-2 Trail Closure/Removal CULT -3 Coastal Trail CULT -4 Step Excavation CULT -6 Overlooks
3	X	X	X	CULT-2 Trail Closure/Removal CULT -3 Coastal Trail CULT -4 Step Excavation
4	X	X	X	CULT-1 Roadbed Closure
5	X	X	X	CULT -1 Roadbed Closure CULT-2 Trail Closure/Removal CULT -3 Coastal Trail CULT -4 Step Excavation CULT -6 Overlooks
6	-	X	-	No additional mitigation measures
7	X	X	X	CULT-2 Trail Closure/Removal CULT -3 Coastal Trail CULT-5 Pedestrian Bridge
8	X	X	1	CULT-2 Trail Closure/Removal CULT-3 Coastal Trail CULT-5 Pedestrian Bridge
9	X	X	X	CULT-2 Trail Closure/Removal CULT-3 Coastal Trail
10	X	X	X	CULT -2 Trail Closure/Removal CULT-3 Coastal Trail CULT -6 Overlooks
11	X	X	X	CULT-2 Trail Closure/Removal CULT-3 Coastal Trail
12	X	X	X	CULT-1 Roadbed Closure CULT-2 Trail Closure/Removal CULT-3 Coastal Trail CULT-6 Overlooks
13	-	X	-	CULT-1 Roadbed Closure
14 North	X	X	X	CULT-2 Trail Closure/Removal
14 South	-	X	-	No additional measures
15	-	X	-	No additional measures
16	X	X	X	CULT-1 Roadbed Closure
17 North	X	X	X	CULT -1 Roadbed Closure CULT -2 Trail Closure/Removal
17 South	X	X	X	CULT-1 Roadbed Closure
18	1,419	1,725	1	CULT-1 Roadbed Closure CULT-2 Trail Closure/Removal CULT-3 Coastal Trail
19	-	X	-	CULT-2 Trail Closure/Removal

VI. GEOLOGY AND SOILS

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	❒	❒	■	❒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	❒	❒	■	❒
ii) Strong seismic ground shaking?	❒	❒	■	❒
iii) Seismic-related ground failure, including liquefaction?	❒	❒	■	❒
iv) Landslides?	❒	❒	■	❒
b) Result in substantial soil erosion or the loss of topsoil?	❒	❒	■	❒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	❒	❒	■	❒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	❒	❒	❒	■
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	❒	❒	❒	■

Setting

Garrapata SP is located on the Big Sur coast, which has a varied geologic composition. Big Sur is known for the high, steep slopes which rise up to over 3,000 feet within less than 3 miles from the coastline. Uplift of the Santa Lucia Mountains and wave erosion at the base has formed precipitous slopes in many types of bedrock and overlying deposits. Garrapata SP is located within the northern Big Sur coast, which is underlain by granitic rocks that are not found to the south in Big Sur.

Cretaceous granitic rocks are found along the northern Big Sur coast from Rocky Point to Monterey.

Overlying the bedrock along the coast are deposits that have been eroded from adjacent slopes or transported down the streams from the Santa Lucia Mountains. The project area features several different soil types including: Arroyo Seco gravelly sandy loam, Chualar loam, Sheridan coarse sandy loam, and coastal beaches. Generally within the project area, these soils are located on nearly level to moderate slopes on the coastal terrace. These soil types are generally well drained with slow to medium runoff. Soil areas with accelerated erosion within the project area include the drain pipe outfall at Gate 2 and accelerated soil loss within the existing trailbeds throughout the project area.

The project area is located on the coastal bluff on the west side of State Highway 1, extending for approximately seven miles along the coastline. To the east of State Highway 1, steep slopes of the Santa Lucia Range rise to an elevation of approximately 1,980 feet within Garrapata SP. The elevation of the project area generally ranges between 40 to 120 feet. At Soberanes Point, the highest elevation is at approximately 280 feet.

Along the edge of the project area, steep sea cliffs descend to the Pacific Ocean. The shoreline features include a sand beach (Garrapata Beach) at the southern end, rocky intertidal zones, and coves. Much of the shoreline is not accessible to the public due to the steep terrain. Cable steps down the coastal bluffs were previously constructed at several trail gates, though the steps have since eroded and deteriorated.

The Big Sur coast is prone to landslides, though the type of landslide varies depending on the geology. A report prepared by the California Department of Conservation Division of Mines and Geology in 2001 (*Landslides in the Highway 1 Corridor: Geology and Slope Instability along the Big Sur Coast*) found there are very few large or deep slides within the project area as compared to other areas of the Big Sur coast. The report did note an abundant evidence of small, shallow debris flows on the higher slopes to the east of State Highway 1, which is not within the project area. There is evidence of coastal erosion along the sea cliffs and an unstable area below an existing walkway at Soberanes Point within the project area.

The Monterey County Regional Faults Map (2006) shows a segment of the Garrapata and Palo Colorado regional faults as being located within the project area. The San Andreas Fault lies approximately 30 to 40 miles to the northeast of the project area. Strong seismic ground shaking or seismic-related ground failure could be expected from a seismic event.

Impact Discussion

a) The project site is not located within an Alquist-Priolo Earthquake Fault Zone as designated by the California Geographic Survey. Two regional faults are located within the vicinity of the project area. The project area could be subjected to strong seismic ground shaking. The proposed project, however, would not add a structure that would substantially increase loss nor would the project substantially increase the exposure of the public to injury or death should a seismic event occur. Thus, the exposure to seismic shaking would be less-than-significant. One of the proposed pedestrian bridges would be located within a stream corridor, while the other proposed bridge would feature abutments on rock outcroppings above the incised stream channel. While some stream corridors may be subject to liquefaction during large seismic events, the proposed pedestrian bridge and puncheon crossing at Doud Creek would not substantially increase the exposure of the public to injury or death should a large seismic event affecting the project area occur. The project area is located within a region prone to landslides; however, there is no evidence of large or deep slides within the project area. Small, shallow slides are primarily located to the east of State Highway 1 on the upper slopes. Therefore, the exposure of people or structures to potential substantial adverse impacts involving rupture of an earthquake fault, strong seismic shaking, seismic related ground failure, or landslides would be less-than-significant.

b) The project primarily involves capping existing system trails and removal and closure of non-system trails. Capping of existing eroded trail segments would help to address accelerated erosion where it presently exists within the trailbed. New trail construction is proposed for the rerouted section at Soberanes Point, but would involve minimal soil excavation and disturbance. Excavation for the Soberanes Creek pedestrian bridge abutments, cable steps, and overlook rock walls would also require only minimal excavation, primarily utilizing hand tools. The project would result in a less-than-significant impact to soil erosion and loss of top soil.

c) Most of the existing trail segments are located on relatively level to moderate slopes. Trail segments in close proximity to an undercut sea cliff would either be closed or rerouted away from the cliff edge as part of the proposed project. Existing overlooks in locations with unstable sea cliffs would also be relocated away from the cliff edges as part of the proposed project. Replacement of steps down the coastal bluffs at Trail Gates 2 and 5 is also proposed. Incorporation of the following Specific Project Requirement would ensure the potential impacts to slope stability remain less-than-significant.
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Specific Project Requirement:
Final design and construction of the interlocking steps at Trail Gate 2 and the cable steps at Trail Gate 5 will be reviewed and approved by a qualified DPR representative.

d) The proposed project does not include construction of a structure on expansive soils that would create substantial risks to life or property. No impact would occur as a result of the project.

e) The proposed project does not include septic tanks or alternative wastewater disposal systems. No impact would occur as a result of the project.

VII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	❒	❒	■	❒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	❒	❒	❒	■

Setting

The proposed project would involve habitat restoration and improvements to an existing trail system within an existing State Park unit. The habitat improvements include removal of invasive, non-native vegetation to enhance Smith's blue butterfly habitat. DPR would also collect seed from seacliff buckwheat for the purpose of planting and/or seeding of buckwheat plants to expand habitat for Smith's blue butterfly within the project area. No heavy equipment would be used for habitat restoration.

The project would include trail improvements to 3.1 miles of existing trails. These Coastal Trail improvements would include widening designated trails to 4 feet and capping with aggregate base material. The project would also include construction of two new bridges, overlooks, and replacement of wood and cable steps. The trail improvements would be completed by crews with hand tools. Gas-powered tote carriers would be used to deliver materials to the trail sites.

The project does not involve any new sources of stationary or mobile greenhouse gas emissions. Temporary construction activities include delivery of materials from supply sources to the project area and use of small mechanized construction equipment.

Impact Discussion

a) Habitat restoration and construction of the proposed trail improvements would not generate any greenhouse gas emissions except for minimal, temporary emissions during delivery of construction materials to the project area and during some construction activities. Much of the work would be completed by crews with hand tools. No heavy equipment would be used for construction. Trucks would

be used to deliver construction materials to the Garrapata SP project site. The potential impacts from the use of hand tools, gas tote carriers, and the delivery of construction materials by truck to the project site would be less-than-significant.

b) The proposed project does not conflict with any plans, policies or regulations adopted for the purpose of reducing greenhouse gas emissions. No impact would occur.

VIII. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	❒	❒	■	❒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	❒	❒	■	❒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	❒	❒	❒	■
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	❒	❒	❒	■
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	❒	❒	❒	■
f) For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	❒	❒	❒	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	❒	❒	❒	■
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	❒	❒	■	❒

Setting

The project site is located within a natural area of Garrapata SP. No evidence of past development was observed within the project area with the exception of ranch fencing along the property boundaries and prior trail and overlook improvements.

Although this wildland area is not adjacent to an urbanized area, there are residences on the north and south boundaries of the project site and a California Department of Fish and Game facility is located between Trail Gates 12 and 13.

Impact Discussion

a) The proposed project does not include the routine transport, use, or disposal of hazardous materials. Project construction requires the use of certain hazardous materials such as fuels and oils; however, any refueling would be minimal and would occur at the construction staging areas. No herbicides will be used to control invasive, non-native plant species. The hazard to the public or environment through the use of hazardous materials would be less-than-significant.

b) During refueling of equipment, there could be an accidental release of hazardous materials into the environment. Any refueling would be minimal due to the limited use of motorized equipment (material toters). Standard DPR practices to inspect equipment for leaks and promptly respond to any minor spill of fuel or oil would ensure the potential impact of the project is less-than-significant.

c) No schools are located within one-quarter mile of the project site. The project would not result in hazardous emissions or waste impacts on an existing or proposed school. No impact would occur.

d) The project site is not included on the California Department of Toxic Substance Control and State Water Resources Control Board list of hazardous materials sites. The project would not create a significant hazard to the public, therefore no impact would occur.

e) The project is not located within two miles of a public airport. No impact would occur.

f) The project is not located within the vicinity of a private airstrip. No impact would occur.

g) Project construction would be short-term and would not impact any emergency evacuation routes or plans. No impact would occur.

h) Construction of the proposed project would require the use of equipment which could potentially result in a source of ignition for a wildland fire. The project primarily involves capping existing trails and habitat restoration, thus motorized equipment would not be operating in heavy brush or expansive grasslands. The project would not require the use of large heavy equipment; only tote carriers and

hand tools would be utilized. As a result, the project construction impacts would be a less-than-significant risk for wildland fire.

IX. HYDROLOGY AND WATER QUALITY

HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	❒	❒	■	❒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	❒	❒	❒	■
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	❒	■	❒	❒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	❒	❒	■	❒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	❒	❒	❒	■
f) Otherwise substantially degrade water quality?	❒	❒	❒	■
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	❒	❒	❒	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	❒	❒	■	❒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	❒	❒	❒	■

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	❒	❒	■	❒

Setting

The project area is located within the westernmost portion of Garrapata SP, which is located within the Santa Lucia Hydrologic Unit. The USGS map depicts nine streams that traverse Garrapata SP which empty into the federally protected Pacific Ocean waters of the Monterey Bay National Marine Sanctuary. These streams include Soberanes Creek, Granite Creek, Doud Creek and six un-named streams. Garrapata Creek is located just to the south of the State Park unit, outside of the project area. No major groundwater basins are located along the Big Sur coast.

To the north of Soberanes Point, three un-named streams and Soberanes Creek transect the project area. There is an existing, overgrown trail crossing at the first unnamed perennial stream between Trail Gates 1 and 2. The existing trails do not cross the other two unnamed streams. Soberanes Creek, a perennial stream, flows within an incised creek corridor just to the north of Soberanes Point. Within the project area, Soberanes Creek flows over a steep cliff, creating a waterfall which cascades down to a small sandy cove before flowing into the Pacific Ocean. Upstream of the waterfall, there are user-created foot paths which cross the creek corridor.

To the south of Soberanes Point, Granite Creek, Doud Creek and two small unnamed streams transect the project area. The first unnamed perennial stream crosses the project area just to the north of the California Department of Fish and Game Facility. The existing pathway crossing the creek corridor is not considered to be part of the designated trail system. Granite Creek, a perennial stream, flows through a very deep canyon with rugged terrain. There are no existing trails crossing the Granite Creek canyon. There are also no existing trails crossing the small unnamed intermittent stream to the south of Granite Creek. Doud Creek, a perennial stream, flows along the bottom of the incised corridor through the project area before entering the Pacific Ocean. Existing steps lead down both sides of the creek corridor, with a small wood plank providing a temporary creek crossing.

Garrapata SP lies within the jurisdiction of the Central Coast Regional Water Quality Control Board (CCRWQCB). The Regional Water Board regulates wastewater discharge to surface waters and ground water, storm water discharges from construction, and several other practices that could degrade water quality. The Water Quality Control Plan for the Central Coast Region (Basin Plan) is the Regional

Board's master water quality control planning document which designates beneficial water uses and water quality objectives. The Basin Plan does not specifically designate beneficial uses or water quality objectives for the streams within the project area. Surface water bodies within the Region that do not have beneficial uses specifically designated are assigned the following uses: Municipal and Domestic Water Supply, and Protection of Recreation and Aquatic Life.

Impact Discussion

a) The proposed project involves habitat restoration and improvements to an existing trail system. The project requires minimal excavation and soil disturbance. New pedestrian bridges are proposed for Soberanes Creek and Doud Creek. Mitigation Measure HYDRO-1 (see item d below) would ensure that any erosion or siltation impacts associated with bridge construction would be less-than-significant. Rehabilitation of existing trailbeds with evidence of accelerated erosion would reduce future sedimentation. Staging areas for equipment and delivery/storage of aggregate base would not be located adjacent to any streams. The project would not involve any waste discharges. With implementation of Mitigation Measure HYDRO-1, the impacts to water quality and waste discharge would be less-than-significant.

b) No major aquifers or pre-existing wells exist within the project area. The project would not utilize any groundwater supplies or interfere with groundwater recharge. No impact would occur.

c) The proposed project involves construction of new pedestrian bridges at Soberanes Creek and Doud Creek. Park visitors currently utilize informal pathways to cross the Soberanes Creek corridor as there is no designated or improved creek crossing. The proposed bridge at Soberanes Creek would not require any excavation, abutments or footings within the creek channel. The bridge would span the top of the incised creek corridor.

d) The proposed pedestrian bridge and puncheon style crossing (no handrails) at Doud Creek would be located within the lower creek channel. Existing steps descend down the slopes on both sides of the creek. Park visitors currently use a temporary wood plank to cross the creek channel. Because there is no designated creek crossing, there are several informal pathways crossing the creek. The project includes a pedestrian bridge and puncheon across Doud Creek. Appendix D includes DPR Design Guidelines for the wood bridge. Potential alteration of Doud Creek and substantial erosion or siltation could result if the pedestrian bridge and puncheon at Doud Creek are not properly designed and installed. Implementation of Mitigation Measure HYDRO-1 would reduce the

potential stream alteration and/or substantial erosion or siltation impacts to less-than-significant.

Impact HYDRO-1: Alteration of the stream flow in Doud Creek and substantial erosion and siltation could occur if the pedestrian bridge and puncheon are not properly designed and installed.

Mitigation Measure HYDRO-1: To avoid alteration of the course of a stream and substantial erosion or siltation, DPR will implement the following:

- The pedestrian bridge and puncheon at Doud Creek will be designed to avoid alteration of the stream flow. The final design and construction of the pedestrian bridge and puncheon at Doud Creek will be reviewed and approved by a qualified DPR representative.

e) The project includes installation of a semi-permeable crushed aggregate (trail width 48 inches) on approximately 3.1 miles of existing trail alignments. The overall impact of this trail surfacing would not result in a substantial increase in the rate or amount of surface runoff such that flooding would result on or off-site. The project also includes removal of approximately 6.3 miles of non-system trail. Removal of these compacted trail surfaces would increase the permeability of the soil and reduce runoff along the trail alignments. The project would not result in flooding on or off-site. The effect of the project on surface run-off would be less-than-significant.

f) There are no existing or planned stormwater drainage systems within the project area of Garrapata SP. The project involves habitat restoration and improvements to a non-motorized trail system. The project would not result in any additional sources of polluted runoff. No impact would occur.

g) The project does not introduce any sources of pollutants that would degrade water quality. Trail improvements would require minimal excavation and soil disturbance during construction. The project would also involve removal and closure of non-system trails, thus resulting in less disturbed soil surface in the future. The project would not otherwise substantially degrade water quality. No impact would occur.

h) The project involves habitat restoration and trail improvements and does not include any housing. No impact would occur.

i) The project includes construction of new pedestrian bridges at Soberanes Creek and Doud Creek. The pedestrian bridge and puncheon (low bridge without handrails) at Doud Creek would be constructed within the creek channel. Specific data regarding the 100-year flood flow for Doud Creek at the proposed bridge

locations was not available. The bridge at Soberanes Creek would span across the incised creek corridor at an elevation unlikely to be affected by a 100-year flood event. The small puncheon bridge may be affected by a 100-year flood flow. In the event of a 100-year flood flow, the pedestrian bridges would not likely substantially impede or redirect flood flows within the deeply incised creek corridor at its location close to the mouth of the creek. The bridge and puncheon at Doud Creek would result in a less-than-significant impact to the 100-year flood flow.

j) The project area does not expose people or structures to a significant risk of loss, injury or death from a mudflow or seiche (a wave that oscillates in lakes, bays, or gulfs as a result of seismic or atmospheric disturbances). The project includes replacement of steps at Trail Gates 2 and 5 to provide access to the rocky intertidal zone which could potentially be affected by a tsunami. The steps, however, would not provide access to a beach area which would attract a large number of visitors. Instead, the steps would likely to be used for fishing access or shoreline exploration. Due to the anticipated limited amount of use and no increased beach access, the potential impact of exposure of people to a risk of loss, injury or death involving a tsunami would be less-than-significant.

X. LAND USE AND PLANNING

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	❒	❒	❒	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	❒	❒	❒	■
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	❒	❒	❒	■

Setting

Garrapata SP is a park unit within the California State Park system. A Park Unit General Plan directs the long-range development and management of a park by providing broad policy and program guidance. Garrapata SP does not have a General Plan nor is any General Plan process underway or anticipated in the near future.

Garrapata SP is located within the unincorporated area of Monterey County. The project area includes 17 parcels, which were acquired by the State in phases. The project area lies within the Coastal Zone, which is subject to the California Coastal Act, Monterey County's *Big Sur Land Use Plan and Local Coastal Program*, and the *Monterey County Coastal Implementation Plan (Part 3) (Regulations for Development in the Big Sur Coastal Land Use Plan).*

The *Big Sur Coast Land Use Plan and Local Coastal Program* includes resource management policies for various resources, including Scenic Resources, Environmentally Sensitive Habitats, and Archaeological Resources. The LCP also describes the kinds, locations, and intensities of land uses recommended for the Big Sur coast. The *Monterey County Coastal Implementation Plan (Part 3) (Regulations for Development in the Big Sur Coastal Land Use Plan)* establishes regulations, standards, and procedures to fully implement the policies of the *Big Sur Land Use Plan and Local Coastal Program*. The California Coastal Act (Public Resources Code Division 20) includes coastal resources planning and management policies for public access, recreation and other issues.

The land use designation for the northern and southernmost parcels within the project area is Outdoor Recreation (OR), while the remaining parcels are designated as Watershed and Scenic Conservation (WSC) based on review of Monterey County's *Big Sur Coast Land Use Plan* North Section Map. The purpose of the OR land use district is for the establishment, enhancement and maintenance of outdoor recreation uses in Monterey County. The purpose of the WSC district is to allow development in the more remote or mountainous areas in the Coastal Zone while protecting the significant and substantial resources of those areas. The project area also lies within a Design Control District (D), which provides for regulation of the location, size, configuration, materials and colors for structures and fences by Monterey County. The Monterey County Zoning Designation for the project area is Open Space Recreation (Coastal Zone).

The California Coastal Trail (Coastal Trail) is a public/private partnership led by the California Coastal Conservancy, in consultation with the California Coastal Commission and the Department of Parks and Recreation, and other state and federal partners. The *Big Sur Coast Highway Management Plan* (DOT, 2004) also includes strategies for the Coastal Trail. Goals and objectives of the Coastal Trail include providing a continuous walking and hiking trail as close to the ocean as possible and maximizing ocean views and scenic coastal vistas. The Coastal Trail should also be designed and located to minimize impacts to environmentally sensitive habitat areas.

Impact Discussion

a) The project is located within an undeveloped area, entirely within the boundaries of Garrapata SP. No impact to an established community would occur as a result of the project.

b) The project includes habitat restoration, protection of sensitive biotic and cultural resources, and improvements to an existing hiking trail system within the Garrapata SP boundaries. The project does not propose any new land uses. Monterey County's *Big Sur Coast Land Use Plan and Local Coastal Program* (LUP/LCP) includes general and specific Public Access policies. The proposed project, which focuses on improving and properly managing an existing trail system to avoid damaging natural resources, sensitive habitats and cultural resources, is consistent with the public access policies for the Big Sur coast. Most of the existing trail alignments would remain the same except where rerouting is needed to reduce adverse environmental effects. Non-system trail routes would be closed and removed to enhance protection of coastal resources. Shoreline access would be provided only at those locations where access previously existed and park users continue to access the shoreline. The project is

also consistent with LUP/LCP policies regarding Scenic Resources, Environmentally Sensitive Habitats, and Archaeological Resources.

The *Monterey County Coastal Implementation Plan (Part 3)* includes regulations and development standards for the Big Sur Coast. The project would not conflict with the development standards for Visual Resources (Section 20.145.030), Environmentally Sensitive Habitat (Section 20.14.5.040), or Archaeological Resources (Section 20.145.120). The potential visual impacts of the pedestrian bridges are discussed under Aesthetics in this Initial Study. Potential impacts to environmentally sensitive habitats (coastal scrub and riparian/wetland areas) and mitigation measures to reduce impacts are discussed under Biotic Resources. Archaeological impacts and mitigation measures are presented in the Cultural Resources section. The project would require a Coastal Development Permit (CDP) from Monterey County.

The project is consistent with the California Coastal Act. The project helps to fulfill policies for the California Coastal Trail. The project would provide clearly designated trail access (totaling 3.1 miles) at 17 trailheads along the west side of State Highway 1. A total of 22 overlooks would also be provided. Cable and wood steps providing access down the bluff to the intertidal zone would be replaced at two locations. The non-system trails proposed to be closed/removed are located within sensitive archaeological sites and/or are located on eroding bluff edges.

Although there is no approved State Park General Plan for Garrapata SP, the project is consistent with DPR's policies and management objectives. Thus, the project would not conflict with any applicable land use plan, policy or regulation of Monterey County, the California Coastal Commission or the California Department of Parks and Recreation. The project is also consistent with CalTrans *Big Sur Coast Highway Management Plan.* No impact would occur.

c) There are presently no habitat conservation plans or natural community conservation plans for the project area. No impact would occur.

XI. MINERAL RESOURCES

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	❒	❒	❒	■
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	❒	❒	❒	■

Setting

Monterey County's *Big Sur Coast Land Use Plan and Local Coastal Program* states that the Big Sur area has a number of sites of historic and potential mineral resources which may be proposed for extraction in the future. Mineral resources in the Big Sur area include limestone deposits, sand and gravel from streambeds, and offshore oil and gas deposits. The project area is located on a coastal bluff, to the west of Highway 1. No mineral resources of value to the region and State have been specifically identified within the project area.

Impact Discussion

a) The project includes habitat restoration and improvements to an existing trail system within a State Park. The project would not result in the loss of availability of a known mineral resource. No impact would occur.

b) The project area has not been identified as a locally important mineral resource recovery site in Monterey County's *Big Sur Coast Land Use Plan and Local Coastal Program*. No impact would occur.

XII. NOISE

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	❒	❒	■	❒
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	❒	❒	❒	■
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	❒	❒	❒	■
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	❒	❒	■	❒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	❒	❒	❒	■
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	❒	❒	❒	■

Setting

The project area is located in a rural setting to the west of State Highway 1, within the unincorporated area of Monterey County. To the east of the project site, the area is generally undeveloped. Residential properties are located to the north and south of the project boundaries. Ambient noise levels within the project site are primarily affected by traffic on State Highway 1. There are no airports or private airstrips within the vicinity of the project site.

Impact Discussion

a) Project construction would require limited use of motorized equipment within the Garrapata SP boundaries. The equipment would be limited to hand-steered motorized tote carriers and hand tools. Construction activities would generally be limited to daylight hours, between 8 a.m. and 5 p.m., Monday through Friday.

The equipment may result in a disturbance to other park users during periods of equipment use. The exposure of park visitors to noise impacts would be less-than-significant.

b) Construction of the project would not require the use of explosives, pile driving, or other equipment which would generate excessive ground borne vibration or ground borne noise levels. No impact would occur.

c) Trail use would not result in a l permanent increase in ambient noise levels. No impact would occur.

d) The duration of construction activities requiring the use of noise generating equipment would result in a less-than-significant temporary increase in ambient noise levels.

e) The project is not located within an area covered by an airport land use plan or within two miles of a public airport or public use airport. No impact would occur.

f) The project is not located in the vicinity of a private airstrip. No impact would occur.

XIII. POPULATION AND HOUSING

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	❒	❒	❒	■
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	❒	❒	❒	■
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	❒	❒	❒	■

Setting

The project site is located within a natural area of Garrapata SP. There is no housing within the Park boundaries.

Impact Discussion

a) The project includes habitat restoration and trail improvements. The project does not include new homes, businesses, extension of roads, or other infrastructure. No growth inducing impacts would occur as a result of the project. No impact would occur.

b) No housing units exist within Garrapata SP. No impact would occur.

c) The project would not displace any population. No impact would occur.

XIV. PUBLIC SERVICES

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	❒	❒	❒	■
Fire protection?	❒	❒	■	❒
Police protection?	❒	❒	❒	■
Schools?	❒	❒	❒	■
Parks?	❒	❒	❒	■
Other public facilities?	❒	❒	❒	■

Setting

DPR Rangers primarily provide emergency and law enforcement services within Garrapata SP. Additional fire protection services are provided by the California Department of Forestry and Fire Protection (CAL FIRE). The closest CAL FIRE station to the project site is located in Carmel Highlands. Supplemental emergency response services are provided by Monterey County as needed.

Impact Discussion

a) The project includes habitat restoration, removal and closure of non-system trails, and improvements to the existing trail segments. The project would not include an expansion of recreational facilities or any new uses. No impact to public services would occur.

   Temporary construction activities could result in a potential increase in the risk of ignition for a wildland fire. This potential wildland fire risk would result in a less-than-significant impact on fire protection services.

   The project would not result in the need for additional law enforcement services. No impact would occur.

The project does not impact existing schools or require additional schools or personnel. No impact would occur.

The project would improve the existing trail system within Garrapata SP by providing stable trail surfaces, overlooks, and pedestrian bridges. No adverse impacts to parks would occur as a result of the project. No impact would occur.

The project would not impact any other public facilities. No impact would occur.

XV. RECREATION

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	❒	❒	■	❒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	❒	❒	■	❒

Setting

Garrapata SP, totaling 2,902 acres, offers hiking, fishing, beach access, and nature viewing opportunities for park visitors from throughout the Central Coast region and California. As the Big Sur coast is widely recognized for its scenic vistas and recreational opportunities, Garrapata SP also attracts visitors from throughout the United States and international visitors. There are no recent surveys of visitor attendance at Garrapata SP.

The project area, located on the west side of State Highway 1, offers hiking opportunities that are relatively short distances as compared to the larger eastern portion of the park. The most popular park user activities within the project area are scenic nature viewing, photography, hiking, visits to Garrapata Beach, and fishing. The project area currently features approximately 9.4 miles of trails, many of which are user-created and considered by DPR to be non-system trails. Trails within the project area are limited to pedestrian-use only. There are also several existing overlooks with benches, and numerous other unimproved overlook sites. There are currently no permanent restroom facilities or other visitor serving facilities within Garrapata SP.

Impact Discussion

a) The project would designate approximately 3.1 miles of existing trails, and one new trail alignment at Soberanes Point, as Coastal Trail segments. The project would also close and remove approximately 6.3 miles of non-system trails. Therefore, the length of trails available would be reduced as a result of the project. Improvement of trailheads at vehicle turnouts and improved trail surfaces may attract more visitors to hike along the trails; however, this increase is not anticipated to be a substantial increase that would result in accelerated deterioration. The closure of eroded, non-system trails and capping of the Coastal Trail segments would help to address existing physical deterioration of

the project area. Temporary closure of system trails may be required during construction of Coastal Trail improvements. The impact would be less-than-significant.

b) The proposed project, including Coastal Trail and overlook improvements and trail removals, may have an adverse impact on biological resources (Smith's blue butterfly, California red-legged frog, and dusky-footed woodrat), cultural resources, and hydrology and water quality. DPR's implementation of Mitigation Measures for Biological Resources, Cultural Resources, and Hydrology and Water Quality would reduce the adverse impacts to a less-than-significant level. DPR's implementation of Specific and Standard Project Requirements for Air Quality and Geology and Soils would ensure potential impacts to these resources remain less-than-significant.

XVI. TRANSPORTATION/TRAFFIC

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	❒	❒	❒	■
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	❒	❒	❒	■
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	❒	❒	❒	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❒	❒	❒	■
e) Result in inadequate emergency access?	❒	❒	❒	■
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	❒	❒	❒	■

Setting

Garrapata SP is accessed from State Highway 1, which follows the Big Sur coastline. There are 19 existing vehicle turnouts along the west side of State Highway 1 which are utilized by park visitors for scenic viewing and parking to access trails within the project area. The unimproved (unpaved) vehicle turnouts are located within the Caltrans right-of-way.

Impact Discussion

a) The proposed project is limited to improvements to existing pedestrian-only trails within Garrapata SP. The project does not include any improvements to State

Highway 1 or existing vehicle turnouts along the highway right-of-way. The project aims to help fulfill objectives of the Coastal Trail. The project is also consistent with CalTrans *Big Sur Coast Highway Management Plan* (DOT, 2004). The proposed project does not conflict with any applicable transportation/traffic plan, ordinance or policy.

b) The project does not propose expansion of existing recreational facilities. The overall trail mileage would be reduced as a result of the project. No new recreational uses are proposed. The proposed project would not result in a substantial increase in vehicle trips other than minimal traffic effects during construction, which is anticipated to be completed in phases as funding is available. The additional vehicle trips required for the trail crew and delivery of materials would not substantially increase congestion or lower standards of service during the temporary construction period. The proposed project would not result in a substantial increase in traffic congestion. No impact to traffic or congestion plans would occur.

c) The proposed project would not result in any change in air traffic patterns. No impact would occur.

d) The proposed project would not affect the design features of the existing roadways or introduce incompatible uses such as farm equipment to the road network accessing the project area. No impact would occur.

e) The proposed project would have no impact on emergency access. No impact would occur.

f) The proposed project would not conflict with any alternative transportation policies, plans, or programs. No impact would occur.

XVII. UTILITIES AND SERVICE SYSTEMS

UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	❒	❒	❒	■
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❒	❒	❒	■
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❒	❒	❒	■
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	❒	❒	❒	■
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	❒	❒	❒	■
f) Be served by a landfill with sufficient permitted capacity to accommodate the project=s solid waste disposal needs?	❒	❒	❒	■
g) Comply with federal, state, and local statutes and regulations related to solid waste?	❒	❒	❒	■

Setting

The proposed project involves improvements to existing trails and overlooks within the portion of Garrapata SP located to the west of State Highway 1. There are presently no potable water or wastewater services within Garrapata SP. One portable toilet is located on the east side of State Highway 1 across from Soberanes Point area (Trail Gate 8). Trash receptacles are provided at the trail gates. The receptacles are serviced by State Parks.

Impact Discussion

a) The proposed project does not include any new wastewater services or facilities. No conflicts or impacts to wastewater treatment requirements would occur.

b) The project does not require construction of new water or wastewater facilities. One portable toilet presently exists on the east side of State Highway 1 across from Trail Gate 8. No potable water services are provided within Garrapata SP. No impact would occur.

c) No new stormwater facilities would be required for the proposed project. The Coastal Trail segments would be capped with aggregate base and crowned to allow for sheet flow off of the trail surfaces. Pedestrian bridges would be installed at the Soberanes Creek and Doud Creek trail crossings. No culverts would be installed. No impact would occur.

d) No potable water is presently provided within Garrapata SP. Park users bring drinking water as needed. No impact would occur.

e-g) The proposed project would not substantially increase visitor use. The project would not generate demand for wastewater or solid waste services. One portable toilet presently exists within Garrapata SP (Trail Gate 8). The portable toilet is serviced by a contractor under State Parks. The project would not generate additional demand for wastewater or solid waste services. No impact would occur.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

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

Impact Discussion

a) The proposed project was evaluated for the potential effects on the quality of the environment, fish and wildlife species, plant communities, and historic and pre-historic resources. As discussed under the Biological Resources section, the project would have the potential to affect the habitat and/or reduce the population of the Smith's blue butterfly, California red-legged frog, and dusky-footed woodrat. As discussed under the Cultural Resources section, the project would have the potential to disturb archaeological sites which provide examples of California pre-history. Full implementation of all mitigation measures incorporated into this project would reduce the level of these potential significant impacts to a less-than-significant level.

b) The proposed project would have less-than-significant impacts on aesthetics, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, and public services. DPR's Standard and Specific Project Requirements for Air Quality and Geology and Soils would ensure potential impacts to these resources remain less-than-significant. No other projects are currently proposed for Garrapata SP. Potentially significant impacts to hydrology

and water quality will be reduced to less-than-significant with implementation of mitigation measures incorporated into this project. These individually limited impacts of the project would not be cumulatively considerable.

c) No significant environmental effects have been identified that would have direct or indirect adverse effects on human beings. No impact would occur.

REFERENCES

California Native Plant Society. 2011. Electronic Inventory of Rare and Endangered Vascular Plants of California. Electronic Database, Soberanes Point quadrangle and surrounding quadrangles.

California, State of, Department of Fish & Game. 2011. Natural Diversity Database. 2011 Rare Find program, Soberanes Point quadrangle and surrounding quadrangles.

California, State of, Department of Fish & Game. 2010. Natural Diversity Database, Natural Communities Classification System, 2010. http://www.dfg.ca.gove/biogeodata/vegcamp.

California Department of Conservation. Alquist-Priolo Earthquake Fault Zone Maps. Website accessed on June 28, 2011. http://www.quake.ca.gov/gmaps/ap/ap-maps.htm.

California Department of Conservation, Division of Mines and Geology. 2001. Landslides in the Highway 1 Corridor: Geology and Slope Stability Along the Big Sur Coast.

California Department of Parks and Recreation. 2011. Location and site maps provided by Monterey District.

California Department of Parks and Recreation. 1990. Cultural Resource Inventory Garrapata State Park. (Confidential).

California Department of Transportation, 2004. Big Sur Coast Highway Management Plan, DOT District 5.

California Air Resources Board. Website accessed on June 26, 2011. http:/arb.ca.gov/design/design.htm

California Air Resources Board. Website accessed on June 24, 1011. http://www.arb.ca.gov/adam/topfour/topfour2.php

Central Coast Regional Water Quality Control Board. Website accessed on July 1, 2011. http://ww.swrcb.ca.gov/rwqcb3

Hickman, J. 1993. The Jepson Manual Higher Plants of California. Berkeley: University of California Press.

Matthews M.A., 1997. Flowering Plants of Monterey County. California Native Plant Society and M.A. Matthews, Sacramento, CA.

Natural Resources Conservation Service. 2011. Web Soil Survey - Soil Maps

Monterey County. 1988. Monterey County Coastal Implementation Plan (Part 3). Regulations for Development in the Big Sur Coast Land Use Plan (Chapter 20.145).

Monterey County. 1986. Big Sur Coast Land Use Plan and Local Coastal Program.

Monterey County. Monterey County Zoning Coastal Implementation Plan – Title 20. Website accessed June 24, 2011. http:/www.co.monterey.ca.us/planning/docs/ordinances/Title 20

Sawyer, J.O., T. Keeler-Wolf, and Evens. 2009. A Manual of California Vegetation, 2nd Edition. California Native Plant Society, Sacramento, CA.

Personal Communications

Larry Tierney, John Hiles, Rae Schwaderer, and Karl Knapp (Monterey District DPR), Timothy Duff (Coastal Conservancy), Kathleen Lyons (Biotic Resources Group), Susan Harris (Outdoor Resources Planning). Personal communication during site visit conducted on June 13, 2011.

Bronwyn Ciccone (Monterey District DPR). Email communication to Susan Harris (Outdoor Resources Planning). June 23, 2011.

Bronwyn Ciccone (Monterey District DPR). Email communication to Susan Harris (Outdoor Resources Planning). July 11, 2011.

Bronwyn Ciccone (Monterey District DPR). Email communication to Susan Harris (Outdoor Resources Planning). August 15, 2011.

Larry Tierney, Rae Schwaderer, Miya Yamashita, John Hiles (Monterey District DPR), Kathleen Lyons (Biotic Resources Group), Matthew Clarke (Holman & Associates), Susan Harris (Outdoor Resources Planning). Personal communication during site visit conducted on July 12, 2011.

Kathleen Lyons (Biotic Resources Group), Dana Bland (Dana Bland & Associates), Jacob Martin (U.S. Fish and Wildlife Service). Personal communication during site visit conducted on July 28, 2011.

Rae Schwaderer and John Hiles (Monterey District DPR), Matthew Clarke (Holman & Associates), Susan Harris (Outdoor Resources Planning). Personal communication during site visits conducted on August 4, 2011 and in March 2012.

REPORT PREPARATION

This Initial Study/Mitigated Negative Declaration was prepared by the following CEQA consultants under the direction of the California Department of Parks and Recreation, Monterey District:

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Appendix A

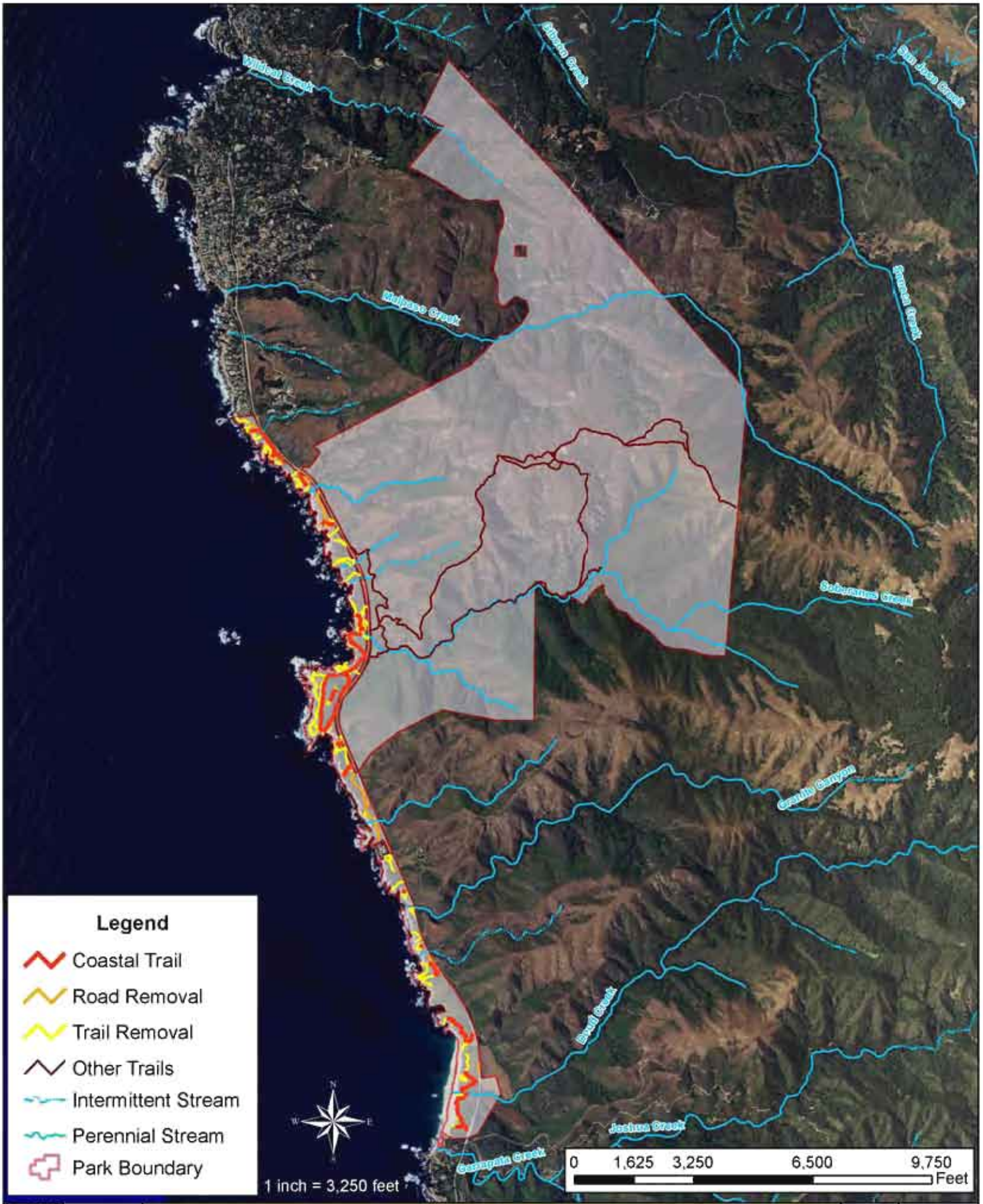
LOCATION AND PROJECT MAPS

Date: 3/28/12
Projection:
State Plane
Zone 4
NAD83 Feet
Source:
USGS & DPR

Location Map
Coastal Habitat Restoration and Coastal Trail Improvement Project

MONTEREY DISTRICT

2211 Garden Road
Monterey, CA
93940



Date: 3/28/12
Proj: SP Zone 4 NAD83, Ft
Source: DPR GIS

Garrapata State Park - Park Overview

Coastal Habitat Restoration and Coastal Trail Improvement Project

Legend
Gate (Trailhead)
Overlook
Coastal Trail
Road Removal
Trail Removal
Existing Steps
Proposed Steps
Proposed Bridge
Intermittent Stream
Perennial Stream
Gates
7-2
7A
7C
7-1
7D
Gate 7
7B
7D
Soberanes Creek
8B
8A
8-1
8C
Garrapata State Park
Sheet 6
Coastal Habitat Restoration and Coastal Trail Improvement Project
0
75
150
300
Feet
1 inch = 150 feet

8-1
8B
8C
Soberanes Creek
8A
Gate 8
8D
8E
9B
Legend
Gate (Trailhead)
Overlook
Coastal Trail
Road Removal
Trail Removal
Existing Steps
Proposed Steps
Proposed Bridge
Intermittent Stream
Perennial Stream
Gates
1
2
3
4
5
6
7
8
9
10
11
12
13
14N
14S
15
16
17N
17S
18
19
Garrapata State Park
Sheet 7
Coastal Habitat Restoration and Coastal Trail Improvement Project
0
75
150
300
Feet
1 inch = 150 feet

Appendix B

SITE PHOTOS

PROJECT SITE PHOTOS

Photo 1. Example of existing trail condition

Photo 2. Example of existing overlook site

Photo 3. Example of eroded walkway

Photo 4. Eroded bluff at former cable steps

Photo 5. Photo of improved trail with aggregate base

Photo 6. Soberanes Creek – proposed pedestrian bridge

Photo 7. Soberanes Creek - bridge simulation

Photo 8. Doud Creek – proposed pedestrian bridges

Photo 9. Doud Creek – bridge simulation

Appendix C

TRAIL CLOSURE AND REMOVAL MEASURES

TRAIL CLOSURE AND REMOVAL MEASURES

Non-system Trail Conditions			Trail Closure and Removal Measures
Archaeological Site/ Evidence of Midden	Smith's Blue Butterfly Habitat	Entrenched/ Gullying	
Yes	Yes	Yes	Trail closure and removal measures include: • Within entrenched areas, decompact/ lightly scarify trail bed using hand tools • For entrenched trailbeds within, and within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site. • For areas not located within, or within 30 feet of an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used. • No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material. • Use soil from an area with no non-native vegetation • Install straw waddles as appropriate • Retain all open areas except at trail entrances • Distribute cut native vegetation at trail entrances for length of approximately 20 feet • Install cable and rod fencing only as needed • Avoid installing sign posts within, or in vicinity of, archaeological sites where feasible
Yes	Yes or No	No	Trail closure and removal measures include: • Allow trail to revegetate naturally • Retain all open areas except at trail entrances • Distribute cut native vegetation at trail entrances for length of approximately 20 feet • Install cable and rod fencing only as needed to discourage access • Avoid installing sign posts within, or in vicinity of, archaeological sites where feasible
No	Yes	Yes	Trail closure and removal measures include: • Decompact/lightly scarify trail bed using hand tools within entrenched areas • Fill entrenched areas and cap with soil from on-site using hand tools • Use soil from outside of an archaeological site and with no evidence of midden • Install straw waddles as appropriate • Revegetate/seed only as recommended by a qualified resource ecologist or botanist

Non-system Trail Conditions			Trail Closure and Removal Measures
Archaeological Site/ Evidence of Midden	Smith's Blue Butterfly Habitat	Entrenched/ Gullying	
No	Yes	Yes	• Remove non-native vegetation along trail corridor, as feasible • Distribute cut native vegetation at trail entrances for length of approximately 20 feet • Install cable and rod fencing or fencing only as needed
No	Yes	No	Trail closure and removal measures include: • Retain open areas along trail except at entrances • Allow trail to revegetate naturally. Revegetate/seed only if recommended by a qualified resource ecologist or botanist on a site specific basis • Remove non-native vegetation along trail corridor, as feasible • Distribute cut native vegetation at trail entrances for length of approximately 20 feet • Install cable and rod fencing or fencing only as needed
No	No	No	Trail closure and removal measures include: • Allow trail to revegetate naturally, or revegetate/seed as recommended by a qualified resource ecologist or botanist • Decompact/scarify soil with hand tools to promote revegetation as needed • Remove non-native vegetation along trail corridor, as feasible • Distribute cut native vegetation at trail entrances for length of approximately 20 feet, as needed • Install cable and rod fencing or signage only as needed

Appendix D

TRAIL AND OVERLOOK IMPROVEMENT DESIGN GUIDELINES

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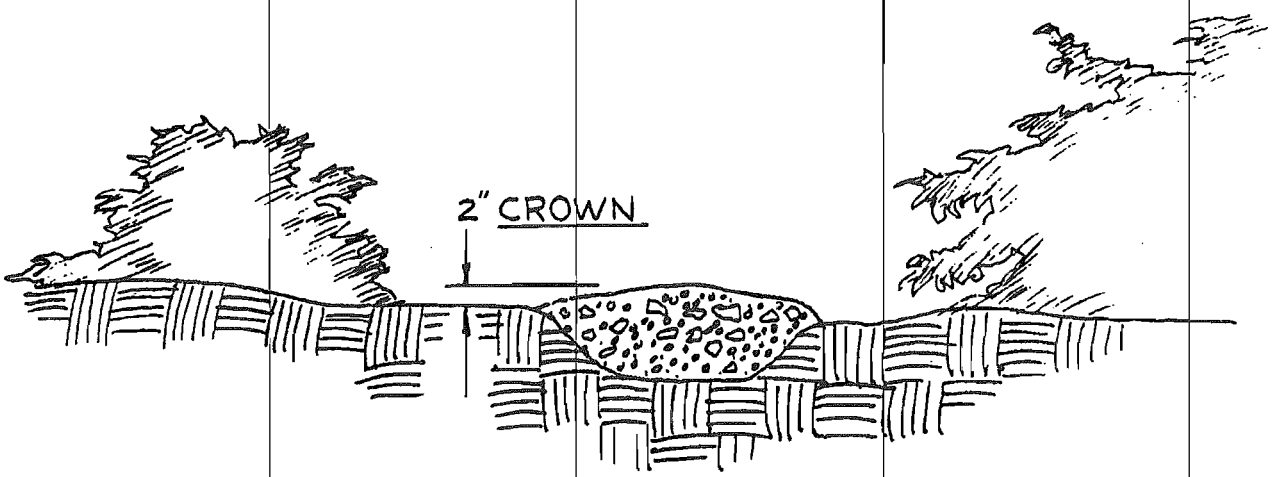
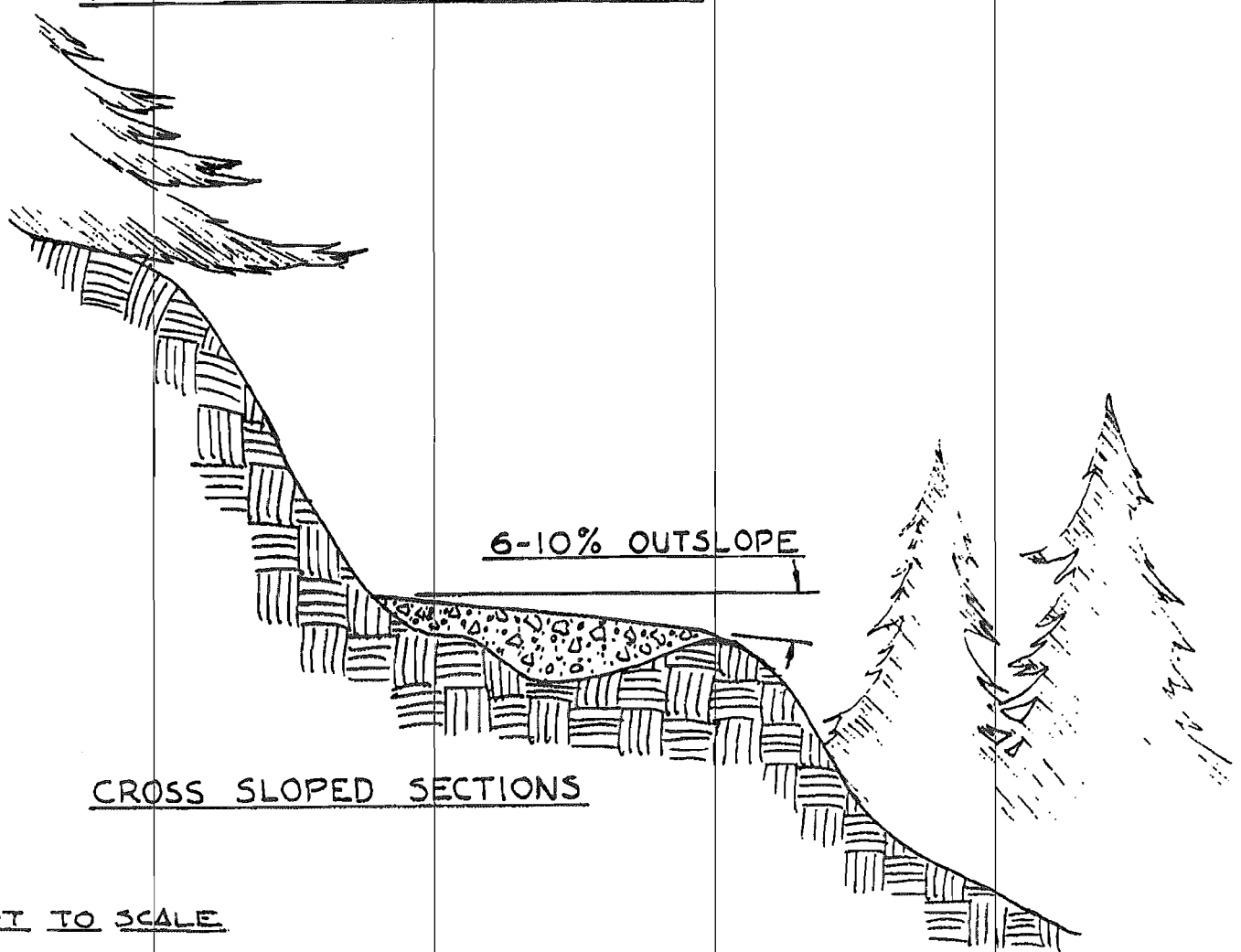
ENTRENCHED TRAIL



MEADOWS AND FLAT SLOPES

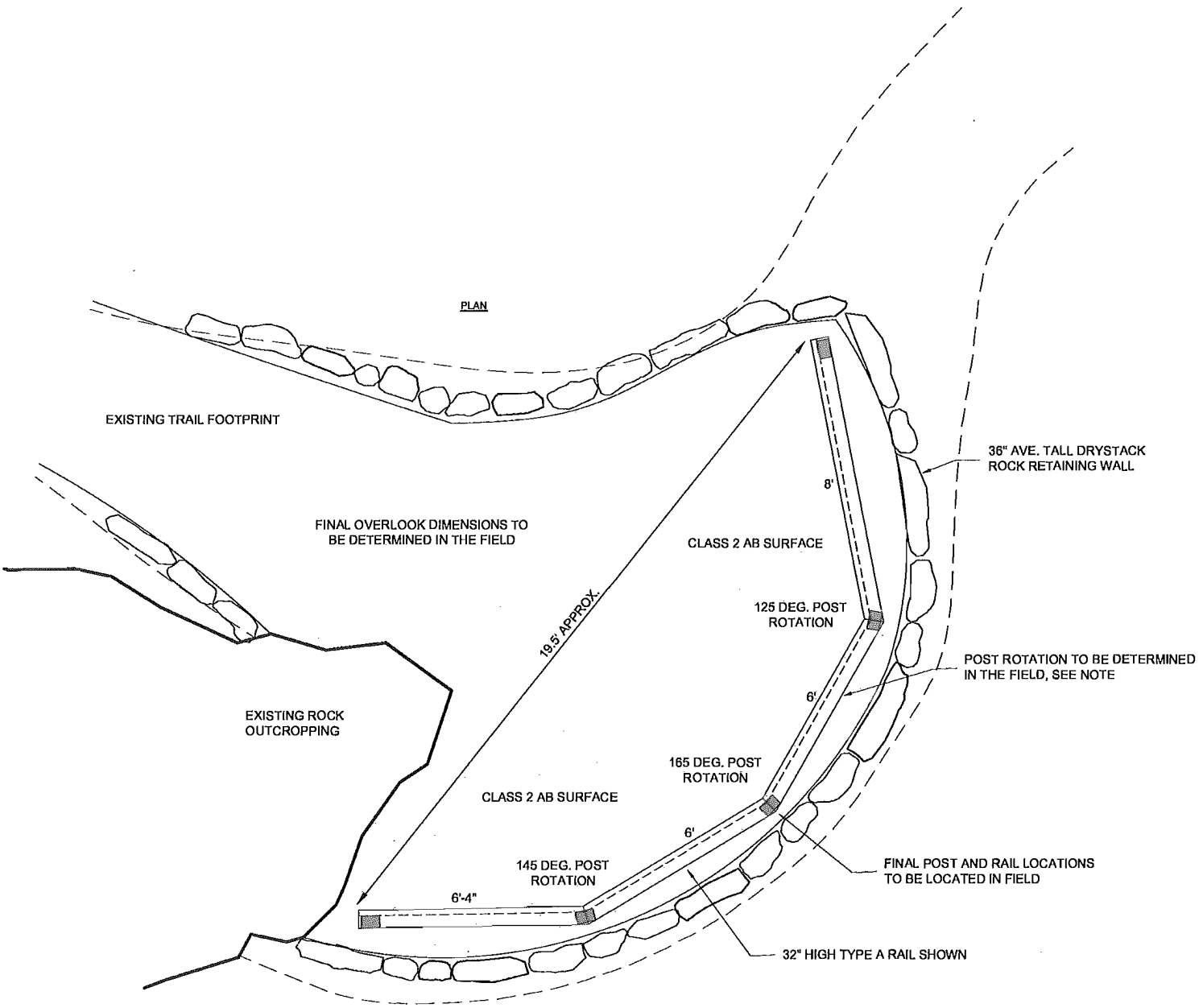


CROSS SLOPED SECTIONS

NOT TO SCALE

Figure 8.2

TYPICAL OVERLOOK

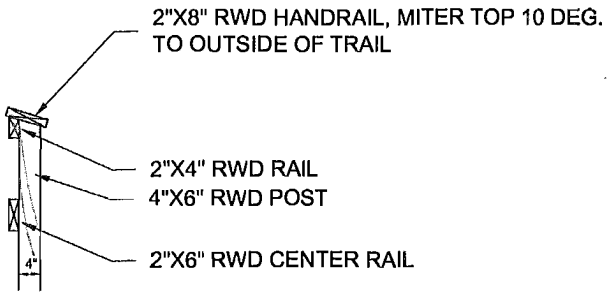


NOTE:

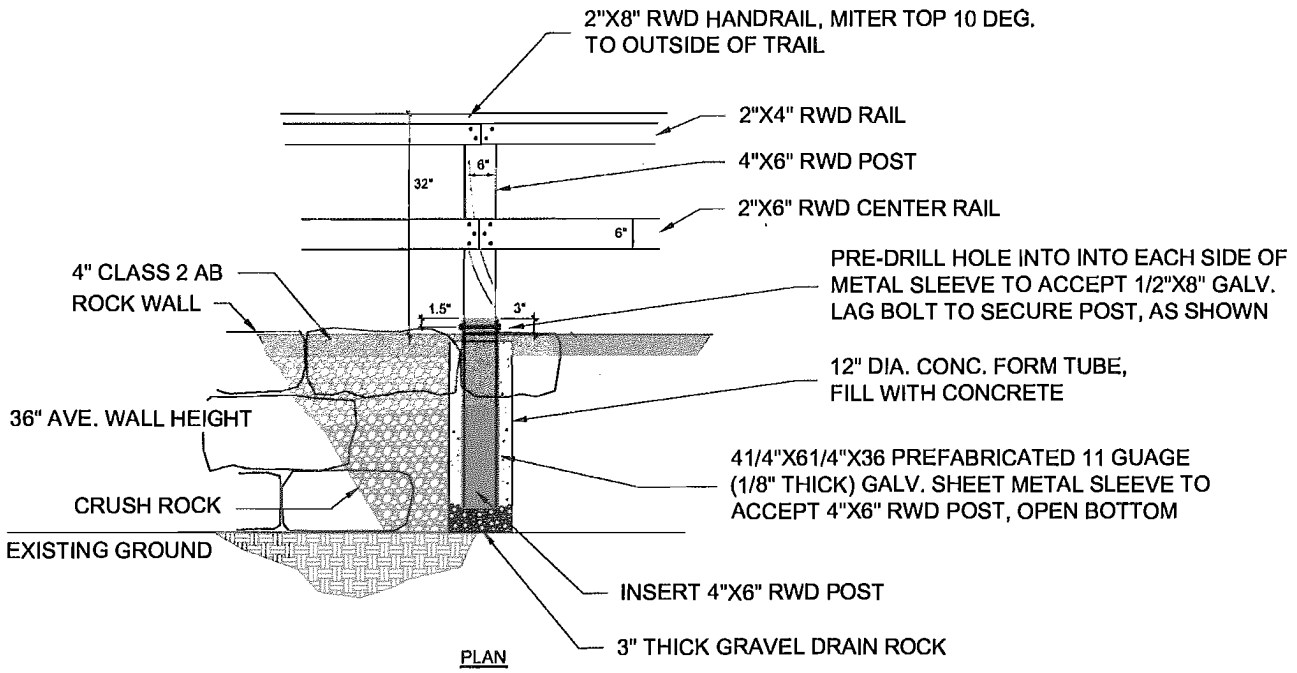
- **POST AND RAIL CONSTRUCTION**: PRIOR TO SETTING POSTS IN CONCRETE, LAYOUT AND FIT TOGETHER ENTIRE POST AND RAIL SYSTEM TO DETERMINE POST ROTATION, ONCE LAYOUT IS COMPLETE AND POSTS AND RAILS ARE FITTED FLUSH, SET POSTS IN CONCRETE AS A FINAL ORDER OF WORK.

- ALL DIMENSIONS AND MEASURMENTS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION

OVERLOOK RAILING DETAIL - TYPE A



SECTION



PLAN

NOT TO SCALE

NOTES:
- ALL POSTS, HANDRAILS, DIAGONALS, BRACES TO BE 4"X6" REDWOOD MINIMUM.
- ALL BARK AND SAPWOOD TO BE REMOVED FROM STRINGERS, SILLS, POST AND BRACINGS
- ALL HARDWARE TO BE GALVANIZED
- MAX. SPAN CENTER TO CENTER OF HANDRAIL POSTS TO BE 10'
- ALL MATERIALS TO BE ROUGH SPLIT OR FULL DIMENSION LUMBER
- DRAW KNIFE HANDRAILS, POSTS POST BRACES AND EXPOSED PORTIONS OF POST SILLS
- SEE DEPARTMENT OF PARKS AND RECREATION "TRAILS HANDBOOK" FOR ADDITION SPECIFICATIONS

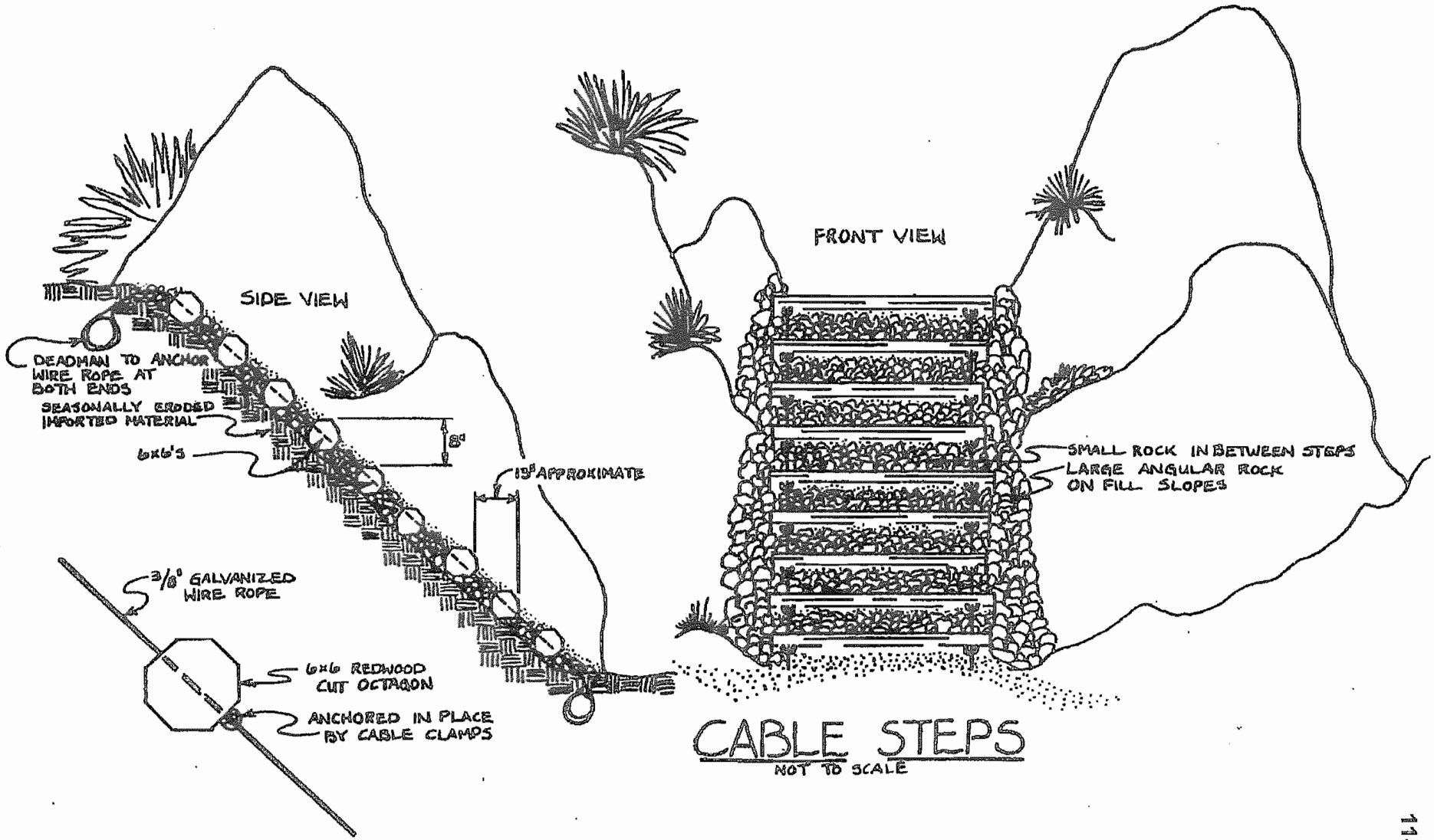
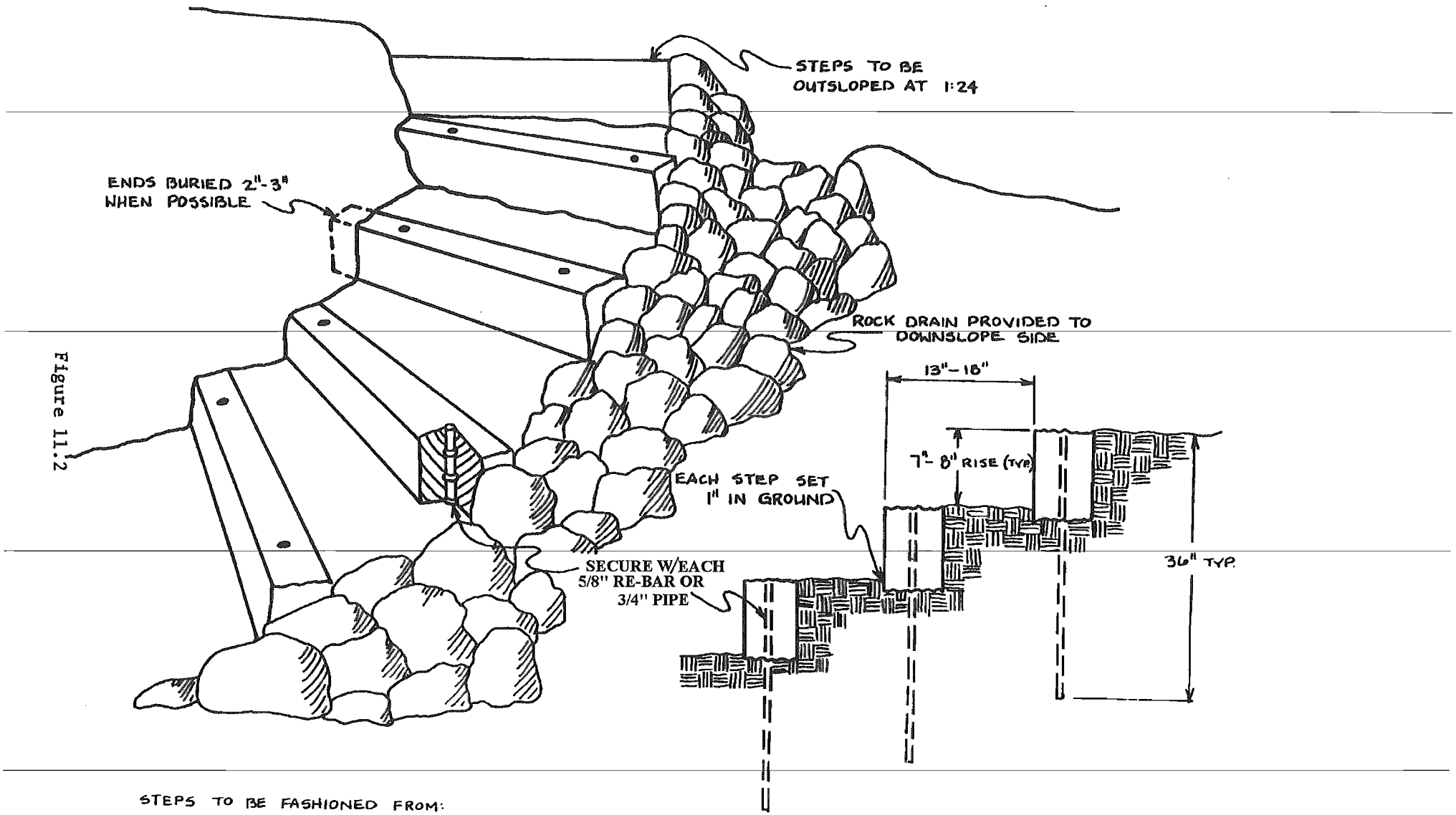

SIDE VIEW
DEADMAN TO ANCHOR WIRE ROPE AT BOTH ENDS
SEASONALLY ERODED IMPORTED MATERIAL
6x6'S
8"
19" APPROXIMATE
3/8" GALVANIZED WIRE ROPE
6x6 REDWOOD CUT OCTAGON
ANCHORED IN PLACE BY CABLE CLAMPS
FRONT VIEW
SMALL ROCK IN BETWEEN STEPS
LARGE ANGULAR ROCK ON FILL SLOPES
CABLE STEPS
NOT TO SCALE

Figure 11.7

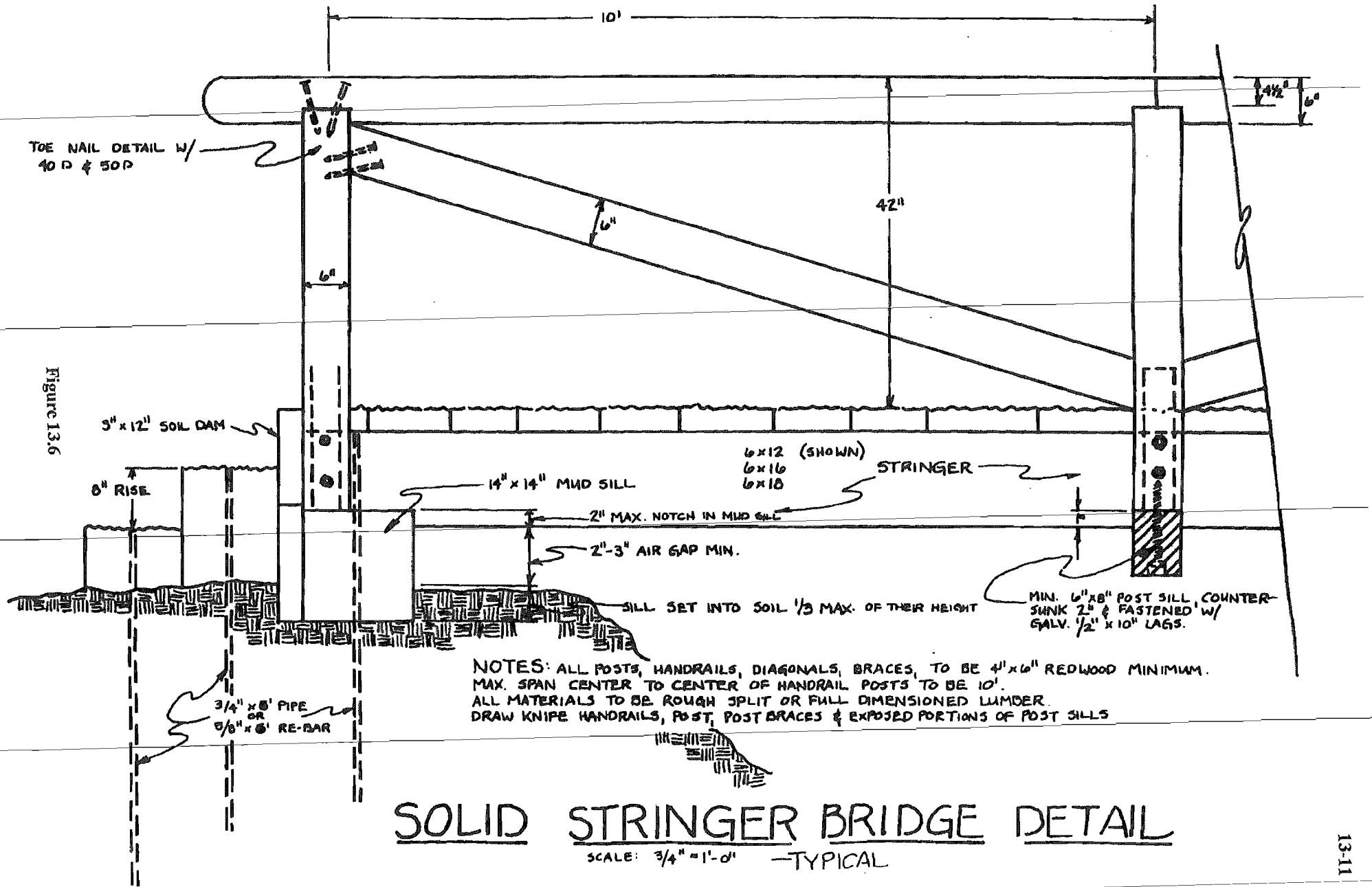


STEPS TO BE FASHIONED FROM:
MILLED REDWOOD OR
SPLIT STOCK

TYPICAL STEP SECTION

NOT TO SCALE

Figure 11.2



SOLID STRINGER BRIDGE DETAIL

SCALE: 3/4" = 1'-0" —TYPICAL

Figure 13.6

Appendix E

MITIGATION MONITORING AND REPORTING PROGRAM

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APPENDIX E
MITIGATION AND MONITORING/REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
BIOLOGICAL RESOURCES				
BIO-1: To avoid construction related impacts to Monterey paintbrush, DPR will incorporate the following measures prior to commencement of all construction activities: ▪ Trail construction should be kept to the smallest feasible disturbance area. Material removed during trail construction should not be side cast onto adjacent coastal scrub and prairie. The limits of the work will be demarcated in the field. DPR will install flagging, fencing, and other protective measures around paintbrush plants that are to be avoided by the project. ▪ DPR will use salvaged and/or seed collected from Monterey paintbrush in the revegetation effort so as to re-establish the species. ▪ Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur adjacent to work areas should be removed/controlled to prevent their encroachment into habitat supporting the Monterey paintbrush. Care will be given to ensure the root systems of Monterey paintbrush are not dislodged if invasive, non-native plants are hand-pulled. No herbicides will be used.	California Dept. of Parks & Recreation (DPR)	California Dept. of Parks & Recreation (DPR)	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
BIO-2: To avoid impacts to California red-legged frog, DPR will schedule construction to occur during the dry season, generally between April 15 and October 15 of any given year and implement the following measures: ▪ No more than 48 hours prior to start of construction of the new footbridges at Soberanes and Doud creeks, a Service-approved biologist will conduct a visual survey of the work area for frogs. If any California red-legged frogs are observed within the work area, a Service-approved biologist will relocate the frogs to other suitable creek habitat upstream of the work area. The biologist will monitor the initial ground disturbance and vegetation removal. The results of the surveys, including whether any California red-legged frogs were observed or heard, and the species of all amphibians detected, will be reported to USFWS. ▪ DPR will secure a Safe Harbor Agreement with USFWS for the California red-legged frog prior to trail developments at Soberanes and Doud creeks.	DPR	DPR	Prior to and during construction	
BIO-3: To avoid, minimize, and compensate for impacts to Smith's blue butterfly DPR will implement the following measures**:**	DPR	DPR	Prior to, during and after	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
▪ Prior to implementation of project improvements within areas supporting seacliff buckwheat, DPR will secure a Safe Harbor Agreement with USFWS that outlines measures DPR will implement to achieve measurable benefit to the species. The Safe Harbor Agreement will provide DPR incidental take coverage for Smith's blue butterflies occupying and associated with its host plant (seacliff buckwheat) that could be taken as a result of the proposed project. Incidental take coverage will be provided in this manner because detecting dead or injured individual Smith's blue butterflies in the various life stages will be difficult due to their small size and cryptic nature; however, damage to and/or loss of a host plant will be detectable. Therefore, the Safe Harbor Agreement, upon approval by USFWS, will authorize DPR to incidentally take all Smith's blue butterflies, in any life stage, occupying and associated with a pre-established number of its host plant (seacliff buckwheat), that could be killed or injured as a result of damage to and/or loss of one of those host plants. DPR will also implement measures to avoid take of the butterfly by minimizing removal of seacliff buckwheat during trail maintenance and improvement activities. ▪ Modifications in the trail alignment may be made			construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
to avoid dense patches of seacliff buckwheat. ▪ DPR will implement measures to encourage the increase in establishment of seacliff buckwheat to provide areas where additional habitat for Smith's blue butterfly could establish so as to potentially increase the abundance and distribution of the species within the project area. These measures include closure of 6.3 miles of non-system trails and restoration of approximately 5.0 acres of coastal scrub habitat through the removal and control of invasive, non-native plant species. ▪ DPR will collect seed from seacliff buckwheat for the purpose of planting and/or seeding of buckwheat plants to expand habitat for Smith's blue butterfly within the project area. ▪ Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur in coastal scrub supporting seacliff buckwheat should be removed/controlled. Care will be given to ensure the root systems of seacliff buckwheat are not dislodged if invasive, non-native plants are hand-pulled. No herbicides will be used.				
BIO-4: To avoid impacts to Monterey dusky-footed woodrat, adjust alignment of Trail 1F to avoid the existing woodrat nests. If this is not possible, implement the following measures:	DPR	DPR	Prior to construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
▪ Two weeks prior to trail construction, a qualified biologist will construct a replacement woodrat nest for each nest that will be disturbed. The replacement nest will be located well outside the construction corridor in suitable habitat. ▪ Three days prior to disturbance of existing woodrat nests, a qualified biologist will conduct live trapping at those nests. Any woodrats caught will be relocated to the newly constructed replacement nests. ▪ After trapping is completed, the biologist will disassemble the existing woodrat nests by hand to allow any remaining woodrats inside to escape unharmed. ▪ The biologist will obtain approval from CDFG for the woodrat relocation effort, prior to implementing it.				
BIO-5: To avoid impacts to riparian and wetland resources within the work area, DPR will implement the following: ▪ Prior to construction, orange plastic construction fencing will be constructed at the limits of construction access and the work area so as to prevent injury to nearby riparian and wetland vegetation. ▪ During construction, excess soil, chemicals,	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
debris, equipment or other materials will not be dumped or stored within 20 feet of the creek edge. ▪ If vegetation is trimmed for trail access, trimmed vegetation will be allowed to re-grow. If trimming is required periodically, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.				
BIO-6: ▪ A wetlands and waters of the U.S. delineation report will be prepared for the Doud Creek bridge area and submitted to the appropriate office of the U.S. Army Corps of Engineers (USACE) for jurisdictional determination under Section 4040 of the Clean Water Act. If required by the USACE, a 4040 permit under the Nationwide Permit Program will be obtained for the bridge project and all conditions imposed by the permitting authority will be implemented. ▪ A waters of the State (riparian and state waters) report will be prepared for the Soberanes and Doud Creek bridge areas and submitted to the appropriate office of CDFG and Regional Water Quality Control Board (RWQCB) for jurisdictional determination under Fish and Game Code and the Porter Cologne Act, respectively. If required	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
by CDFG and/or RWQCB, a Streambed Alteration Agreement and/or Section 401 water quality certification will be obtained for the bridge project areas and all conditions imposed by the permitting authorities will be implemented. ▪ Best management practices will be implemented at watercourses; these practices include: ○ Install orange plastic construction-limit fencing to demarcate the limits of work and worker access and to protect aquatic resources. ○ Conduct construction activities during the dry season. ○ Divert concentrated runoff away from channel banks. ○ Minimize tree limbing. ○ Identify with construction fencing all areas that require clearing, grading or disturbance. ○ Implement erosion control measures as needed. Monitor effectiveness of measures during the first year's rainy season and implement remedial measures (e.g., reseeding) if sedimentation or erosion is noted. ○ If riparian vegetation (willow) is removed, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.				

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
BIO-7: DPR will implement the following measures: ▪ If possible, all noise generating construction activities will occur outside the raptor and migratory bird breeding season (August 1 – February 1). ▪ If construction-related activities must be scheduled during the breeding season, then focused surveys to identify active nests of migratory birds and raptor species will be conducted by a DPR-approved biologist before construction activities occur in these months. ▪ Surveys for active raptor nests will be conducted within a 500-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 500-foot radius of the nest until the young have fledged and the young will not be impacted by project activities (as determined by the biologist) and there is no evidence of a second nest attempt. ▪ Surveys for active migratory bird nests will be conducted within a 100-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 100-foot radius of the nest until the young have fledged and the young will not be impacted by	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
project activities (as determined by the biologist) and there is no evidence of a second nest attempt.				
CULTURAL RESOURCES				
CULT-1: To avoid impacts to potential historic roadbed remnants when closing and removing non-system trails, the following measures will be implemented. ▪ Where the remnant roadbed is relatively stable, utilize fencing, signage or vegetation debris to discourage access and lightly scarify the surface to promote revegetation in order to reduce erosion. ▪ Where excessive erosion exists along the roadbed and remediation is needed to prevent further erosion of the roadbed, fill entrenched areas, install drainage dips as needed, and lightly decompact the surface to promote revegetation. ▪ Mechanical grading will not be conducted to remove the roadbed. ▪ If, at a later date, the roadbed segments are evaluated, documented, and determined by a qualified DPR representative not to be eligible for the California Register, the roadbed may be removed.	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
CULT-2: To avoid impacts to archaeological sites when closing and removing non-system trails, the following measures will be implemented within, and in the vicinity of, identified archaeological sites. For trail closures within the Soberanes Point area: ▪ The DPR District Archaeologist, or other qualified archaeologist/designee, will inspect the location of the trail removals and closures prior to any soil disturbance to confirm the locations where an archaeological monitor will be required.The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location the appropriate measures have been implemented as determined by the Archaeologist. Trail closure and removal measures where the trailbed is stable:	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
▪ Allow trail to revegetate naturally. ▪ Retain all open areas except at trail entrances. ▪ Distribute cut native vegetation at trail entrances for length of approximately 20 feet. ▪ Install cable and rod fencing only as needed. ▪ Avoid installing sign posts within, or in vicinity of, archaeological sites where feasible. Trail closure and removal measures where the trailbed is entrenched (uneven surface with substantial loss of soil within the trailbed): ▪ Within entrenched areas, decompact/ lightly scarify trail bed using hand tools. ▪ For entrenched trailbeds within, and within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site. ▪ For areas not located within, or within 30 feet of, an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used. ▪ No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material. ▪ Install straw wattles as appropriate.				

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
CULT-3: To avoid impacts to archaeological resources from designating and widening the trailbed of Coastal Trail segments, the following trail improvement measures will be followed: ▪ Within entrenched areas, decompact/ lightly scarify trail bed using hand tools. ▪ For entrenched trailbeds within, or within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site. ▪ For areas not located within, or within 30 feet of, an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used. ▪ No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material. ▪ Delineate and lightly scrape trailbed to maximum width of 48 inches. ▪ Cap trail bed with an aggregate base 6 to 8 inches in depth. ▪ At Soberanes Point, within the Trail Gate 7 area, and on the coastal bluff to the south of Doud	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
Creek (Trail 19A), within identified archaeological sites and within 10 meters of identified sites, a qualified archaeological monitor will be present during construction of Coastal Trail improvements. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.				
CULT-4: To avoid impacts to archaeological resources from excavation during construction of steps at Trail Gates 2, 3 and 5, the following combination of mitigation measures will be implemented: ▪ Prior to construction, the proposed step alignment down the bluff to the intertidal zone at Gate 2 will be flagged by DPR and inspected by	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
a qualified archaeologist. ▪ A qualified archaeological monitor will be present during excavation for the steps at Trail Gate 3 and the cable steps anchors at Trail Gate 5. The archaeological monitor will remain on site as warranted by the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.				
CULT-5: To avoid impacts to archaeological resources from construction of the abutments for the Soberanes Creek pedestrian bridge, the following measures shall be implemented: ▪ Prior to any excavation, the DPR District Archaeologist, or other qualified archaeologist/designee, will verify the location of the proposed bridge abutments to ensure the	DPR	DPR	Prior to construction	

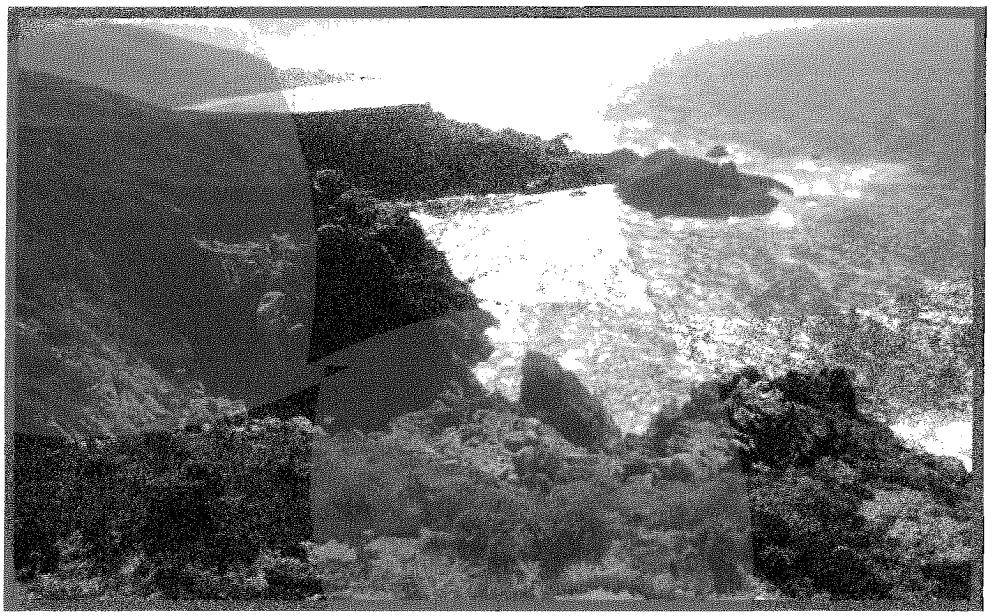
Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
location will not result in potential significant impacts to archaeological resources.				
CULT-6: To avoid impacts to archaeological resources during excavation for overlook improvements, the following combination of mitigation measures will be implemented: ▪ Close access to existing unimproved overlooks within identified archaeological sites where feasible. ▪ Relocate overlooks at Trail Gates 1, 2, 10, and 17 South to the designated locations outside of identified archaeological sites. Overlooks 2, 10, and 17 South will be relocated to sites where previous archaeological posthole tests were conducted. Any excavation for the rock wall and bench posts will be located where previously marked and recorded by DPR staff based on prior testing. The District Archaeologist, or qualified archaeologist/ designee, will verify the location of relocated overlooks at Trail Gates 1, 2, 10, and 17 South prior to any soil disturbance or excavation. ▪ The overlook at Trail Gate 12 will be located within the previously disturbed rock/thin soil area. The existing trail alignment leading to the overlook will be capped with aggregate base for a	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
distance to be determined by a qualified archaeologist prior to construction of the overlook improvements. ▪ Excavation for overlooks will be limited to the rock wall (6 to 8 inches in depth), wood railing, and bench posts (36 inches in depth maximum). ▪ Overlook areas will be capped with aggregate base material. ▪ No new benches or wood railing will be installed within existing overlooks located within identified archaeological sites. ▪ A qualified archaeological monitor will be present during excavation for construction of the overlooks at Trail Gates 1, 5, and 12. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation, or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.				

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
CULT-7: To avoid unanticipated impacts to archaeological resources from project-related activities in areas, the following mitigation measure will be implemented: ▪ In the event that a previously undocumented, potentially significant cultural deposit is encountered during project related activities and no archaeological monitor is present, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location of until the appropriate measures have been implemented as determined by the Archaeologist.	DPR	DPR	During construction	
HYRDROLOGY AND WATER QUALITY				
HYDRO-1: To avoid alteration of the course of a stream and substantial erosion or siltation, DPR will implement the following: ▪ The pedestrian bridge and puncheon at Doud Creek will be designed to avoid alteration of the	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
stream flow. The final design and construction of the pedestrian bridge and puncheon at Doud Creek will be reviewed and approved by a qualified DPR representative.				

FINAL
MITIGATED NEGATIVE DECLARATION
AND
RESPONSE TO COMMENTS RECEIVED



GARRAPATA STATE PARK
COASTAL HABITAT RESTORATION AND TRAIL IMPROVEMENTS PROJECT

AUGUST 2012

Lead Agency

State of California
DEPARTMENT OF PARKS AND RECREATION
Monterey District

MITIGATED NEGATIVE DECLARATION

PROJECT: GARRAPATA STATE PARK
COASTAL HABITAT RESTORATION AND TRAIL IMPROVEMENTS PROJECT

LEAD AGENCY: California Department of Parks and Recreation (DPR)

AVAILABILITY OF DOCUMENTS:
The Initial Study for this Mitigated Negative Declaration was made available throughout the 30-day public review period at the reference desks of the Monterey Public Library. It was also available at the public information desk of DPR's Monterey District Headquarters offices. The Final Mitigated Negative Declaration and all supporting materials will be available, by request, at DPR's Monterey District Headquarters office.

PROJECT DESCRIPTION:
The proposed project includes restoration of coastal habitat and improvements to the California Coastal Trail (Coastal Trail). A key goal of the coastal habitat restoration is to protect and enhance the seacliff buckwheat population in order to benefit the Smith's blue butterfly. Approximately 9.4 miles of trails currently exist within the project area. Many of these trails were created by park users and are not considered by park staff to be part of the Garrapata SP system trails. The project proposes to close and remove 6.3 miles of non-system trail segments in order to protect and restore Smith's blue butterfly habitat, protect archaeological sites, and address on-going accelerated erosion. The project also proposes to clearly designate and improve the Coastal Trail segments, totaling 3.1 miles. Proposed Coastal Trail improvements include capping the existing trail bed with an aggregate base, installing two new foot bridges and one puncheon (a low bridge with no hand railings) crossing at Soberanes and Doud Creek crossings, replacing wood and cable steps, designating and improving overlook sites, and installing signage. These trails would be accessed from a total of 17 existing trailheads. Trail use would continue to be limited to pedestrian use only.

FINDINGS
An Initial Study has been prepared to assess the proposed project's potential impacts on the environment and the significance of those impacts and is incorporated in the Draft MND. Based on this Initial Study, it has been determined that the proposed project would not have any significant impacts on the environment, once all proposed mitigation measures have been implemented. This conclusion is supported by the following findings:

- There was no potential for adverse impacts on agriculture and forestry resources, land use and planning, mineral resources, population and housing, transportation/traffic, and utilities/service systems associated with the proposed project.

- Potential adverse impacts resulting from the proposed project were found to be less than significant in the following areas: aesthetics, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, public services, and recreation.

- Full implementation of the proposed mitigation measures included in this MND would reduce potential project-related adverse impacts for biological resources, cultural resources, and hydrology and water quality to a less than significant level.

MITIGATION MEASURES

The following mitigation measures have been incorporated into the scope of work for the Garrapata State Park Coastal Habitat Restoration and Trail Improvement Project and will be fully implemented by DPR to avoid or minimize adverse environmental impacts identified in this MND. These mitigation measures will be included in contract specifications and instructions to DPR personnel involved in implementing the project.

Significant Impact	Mitigation
Biological Resources	
Impact BIO-1: Trail rehabilitation would occur within and/or in close proximity to individuals of Monterey paintbrush (CNPS List 4; species considered to be locally unique by Monterey County). Plants of this species may be removed by trail rehabilitation and maintenance depending upon the extent of construction work required in each area.	**Mitigation Measure BIO-1:** To avoid construction related impacts to Monterey paintbrush, DPR will incorporate the following measures prior to commencement of all construction activities: ▪ Trail construction should be kept to the smallest feasible disturbance area. Material removed during trail construction should not be side cast onto adjacent coastal scrub and prairie. The limits of the work will be demarcated in the field. DPR will install flagging, fencing, and other protective measures around paintbrush plants that are to be avoided by the project. ▪ DPR will use salvaged and/or seed collected from Monterey paintbrush in the revegetation effort so as to re-establish the species. ▪ Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur adjacent to work areas should be removed/controlled to prevent their encroachment into habitat supporting the Monterey paintbrush. Care will be given to ensure the root systems of Monterey paintbrush are not dislodged if invasive, non-native plants are hand-pulled. No herbicides will be used.
Impact BIO-2: Construction of the bridges over Doud and Soberanes creeks would temporarily disturb some wetland vegetation, and if frogs are present in the work area, they	**Mitigation Measure BIO-2:** To avoid impacts to California red-legged frog, DPR will schedule construction to occur during the dry season, generally between April 15 and October 15 of any given year and implement the following measures: ▪ No more than 48 hours prior to start of

Significant Impact	Mitigation
may be injured or killed by construction. Construction of the bridge over Soberanes Creek may temporarily affect areas adjacent to the creek.	construction of the new footbridges at Soberanes and Doud creeks, a Service-approved biologist will conduct a visual survey of the work area for frogs. If any California red-legged frogs are observed within the work area, a Service-approved biologist will relocate the frogs to other suitable creek habitat upstream of the work area. The biologist will monitor the initial ground disturbance and vegetation removal. The results of the surveys, including whether any California red-legged frogs were observed or heard, and the species of all amphibians detected, will be reported to USFWS. ▪ DPR will secure a Safe Harbor Agreement with USFWS for the California red-legged frog prior to trail developments at Soberanes and Doud creeks.
Impact BIO-3: Impacts to Smith's blue butterflies could occur as a result of maintaining trails and overlooks and by enhancing and restoring habitat. Actions could damage or cause a direct loss of seacliff buckwheat, the species host plant. Trail maintenance may result in temporary habitat loss, disturbance and displacement during such activities. Incidental take of Smith's blue butterflies could also occur as a result of recreation and associated activities such as hiking on trails.	**Mitigation Measure BIO-3:** To avoid, minimize, and compensate for impacts to Smith's blue butterfly DPR will implement the following measures: ▪ Prior to implementation of project improvements within areas supporting seacliff buckwheat, DPR will secure a Safe Harbor Agreement with USFWS that outlines measures DPR will implement to achieve measurable benefit to the species. The Safe Harbor Agreement will provide DPR incidental take coverage for Smith's blue butterflies occupying and associated with its host plant (seacliff buckwheat) that could be taken as a result of the proposed project. Incidental take coverage will be provided in this manner because detecting dead or injured individual Smith's blue butterflies in the various life stages would be difficult due to their small size and cryptic nature; however, damage to and/or loss of a host plant would be detectable. Therefore, the Safe Harbor Agreement, upon approval by USFWS, will authorize DPR to incidentally take all Smith's blue butterflies, in any life stage, occupying and associated with a pre-established number

Significant Impact	Mitigation
	of its host plant (seacliff buckwheat), that could be killed or injured as a result of damage to and/or loss of one of those host plants. DPR will also implement measures to avoid take of the butterfly by minimizing removal of seacliff buckwheat during trail maintenance and improvement activities. ▪ Modifications in the trail alignment may be made to avoid dense patches of seacliff buckwheat. ▪ DPR will implement measures to encourage the increase in establishment of seacliff buckwheat to provide areas where additional habitat for Smith's blue butterfly could establish so as to potentially increase the abundance and distribution of the species within the project area. These measures include closure of 6.3 miles of non-system trails and restoration of approximately 5.0 acres of coastal scrub habitat through the removal and control of invasive, non-native plant species. ▪ DPR will collect seed from seacliff buckwheat for the purpose of planting and/or seeding of buckwheat plants to expand habitat for Smith's blue butterfly within the project area. ▪ Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur in coastal scrub supporting seacliff buckwheat should be removed/controlled. Care will be given to ensure the root systems of seacliff buckwheat are not dislodged if invasive, non-native plants are hand-pulled. No herbicides will be used.
Impact BIO-4: Improvement to existing Trail 1F may result in impacts to Monterey dusky-footed woodrat nests. The species may be disturbed if trail construction occurs at nest sites.	**Mitigation Measure BIO-4:** To avoid impacts to Monterey dusky-footed woodrat, adjust alignment of Trail 1F to avoid the existing woodrat nests. If this is not possible, implement the following measures: ▪ Two weeks prior to trail construction, a qualified biologist will construct a replacement woodrat nest for each nest that would be disturbed. The replacement nest will be located well outside the

Significant Impact	Mitigation
	construction corridor in suitable habitat. ▪ Three days prior to disturbance of existing woodrat nests, a qualified biologist will conduct live trapping at those nests. Any woodrats caught will be relocated to the newly constructed replacement nests. ▪ After trapping is completed, the biologist will disassemble the existing woodrat nests by hand to allow any remaining woodrats inside to escape unharmed. ▪ The biologist will obtain approval from CDFG for the woodrat relocation effort, prior to implementing it.
Impact BIO-5: Willows may be trimmed to provide trail clearance near Gate 1 (Trail section 1F) and some riparian and wetland vegetation may be temporarily impacted from worker and equipment access during bridge construction at Doud Creek.	**Mitigation Measure BIO-5:** To avoid impacts to riparian and wetland resources within the work area, DPR will implement the following: ▪ Prior to construction, orange plastic construction fencing will be constructed at the limits of construction access and the work area so as to prevent injury to nearby riparian and wetland vegetation. ▪ During construction, excess soil, chemicals, debris, equipment or other materials will not be dumped or stored within 20 feet of the creek edge. ▪ If vegetation is trimmed for trail access, trimmed vegetation will be allowed to re-grow. If trimming is required periodically, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.
Impact BIO-6: Construction of the bridges at Soberanes and Doud creeks may cause temporary impacts to water resources if workers access the waterway.	**Mitigation Measure BIO-6:** ▪ A wetlands and waters of the U.S. delineation report will be prepared for the Doud Creek bridge area and submitted to the appropriate office of the U.S. Army Corps of Engineers (USACE) for jurisdictional determination under Section 4040 of the Clean Water Act. If required by the USACE, a 4040 permit under the Nationwide Permit Program will be obtained for the bridge project and all conditions imposed by the permitting authority will be implemented. ▪ A waters of the State (riparian and state

Significant Impact	Mitigation
	waters) report will be prepared for the Soberanes and Doud Creek bridge areas and submitted to the appropriate office of CDFG and Regional Water Quality Control Board (RWQCB) for jurisdictional determination under Fish and Game Code and the Porter Cologne Act, respectively. If required by CDFG and/or RWQCB, a Streambed Alteration Agreement and/or Section 401 water quality certification will be obtained for the bridge project areas and all conditions imposed by the permitting authorities will be implemented. ▪ Best management practices will be implemented at watercourses; these practices include: o Install orange plastic construction-limit fencing to demarcate the limits of work and worker access and to protect aquatic resources. o Conduct construction activities during the dry season. o Divert concentrated runoff away from channel banks. o Minimize tree limbing. o Identify with construction fencing all areas that require clearing, grading or disturbance. o Implement erosion control measures as needed. Monitor effectiveness of measures during the first year's rainy season and implement remedial measures (e.g., reseeding) if sedimentation or erosion is noted. o If riparian vegetation (willow) is removed, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.
Impact BIO-7: Construction activities may cause short-term impacts to nesting birds if they are present during construction. The noise from construction may cause nesting birds to abandon eggs or chicks, resulting in their death.	**Mitigation Measure BIO-7:** DPR will implement the following measures: ▪ If possible, all noise generating construction activities will occur outside the raptor and migratory bird breeding season (August 1 – February 1). ▪ If construction-related activities must be scheduled during the breeding season, then

Significant Impact	Mitigation
	focused surveys to identify active nests of migratory birds and raptor species will be conducted by a DPR-approved biologist before construction activities occur in these months. ▪ Surveys for active raptor nests will be conducted within a 500-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 500-foot radius of the nest until the young have fledged and the young will not be impacted by project activities (as determined by the biologist) and there is no evidence of a second nest attempt. ▪ Surveys for active migratory bird nests will be conducted within a 100-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 100-foot radius of the nest until the young have fledged and the young will not be impacted by project activities (as determined by the biologist) and there is no evidence of a second nest attempt.
Cultural Resources	
Impact CULT-1: Remnant roadbed removal, if not carried out sensitively, could result in significance disturbance to a potential historic resource.	**Mitigation Measure CULT-1**: To avoid impacts to potential historic roadbed remnants when closing and removing non-system trails, the following measures will be implemented. ▪ Where the remnant roadbed is relatively stable, utilize fencing, signage or vegetation debris to discourage access and lightly scarify the surface to promote revegetation in order to reduce erosion. ▪ Where excessive erosion exists along the roadbed and remediation is needed to prevent further erosion of the roadbed, fill entrenched areas, install drainage dips as needed, and lightly decompact the surface to promote revegetation. ▪ Mechanical grading will not be conducted to remove the roadbed. ▪ If, at a later date, the roadbed segments are evaluated, documented, and determined by a qualified DPR representative not to be

Significant Impact	Mitigation
	eligible for the California Register, the roadbed may be removed.
Impact CULT-2: Non-system trail closure and removal, if not carried out sensitively, could result in disturbance to archaeological sites.	**Mitigation Measure CULT-2:** To avoid impacts to archaeological sites when closing and removing non-system trails, the following measures will be implemented within, and within 30 feet of, identified archaeological sites. For trail closures within the Soberanes Point area: ▪ The DPR District archaeologist, or other qualified archaeologist/designee, will inspect the location of the trail removals and closures prior to any soil disturbance to confirm the locations where an archaeological monitor will be required. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist. Trail closure and removal measures where the trailbed is stable: ▪ Allow trail to revegetate naturally. ▪ Retain all open areas except at trail entrances. ▪ Distribute cut native vegetation at trail entrances for length of approximately 20 feet. ▪ Install cable and rod fencing only as needed. ▪ Avoid installing sign posts within, or in vicinity of, archaeological sites where feasible.

Significant Impact	Mitigation
	Trail closure and removal measures where the trailbed is entrenched (uneven surface with substantial loss of soil within the trailbed): ▪ Within entrenched areas, decompact/ lightly scarify trail bed using hand tools. ▪ For entrenched trailbeds within, and within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site. ▪ For areas not located within, or within 30 feet of, an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used. ▪ No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material. ▪ Install straw wattles as appropriate.
Impact CULT-3: Designation and use of the Coastal Trail segments could result in greater disturbance to archaeological resources due to trampling, accelerated erosion, and increased trail use. Widening of the existing trailbed could result in exposure, disturbance, or displacement of archaeological features or artifacts.	**Mitigation Measure CULT-3**: To avoid impacts to archaeological resources from designating and widening the trailbed of Coastal Trail segments, the following trail improvement measures will be followed: ▪ Within entrenched areas, decompact/ lightly scarify trail bed using hand tools. ▪ For entrenched trailbeds within, and within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site. ▪ For areas not located within, or within 30 feet, of an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used. ▪ No additional sites within the project area beyond those designated for trail

Significant Impact	Mitigation
	improvements will be excavated solely to collect fill material. ▪ Delineate and lightly scrape trailbed to maximum width of 48 inches. ▪ Cap trail bed with an aggregate base 6 to 8 inches in depth. ▪ At Soberanes Point, within the Trail Gate 7 area, and on the coastal bluff to the south of Doud Creek (Trail 19A), within, and within 30 feet, of identified archaeological sites, a qualified archaeological monitor will be present during construction of Coastal Trail improvements. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.
Impact CULT-4: Excavation for construction of interlocking and cable steps at Trail Gates 2, 3 and 5 could result in disturbance to archaeological resources.	**Mitigation Measure CULT-4**: To avoid impacts to archaeological resources from excavation during construction of steps at Trail Gates 2, 3 and 5, the following combination of mitigation measures will be implemented: ▪ Prior to construction, the proposed step alignment down the bluff to the intertidal zone at Gate 2 will be flagged by DPR and inspected by a qualified archaeologist. ▪ A qualified archaeological monitor will be present during excavation for the steps at Trail Gate 3 and the cable steps anchors at Trail Gate 5. The archaeological monitor will remain on site as warranted by the archaeological monitor. In the event that a potentially significant cultural deposit is

Significant Impact	Mitigation
	uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.
Impact CULT-5: Construction of the abutments for the Soberanes Creek pedestrian bridge could result in potential significant impacts to archaeological resources.	**Mitigation Measure CULT 5:** To avoid impacts to archaeological resources from construction of the abutments for the Soberanes Creek pedestrian bridge, the following measures shall be implemented: ▪ Prior to any excavation, the DPR District Archaeologist, or other qualified archaeologist/designee, will verify the location of the proposed bridge abutments to ensure the location will not result in potential significant impacts to archaeological resources.
Impact CULT-6: Excavation for overlook improvements could result in impacts to archaeological resources.	**Mitigation Measure CULT-6**: To avoid impacts to archaeological resources during excavation for overlook improvements, the following combination of mitigation measures will be implemented: ▪ Close access to existing unimproved overlooks within identified archaeological sites where feasible. ▪ Relocate overlooks at Trail Gates 1, 2, 10, and 17 South to the designated locations outside of identified archaeological sites. Overlooks 2, 10, and 17 South will be relocated to sites where previous archaeological posthole tests were conducted. Any excavation for the rock wall and bench posts will be located where previously marked and recorded by DPR staff based on prior testing. The District Archaeologist, or qualified archaeologist/ designee, will verify the location of relocated overlooks at Trail Gates 1, 2, 10,

Significant Impact	Mitigation
	and 17 South prior to any soil disturbance or excavation. ▪ The overlook at Trail Gate 12 will be located within the previously disturbed rock/thin soil area. The existing trail alignment leading to the overlook will be capped with aggregate base for a distance to be determined by a qualified archaeologist prior to construction of the overlook improvements. ▪ Excavation for overlooks will be limited to the rock wall (6 to 8 inches in depth), wood railing, and bench posts (36 inches in depth maximum). ▪ Overlook areas will be capped with aggregate base material. ▪ No new benches or wood railing will be installed within existing overlooks located within identified archaeological sites. ▪ A qualified archaeological monitor will be present during excavation for construction of the overlooks at Trail Gates 1, 5, and 12. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist can evaluate the feature. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.
Impact CULT-7: Project-related activities could result in impacts to significant archaeological resources in areas not anticipated.	**Mitigation Measure CULT-7**: To avoid unanticipated impacts to archaeological resources from project-related activities in areas, the following mitigation measure will be implemented: ▪ In the event that a previously undocumented, potentially significant cultural deposit is encountered during project related activities and no

Significant Impact	Mitigation
	archaeological monitor is present, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location of until the appropriate measures have been implemented as determined by the Archaeologist.
HYDROLOGY AND WATER QUALITY	
Impact HYDRO-1: Alteration of the stream flow in Doud Creek and substantial erosion and siltation could occur if the pedestrian bridge and puncheon are not properly designed and installed.	**Mitigation Measure HYDRO-1:** To avoid alteration of the course of a stream and substantial erosion or siltation, DPR will implement the following: ▪ The pedestrian bridge and puncheon at Doud Creek will be designed to avoid alteration of the stream flow. The final design and construction of the pedestrian bridge and puncheon at Doud Creek will be reviewed and approved by a qualified DPR representative.

This document, along with the Draft Initial Study/Mitigated Negative Declaration (SCH#2012071053), corrected as noted above; Comments and Response to Comments; Mitigation Monitoring and Reporting Program; and the Notice of Determination, constitute the Final Mitigated Negative Declaration for the Coastal Habitat Restoration and Trail Improvement Project at Garrapata State Park.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

Mathew Fuzie, District Superintendent
Monterey District

8/24/12
Date

DEPARTMENT OF TRANSPORTATION
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Flex your power!
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August 9, 2012

MON-1-62.42
SCH# 2012071053

Larry Tierney
California Department of Parks and Recreation
2211 Garden Road
Monterey, CA 93940

Dear Mr. Tierney:

COMMENTS TO GARRAPATA STATE PARK HABITAT AND TRAIL RESTORATION

The California Department of Transportation (Caltrans), District 5, Development Review, has reviewed the above referenced project and offers the following comments in response to your summary of impacts

1. Any work within the State right-of-way will require an encroachment permit issued from Caltrans. Detailed information such as complete drawings, biological and cultural resource findings, hydraulic calculations, environmental reports, traffic study, etc., may need to be submitted as part of the encroachment permit process.

2. The project is proposing to use existing turnouts in Caltrans right-of-way as staging areas. This would require an encroachment permit as mentioned above; a specific concern is that any activity in these areas would avoid impacts to seacliff buckwheat.

If you have any questions, or need further clarification on items discussed above, please don't hesitate to call me at (805) 542-4751.

Sincerely,

JOHN J. OLEJNIK
Associate Transportation Planner
District 5 Development Review Coordinator
john.olejnik@dot.ca.gov

cc: Brandy Rider (D5)

RESPONSE TO COMMENTS RECEIVED ON THE GARRAPATA STATE PARK COASTAL HABITAT RESTORATION AND TRAIL IMPROVEMENT PROJECT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The only comment(s) received during the 30-day public review period for this project was from the California Department of Transportation, indicating an encroachment permit is required for any work within the State right-of-way. Department of Parks and Recreation will obtain an encroachment permit from California Department of Transportation as described on page 14 of the Draft IS/MND.

No significant corrections, additions, and deletions have been made to the Garrapata State Park Coastal Habitat Restoration and Trail Improvement Draft MND. Minor punctuation, spelling, and grammatical corrections that contribute to ease of understanding, but have no significant impact on the content, have not been noted.

APPENDIX E
MITIGATION AND MONITORING/REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
BIOLOGICAL RESOURCES				
BIO-1: To avoid construction related impacts to Monterey paintbrush, DPR will incorporate the following measures prior to commencement of all construction activities: ▪ Trail construction should be kept to the smallest feasible disturbance area. Material removed during trail construction should not be side cast onto adjacent coastal scrub and prairie. The limits of the work will be demarcated in the field. DPR will install flagging, fencing, and other protective measures around paintbrush plants that are to be avoided by the project. ▪ DPR will use salvaged and/or seed collected from Monterey paintbrush in the revegetation effort so as to re-establish the species. ▪ Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur adjacent to work areas should be removed/controlled to prevent their encroachment into habitat supporting the Monterey paintbrush. Care will be given to ensure the root systems of Monterey paintbrush are not dislodged if invasive, non-native plants are hand-pulled. No herbicides will be used.	California Dept. of Parks & Recreation (DPR)	California Dept. of Parks & Recreation (DPR)	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
BIO-2: To avoid impacts to California red-legged frog, DPR will schedule construction to occur during the dry season, generally between April 15 and October 15 of any given year and implement the following measures: ▪ No more than 48 hours prior to start of construction of the new footbridges at Soberanes and Doud creeks, a Service-approved biologist will conduct a visual survey of the work area for frogs. If any California red-legged frogs are observed within the work area, a Service-approved biologist will relocate the frogs to other suitable creek habitat upstream of the work area. The biologist will monitor the initial ground disturbance and vegetation removal. The results of the surveys, including whether any California red-legged frogs were observed or heard, and the species of all amphibians detected, will be reported to USFWS. ▪ DPR will secure a Safe Harbor Agreement with USFWS for the California red-legged frog prior to trail developments at Soberanes and Doud creeks.	DPR	DPR	Prior to and during construction	
BIO-3: To avoid, minimize, and compensate for impacts to Smith's blue butterfly DPR will implement the following measures**:**	DPR	DPR	Prior to, during and after	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
▪ Prior to implementation of project improvements within areas supporting seacliff buckwheat, DPR will secure a Safe Harbor Agreement with USFWS that outlines measures DPR will implement to achieve measurable benefit to the species. The Safe Harbor Agreement will provide DPR incidental take coverage for Smith's blue butterflies occupying and associated with its host plant (seacliff buckwheat) that could be taken as a result of the proposed project. Incidental take coverage will be provided in this manner because detecting dead or injured individual Smith's blue butterflies in the various life stages will be difficult due to their small size and cryptic nature; however, damage to and/or loss of a host plant will be detectable. Therefore, the Safe Harbor Agreement, upon approval by USFWS, will authorize DPR to incidentally take all Smith's blue butterflies, in any life stage, occupying and associated with a pre-established number of its host plant (seacliff buckwheat), that could be killed or injured as a result of damage to and/or loss of one of those host plants. DPR will also implement measures to avoid take of the butterfly by minimizing removal of seacliff buckwheat during trail maintenance and improvement activities. ▪ Modifications in the trail alignment may be made			construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
to avoid dense patches of seacliff buckwheat. ▪ DPR will implement measures to encourage the increase in establishment of seacliff buckwheat to provide areas where additional habitat for Smith's blue butterfly could establish so as to potentially increase the abundance and distribution of the species within the project area. These measures include closure of 6.3 miles of non-system trails and restoration of approximately 5.0 acres of coastal scrub habitat through the removal and control of invasive, non-native plant species. ▪ DPR will collect seed from seacliff buckwheat for the purpose of planting and/or seeding of buckwheat plants to expand habitat for Smith's blue butterfly within the project area. ▪ Invasive, non-native plant species (e.g., poison hemlock, iceplant, mustards, Cape ivy) that occur in coastal scrub supporting seacliff buckwheat should be removed/controlled. Care will be given to ensure the root systems of seacliff buckwheat are not dislodged if invasive, non-native plants are hand-pulled. No herbicides will be used.				
BIO-4: To avoid impacts to Monterey dusky-footed woodrat, adjust alignment of Trail 1F to avoid the existing woodrat nests. If this is not possible, implement the following measures:	DPR	DPR	Prior to construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
▪ Two weeks prior to trail construction, a qualified biologist will construct a replacement woodrat nest for each nest that will be disturbed. The replacement nest will be located well outside the construction corridor in suitable habitat. ▪ Three days prior to disturbance of existing woodrat nests, a qualified biologist will conduct live trapping at those nests. Any woodrats caught will be relocated to the newly constructed replacement nests. ▪ After trapping is completed, the biologist will disassemble the existing woodrat nests by hand to allow any remaining woodrats inside to escape unharmed. ▪ The biologist will obtain approval from CDFG for the woodrat relocation effort, prior to implementing it.				
BIO-5: To avoid impacts to riparian and wetland resources within the work area, DPR will implement the following: ▪ Prior to construction, orange plastic construction fencing will be constructed at the limits of construction access and the work area so as to prevent injury to nearby riparian and wetland vegetation. ▪ During construction, excess soil, chemicals,	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
debris, equipment or other materials will not be dumped or stored within 20 feet of the creek edge. ▪ If vegetation is trimmed for trail access, trimmed vegetation will be allowed to re-grow. If trimming is required periodically, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.				
BIO-6: ▪ A wetlands and waters of the U.S. delineation report will be prepared for the Doud Creek bridge area and submitted to the appropriate office of the U.S. Army Corps of Engineers (USACE) for jurisdictional determination under Section 4040 of the Clean Water Act. If required by the USACE, a 4040 permit under the Nationwide Permit Program will be obtained for the bridge project and all conditions imposed by the permitting authority will be implemented. ▪ A waters of the State (riparian and state waters) report will be prepared for the Soberanes and Doud Creek bridge areas and submitted to the appropriate office of CDFG and Regional Water Quality Control Board (RWQCB) for jurisdictional determination under Fish and Game Code and the Porter Cologne Act, respectively. If required	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
by CDFG and/or RWQCB, a Streambed Alteration Agreement and/or Section 401 water quality certification will be obtained for the bridge project areas and all conditions imposed by the permitting authorities will be implemented. ▪ Best management practices will be implemented at watercourses; these practices include: ○ Install orange plastic construction-limit fencing to demarcate the limits of work and worker access and to protect aquatic resources. ○ Conduct construction activities during the dry season. ○ Divert concentrated runoff away from channel banks. ○ Minimize tree limbing. ○ Identify with construction fencing all areas that require clearing, grading or disturbance. ○ Implement erosion control measures as needed. Monitor effectiveness of measures during the first year's rainy season and implement remedial measures (e.g., reseeding) if sedimentation or erosion is noted. ○ If riparian vegetation (willow) is removed, DPR will re-establish willow vegetation in a nearby area at a 1:1 impact to restoration ratio.				

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
BIO-7: DPR will implement the following measures: ▪ If possible, all noise generating construction activities will occur outside the raptor and migratory bird breeding season (August 1 – February 1). ▪ If construction-related activities must be scheduled during the breeding season, then focused surveys to identify active nests of migratory birds and raptor species will be conducted by a DPR-approved biologist before construction activities occur in these months. ▪ Surveys for active raptor nests will be conducted within a 500-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 500-foot radius of the nest until the young have fledged and the young will not be impacted by project activities (as determined by the biologist) and there is no evidence of a second nest attempt. ▪ Surveys for active migratory bird nests will be conducted within a 100-foot radius of the project area 10 days prior to the beginning of construction at each work site. If nesting raptors are found, no construction will occur within a 100-foot radius of the nest until the young have fledged and the young will not be impacted by	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
project activities (as determined by the biologist) and there is no evidence of a second nest attempt.				
CULTURAL RESOURCES				
CULT-1: To avoid impacts to potential historic roadbed remnants when closing and removing non-system trails, the following measures will be implemented. ▪ Where the remnant roadbed is relatively stable, utilize fencing, signage or vegetation debris to discourage access and lightly scarify the surface to promote revegetation in order to reduce erosion. ▪ Where excessive erosion exists along the roadbed and remediation is needed to prevent further erosion of the roadbed, fill entrenched areas, install drainage dips as needed, and lightly decompact the surface to promote revegetation. ▪ Mechanical grading will not be conducted to remove the roadbed. ▪ If, at a later date, the roadbed segments are evaluated, documented, and determined by a qualified DPR representative not to be eligible for the California Register, the roadbed may be removed.	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
CULT-2: To avoid impacts to archaeological sites when closing and removing non-system trails, the following measures will be implemented within, and in the vicinity of, identified archaeological sites. For trail closures within the Soberanes Point area: ▪ The DPR District Archaeologist, or other qualified archaeologist/designee, will inspect the location of the trail removals and closures prior to any soil disturbance to confirm the locations where an archaeological monitor will be required.The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location the appropriate measures have been implemented as determined by the Archaeologist. Trail closure and removal measures where the trailbed is stable:	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
▪ Allow trail to revegetate naturally. ▪ Retain all open areas except at trail entrances. ▪ Distribute cut native vegetation at trail entrances for length of approximately 20 feet. ▪ Install cable and rod fencing only as needed. ▪ Avoid installing sign posts within, or in vicinity of, archaeological sites where feasible. Trail closure and removal measures where the trailbed is entrenched (uneven surface with substantial loss of soil within the trailbed): ▪ Within entrenched areas, decompact/ lightly scarify trail bed using hand tools. ▪ For entrenched trailbeds within, and within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site. ▪ For areas not located within, or within 30 feet of, an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used. ▪ No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material. ▪ Install straw wattles as appropriate.				

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
CULT-3: To avoid impacts to archaeological resources from designating and widening the trailbed of Coastal Trail segments, the following trail improvement measures will be followed: ▪ Within entrenched areas, decompact/ lightly scarify trail bed using hand tools. ▪ For entrenched trailbeds within, or within 30 feet of, an identified archaeological site, any excavated soil material will be used within the site area. Any soil excavated from an identified archaeological site will not be exported for use as fill beyond the archaeological site. ▪ For areas not located within, or within 30 feet of, an identified archaeological site, entrenched areas will be filled and capped with soil that has been removed for trail construction from the vicinity or clean fill from offsite will be used. ▪ No additional sites within the project area beyond those designated for trail improvements will be excavated solely to collect fill material. ▪ Delineate and lightly scrape trailbed to maximum width of 48 inches. ▪ Cap trail bed with an aggregate base 6 to 8 inches in depth. ▪ At Soberanes Point, within the Trail Gate 7 area, and on the coastal bluff to the south of Doud	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
Creek (Trail 19A), within identified archaeological sites and within 10 meters of identified sites, a qualified archaeological monitor will be present during construction of Coastal Trail improvements. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.				
CULT-4: To avoid impacts to archaeological resources from excavation during construction of steps at Trail Gates 2, 3 and 5, the following combination of mitigation measures will be implemented: ▪ Prior to construction, the proposed step alignment down the bluff to the intertidal zone at Gate 2 will be flagged by DPR and inspected by	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
a qualified archaeologist. ▪ A qualified archaeological monitor will be present during excavation for the steps at Trail Gate 3 and the cable steps anchors at Trail Gate 5. The archaeological monitor will remain on site as warranted by the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.				
CULT-5: To avoid impacts to archaeological resources from construction of the abutments for the Soberanes Creek pedestrian bridge, the following measures shall be implemented: ▪ Prior to any excavation, the DPR District Archaeologist, or other qualified archaeologist/designee, will verify the location of the proposed bridge abutments to ensure the	DPR	DPR	Prior to construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
location will not result in potential significant impacts to archaeological resources.				
CULT-6: To avoid impacts to archaeological resources during excavation for overlook improvements, the following combination of mitigation measures will be implemented: ▪ Close access to existing unimproved overlooks within identified archaeological sites where feasible. ▪ Relocate overlooks at Trail Gates 1, 2, 10, and 17 South to the designated locations outside of identified archaeological sites. Overlooks 2, 10, and 17 South will be relocated to sites where previous archaeological posthole tests were conducted. Any excavation for the rock wall and bench posts will be located where previously marked and recorded by DPR staff based on prior testing. The District Archaeologist, or qualified archaeologist/ designee, will verify the location of relocated overlooks at Trail Gates 1, 2, 10, and 17 South prior to any soil disturbance or excavation. ▪ The overlook at Trail Gate 12 will be located within the previously disturbed rock/thin soil area. The existing trail alignment leading to the overlook will be capped with aggregate base for a	DPR	DPR	During construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
distance to be determined by a qualified archaeologist prior to construction of the overlook improvements. ▪ Excavation for overlooks will be limited to the rock wall (6 to 8 inches in depth), wood railing, and bench posts (36 inches in depth maximum). ▪ Overlook areas will be capped with aggregate base material. ▪ No new benches or wood railing will be installed within existing overlooks located within identified archaeological sites. ▪ A qualified archaeological monitor will be present during excavation for construction of the overlooks at Trail Gates 1, 5, and 12. The archaeological monitor will remain on site as warranted in the opinion of the archaeological monitor. In the event that a potentially significant cultural deposit is uncovered during construction, all work will be stopped at the specific location of the find until the DPR District Archaeologist can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation, or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location until the appropriate measures have been implemented as determined by the Archaeologist.				

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
CULT-7: To avoid unanticipated impacts to archaeological resources from project-related activities in areas, the following mitigation measure will be implemented: ▪ In the event that a previously undocumented, potentially significant cultural deposit is encountered during project related activities and no archaeological monitor is present, all work will be stopped at the specific location of the find until the DPR District Archaeologist, or other qualified archaeologist/designee, can evaluate it. Prior to work resuming at the location, the Archaeologist will determine the appropriate avoidance, preservation or recovery measures required, in compliance with DPR directives and CEQA. Work will not resume at the location of until the appropriate measures have been implemented as determined by the Archaeologist.	DPR	DPR	During construction	
HYRDROLOGY AND WATER QUALITY				
HYDRO-1: To avoid alteration of the course of a stream and substantial erosion or siltation, DPR will implement the following: ▪ The pedestrian bridge and puncheon at Doud Creek will be designed to avoid alteration of the	DPR	DPR	Prior to and during construction	

Mitigation Measures	Party Responsible for Implementation	Agency Responsible for Monitoring	Monitoring Timeline	Monitoring Compliance Record (Name/Date)
stream flow. The final design and construction of the pedestrian bridge and puncheon at Doud Creek will be reviewed and approved by a qualified DPR representative.				