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Conceptual Mitigation Monitoring & Reporting Plan

For the Piedras Blancas California Coastal Trail Project

California State Parks

San Luis Obispo Coast District

San Luis Obispo County

DRAFT

July 2024

Summary

The California Department of Parks and Recreation (DPR) Parks is proposing to construct the Piedras Blancas segment of the California Coastal Trail located approximately 9 miles north of Old San Simeon Village. The Piedras Blancas Coastal Trail Project (PBCT) consists of 4.2 miles of accessible trail including boardwalks, bridges, and compacted gravel surface. The width of trail will vary between 4 and 5 feet and total approximately 2.5 acres once it is constructed. Construction of the PBCT will result in approximately 9.5 acres of total disturbance which includes temporary impacts as a result of staging and stockpiling and temporary vegetation disturbance. The PBCT would be located west of Highway 1 and would extend north from the elephant seal boardwalk at the Caltrans Vista Point 4 parking lot to the Arroyo de la Cruz parking lot and trailhead.

This Conceptual Mitigation, Monitoring & Revegetation Plan provides an overview of the types and quantities of impacts to regulated habitats and sensitive species and describes the efforts proposed to mitigate the impacts to these resources. The proposed stretch of Coastal Trail is located along Highway 1 in northern San Luis Obispo County, just north of the Piedras Blancas Lighthouse. This project will have impacts on Environmentally Sensitive Habitat Areas (ESHAs). These impacts fall under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), California Coastal Commission (CCC), the U.S. Fish and Wildlife Service (USFWS), Central Coast Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). This plan will be revised and finalized after final design plans have been prepared and the regulatory permit process has been completed.

This Conceptual Mitigation, Monitoring & Revegetation Plan (Conceptual MMRP) outlines where mitigation could occur, defines success criteria, outlines maintenance actions, and identifies contingency measures and/or adaptive management actions if initial planting efforts do not meet success criteria.

Project Summary

The DPR is proposing to construct the Piedras Blancas Coastal Trail (PBCT) located approximately 9 miles north of Old San Simeon Village. The PBCT consists of 4.2 miles of accessible trail including boardwalks, bridges, and compacted gravel surface. The width of trail will vary between 4 and 5 feet and total approximately 2.5 acres once it is constructed. Construction of the PBCT will result in approximately 9.5 acres of total disturbance which includes temporary impacts as a result of staging and stockpiling and temporary vegetation disturbance. The PBCT would be located west of Highway 1 and would extend north from the elephant seal boardwalk at the Caltrans Vista Point 4 parking lot to the Arroyo de la Cruz parking lot and trailhead.

As part of the development process that resulted in the proposed PBCT alignment, several other potential routes were mapped out and compared to the areas of environmental sensitivity to determine the extent of impacts on resources. Field surveys and a desktop literature review was conducted using queries with the CDFW Natural Diversity Database (CNDDDB) as well as the USFWS IPAC and using spatial data from CDFW and USFWS as well as spatial data for delineated wetlands from the United States Army Corps of Engineers (ACOE). Maps of the species identified by the CNDDDB with potential to occur near the Project site are in Appendix A. The Mitigated Negative Declaration (MND) prepared for the Project analyzes potential impacts to the botanical and wildlife species identified in those queries.

The Project was designed to avoid impacts to sensitive botanical species and minimize and avoid impacts to elephant seals. The MND includes avoidance and minimization measures as well as mitigation measures to reduce potential impacts to these resources to a less than significant level. The proposed alignment was identified as the preferred alignment as it was determined to have the fewest impacts on sensitive resources (Refer to Appendix B). However, the Project will impact wetlands, coastal prairie, and riparian habitat. This Conceptual MMRP discusses how DPR will mitigate those impacts and monitor the success of those efforts.

Table 1 lists the trail feature lengths and the anticipated acreage of disturbance associated with the PBCT.

Table 1. Area of Trail Features and Area of Disturbance

Trail Feature Lengths	
Length of earth tone road base surface sections	20,358 feet

Length of boardwalk sections	1565 feet
Length of bridged sections	275 feet
Total Length of Trail including Boardwalks & Bridges	22,189 feet = 4.2 miles
Project Acreage	
Earth tone road base trail, boardwalks, & bridges	2.5 acres
Temporary vegetation disturbance (~5 feet on either side of trail, boardwalks, bridges)	5 acres
Staging and stockpiling	2 acres
Total Project Acreage	9.5 acres
Total Acres of Disturbance	
Earth Tone Road Base Sections	
Permanent Impacts (Terrestrial)	2.15 acres
Temporary Impacts (5' on each side of trail)	4.68 acres
Boardwalk Sections	
Permanent Impacts	0.2 acre
Temporary Impacts (5' on each side)	0.51 acre
Bridge Sections	
Permanent Impacts	0.03 acre
Temporary Impacts (5' on each side)	0.06 acre

Site Ownership and Responsible Parties

DPR owns the Project site and all mitigation will occur on-site or on DPR-owned property close to and/or within the same watershed as the Project site.

Existing Conditions

Environmentally Sensitive Habitat Areas (ESHA)

ESHAs that will be impacted as a result of the proposed project include wetlands, riparian habitat, and coastal prairie. Coastal zone wetlands are those subject to regulations under the California Coastal Act. ACOE wetlands must meet three parameters – hydrology, hydric soils, and hydrophytic vegetation. Coastal wetlands are only required to meet one of these parameters in order to be considered wetlands under the Coastal Act. In a few areas, ephemeral coastal zone wetlands had only one wetland indicator (hydrophytic vegetation) and were therefore mapped as coastal wetlands.

Emergent wetland habitat is defined as erect, hydrophytic, rooted, low growing, non-woody perennials with no canopy cover. Arroyo willow riparian habitat consists of an abundance of woody material with arroyo willows dominating the dense canopy cover. Arroyo willow riparian impacts will be mitigated by planting willow cuttings in appropriate areas. Coastal prairie is a native grassland characterized by high species-richness and a Mediterranean climate along the coast where fog provide moisture and is considered to be ESHA by the CCC.

1.1. Vegetation

1.1.1. Emergent Wetlands

Wetlands on this project will be quantified in two separate groups: emergent and arroyo willow riparian. Emergent wetlands in the project area consist of erect, hydrophytic, rooted, low growing, non-woody perennials. In contrast, the arroyo willow riparian wetlands in the project area are dominated by dense stands of arroyo willow (*Salix lasiolepis*). The emergent wetlands remain robust and healthy and are dominated by native hydrophytics in most areas.

Within the project area there are several types of emergent wetlands: brackish water, coastal prairie, and freshwater seep/marsh.

Brackish water wetlands occur only at the creek mouths and are dominated by salt-tolerant vegetation such as salt grass (*Distichlis spicata*), pickle weed (*Salicornia pacifica*), alkali heath (*Frankenia salina*), and fleshy jaumea (*Jaumea carnosa*). The primary influence creating this plant community is a higher salt content in the water and soil. Most of these areas are subject to tidal influence for part of the year. No impacts to brackish water areas are anticipated.

The most common of the emergent wetlands within the project area are locations that become wet in the rainy season and support wetland species seasonally. Within the project area subtle differences in soil, topography, and hydrology result in a mosaic of species that vary from year to year depending on precipitation. The slow permeability and the moderate to high water capacity of this soil series supports hydrophytic species such as coastal tufted hairgrass (*Deschampsia*

caespitosa holciformis), meadow barley (*Hordeum brachyantherum*), California oatgrass (*Danthonia californica*), and brown-headed rush (*Juncus phaeocephalus*).

Freshwater seeps and marshes are herbaceous communities associated with seeps, springs, and slow-moving drainages. This community is comprised of diverse herbs, sedges, and *Juncus* species occurring in perennial or long-saturated seeps and creeks. Characteristic plant species include sedges (*Carex* sp.), spike rushes (*Eleocharis* spp.), brown-headed rush (*Juncus phaeocephalus*), spiny rush (*Eleocharis macrostachya*), willow-herb (*Epilobium* sp.), spreading rush (*Juncus patens*), silverweed (*Potentilla anserina*), common three square (*Scirpus pungens*), golden-eyed grass (*Sisyrinchium californicum*), pennyworts (*Hydrocotyle* spp.), and panicked bulrush (*Scirpus microcarpus*). The plant species in these seeps and creeks are highly diverse.

The project crosses several of these jurisdictional emergent wetland areas.

1.1.2. Arroyo Willow Riparian Habitat

Arroyo willow riparian habitat is primarily dominated by arroyo willow (*Salix lasiolepis*) with few forbs and grasses. Riparian habitat is considered a wetland by the CCC and, within the Project site, is subject to the Local Coastal Plan implemented by the County of San Luis Obispo Planning and Building Department.

This community is a dense, low, closed canopy riparian forest dominated by arroyo willow (*Salix lasiolepis*). Willow-dominated riparian communities occur at Arroyo del Corral and Arroyo del Oso in locations with less saltwater influence and some protection from wind. The willows provide shade in riparian habitats and important habitat for wildlife. A stand of willows also occurs at a coastal freshwater seep located between the northern elephant seal parking lot and Point Piedras Blancas.

Since the willows in this area are short-statured, low-growing and wide, the canopy cover will be used to determine impacts and mitigation rather than individual trees.

1.1.3. Coastal Prairie

Coastal prairie is a native, perennial bunchgrass community with diverse annual and perennial forbs. This community is limited to areas with a maritime climate. Some of the coastal prairies on the northern San Luis Obispo County coast boast some of the most pristine coastal prairies in California and are host to a suite of rare and endemic plant species. Coastal prairie is the most abundant habitat type within the study area. Coastal prairie is considered a natural community of special interest under CEQA and an ESHA in the San Luis Obispo County Local Coastal Plan (LCP), and therefore must be addressed appropriately.

Within areas of impact, there are large stands of native perennial bunchgrasses. Species include purple needle grass (*Stipa pulchra*) which dominates more xeric sites within the coastal prairie, often with patches of blue wild rye (*Elymus glaucus*). Introduced annual grasses such as purple false brome (*Brachypodium distachyon*), rat-tail fescue (*Festuca myuros*), and rattlesnake grass (*Briza maxima*), also dominate these areas seasonally.

1.2. Hydrology

All waters in the project area flow from an east to west direction and flow into the Pacific Ocean. The emergent wetlands in coastal prairie were the most abundant wetland type and were often associated with subtle mima topography. The shallow clay pan creates the seasonal wetland hydrology. The rainy season's first several storms swell the claypan, which then becomes impermeable and perches water in the overlying soil horizon. In many of these areas, the soil is saturated all the way to the surface during the rainy season. The clay also has a high available water capacity, which keeps water in the rooting zone for perennial plants long after the surface layer has dried and shallow-rooted annuals have perished. Despite the mima topography and impermeable layers, no true vernal pools were observed, even in winter/spring 2010/2011 and 2021/2022 which were exceptionally wet years.

Emergent wetlands associated with hillside seeps were mostly seasonal and appeared to form at breaks in the slope where water moving through the upper soil profile was forced to the surface. A wide swale at the un-named creek immediately south of Arroyo del Corral is characteristic of a freshwater marsh and also supports emergent wetland vegetation. This un-named creek is fed through groundwater from a stockpond upstream which was artificially impounded in the past. The drainage feature does not have a defined channel and water moves at a very slow-imperceptible pace. It remains saturated most of the year.

1.3. Threatened / Endangered Species

The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS). NMFS is the permitting authority for species covered under the Marine Mammal Protection Act, including the northern elephant seals (*Mirounga angustirostris*) that occur adjacent to the Project. However, the Project has been designed to avoid impacts to elephants seals as its been located away from haul-outs, beaches they occupy, moved up to the bluff tops, and the Project includes fencing to separate visitors from the elephant seals.

The Project design includes elephant seal fencing that will be installed at Arroyo Del Osos, where it currently does not exist, and around a viewing platform that will be built at Arroyo del Corral to prevent elephant seal and human interaction and allow

trail users to view elephant seals from a safe distance. Fencing installation at Arroyo del Oso is not anticipated to cause impacts to elephant seal movement or habitat and is intended to preserve haul out areas, while keeping trail users and elephant seals separated and allowing trail users to view elephant seals from a safe distance.

The Project includes the construction of free-span bridges over waterways that provide habitat for steelhead, tidewater goby, and California red-legged frog. Arroyo del Corral is designated critical habitat for tidewater goby. Impacts to tidewater goby critical habitat and suitable habitat for steelhead and tidewater gobies is not anticipated to occur since the Project is designed to free-span waterways where these species occur using bridges. The bridges will not require dewatering of creeks/waterways; therefore, bridge construction is not anticipated to impact steelhead, tidewater gobies, and/or tidewater goby critical habitat.

California red-legged frogs have been observed at three locations within the Project site: the unnamed creek south of the lighthouse, Arroyo del Corral, and Arroyo del Oso. However, construction activities at these locations involve installing free-span bridges which will avoid impacts to the waterways, and construction will occur outside of the breeding season, when this species is less likely to be dispersing overland. A qualified biological monitor will survey for this species prior to work in these areas. If an individual is detected during surveys, work at that location will halt until the individual leaves the Project area on its own. Once the Project has more clearly defined plans/specs and through the regulatory permitting process, it will be determined whether or not a Biological Opinion from USFWS is required and/or if additional measures are required in addition to preconstruction surveys.

Anticipated Impacts to Jurisdictional Areas

Wetlands

Where the PBCT cannot avoid wetlands, elevated boardwalks will be installed to raise the trail above this feature, which will allow wetland flora and fauna to exist and migrate under the structures, though the piers supporting the boardwalks will be constructed within and result in permanent impacts to wetlands. The Project crosses approximately 0.33 acre of wetlands; however, permanent impacts will only occur where individual piers that support the boardwalks are constructed within the wetlands. It is anticipated that, once final design plans are prepared, far less than 0.33 acre of permanent impacts will occur within the wetlands. The boardwalks themselves are not permanently impacting wetlands due to the fact that they will be raised and allow for migration of some wildlife below the structures, continued growth of vegetation, and allow hydric function to continue. Consultation with permitting agencies will determine final impacts and mitigation ratios, but DPR is proposing to offset impacts to wetlands at a ratio agreed upon with regulatory permitting agencies.

Arroyo willow riparian habitat

Riparian habitat impacts will consist of temporary disturbance to install bridges over waterways located along the trail. Permanent impacts to riparian habitat will be determined by the regulatory permitting agencies and will be mitigated by DPR staff accordingly. Placement of bridges over riparian habitats will reduce impacts to this habitat type. Bridge placement will result in approximately 0.03 acre of disturbance to riparian habitat.

Coastal Prairie

Coastal prairie is the largest habitat type in the project area. Approximately 0.92 acres of coastal prairie is anticipated to be permanently impacted as a result of the new trail and will be mitigated at a mitigation ratio agreed upon with the regulatory permitting agencies. Approximately 1.84 acres of coastal prairie is anticipated to be temporarily impacted and DPR proposes to mitigate those impacts at 1:1 on-site as feasible.

Whether or not the mitigation will occur on-site and/or offsite will be determined once the precise construction footprint is finalized and as a part of the regulatory permit process. All mitigation will occur on State Parks property.

Both wetlands and coastal prairie are considered ESHA and will be mitigated appropriately and in coordination with permitting regulatory agencies.

No permanent impacts to riparian habitats will occur. However, temporary impacts to riparian habitats may occur during the installation of bridges at an un-named stream located between Point Piedras Blancas and the upcoast elephant seal viewing area, Arroyo del Oso, and an un-named drainage upcoast from Arroyo del Oso.

On-site Mitigation

The on-site mitigation for emergent wetlands will be located adjacent to the PBCT. On-site mitigation for riparian impacts will consist of planting willow cuttings on stream banks and in wet areas along the proposed trail route. On-site mitigation for coastal prairie will consist of converting non-native weedy areas to native coastal prairie through weed control, outplanting, and maintenance.

The adjacency and quality of the on-site mitigation lands provide the greatest potential for restoration success, particularly in the case of the emergent wetlands because it is anticipated that available water will naturally help exclude non-native invasive plants and revegetate the site with native hydrophytic vegetation quickly.

Off-site Mitigation

If there is not enough suitable habitat on-site for mitigation, off-site mitigation will occur south of the PBCT between the southern terminus of the Project and San Simeon Point on State Park property.

Avoidance, Minimization, and Mitigation Measures

Several avoidance and minimization measures have been incorporated into the project to reduce impacts to sensitive habitats and sensitive species. Bridges were designed and will be constructed in a manner to incur the least impact on wetlands and coastal prairie. Elevated boardwalks will be installed to raise the trail above wetlands, which will allow wetland flora and fauna to exist and migrate under the structures, though the piers supporting the boardwalks will be constructed within and result in permanent impacts to wetlands. The use of raised boardwalks across wetlands would allow for migration of some wildlife below the structures, continued growth of vegetation, and allow hydric function to continue.

Environmental Sensitive Areas (ESAs) will be established by DPR to protect all areas that are not necessary for construction and to prevent unnecessary temporary impacts to ESHAs. The following Standard Project Requirements (SPR) will be implemented to avoid and/or minimize impacts to sensitive resources, per the MND prepared for the Project:

SPR BIOR-1: Environmentally Sensitive Areas

- Environmentally Sensitive Areas will be demarcated, and all work personnel and vehicles/equipment will avoid those areas.

SPR BIOR-2: Environmental Awareness Training

- Environmental training will be provided by a DPR Environmental Scientist for all work personnel prior to the onset of work activities, including staging and stockpiling.
- SPR BIOR-3: Best Management Practices
 - a) Prior to the start of on-site construction activities, DPR Environmental staff will conduct an additional survey of the Project area for sensitive species.
 - b) To prevent the spread of noxious weeds, all construction vehicles and equipment will enter and leave the Project site free of soil, vegetative matter or other debris that could contain weed seeds.
 - c) All construction will be consistent with the State Parks Trail Manual guidelines.

- d) DPR Environmental staff will monitor Project construction activities on a regular basis to ensure that impacts to natural resources are minimized.

SPR BIOR-4: Plants

- a) If special status plant species are located within 50 feet of the project area, the occurrences will be flagged by the DPR Environmental staff, fenced off prior to the start of on-site construction activities, and completely avoided. The contractor is responsible for ensuring that all fencing remains intact for the duration of construction activities.
- b) To maintain genetic integrity, restoration efforts will use seed/stock collected from the Project site and/or the local area.

SPR BIOR-5: Wildlife

- a) Construction of boardwalks and bridges must occur during the summer months when wetlands and waterways are at their driest to avoid potential impacts to amphibians and reptiles.
- b) A qualified biological monitor will survey for California red-legged frogs prior to work near the locations where this species has been found. Through the regulatory permit process, additional measures to reduce and/or avoid impacts to State listed, federally listed, and/or sensitive species will be incorporated into construction activities.
- c) Construction of the trail must occur in the summer months prior to September to avoid potential impacts to burrowing owls and California red-legged frogs.

The following mitigation measures (MM) will be implemented to mitigate impacts to sensitive resources, per the MND prepared for the Project:

BIOMM-1

- Impacts to coastal prairie and cobwebby thistle will be mitigated at a ratio agreed upon with regulatory permitting agencies.

BIOMM-2

- Impacts to emergent wetlands will be mitigated on-site and/or off-site at a ratio agreed upon with regulatory permitting agencies.

Mitigation Strategy

Site Preparation

Site preparation of temporarily impacted areas will consist of restoring the disturbed areas to original contours and native vegetation. Planting will occur following completion of construction activities, prior to the next rain event in the fall or winter.

Planting and Seeding Strategy

A DPR Environmental Scientist will oversee all implementation of planting/collecting efforts in the field. If it is determined that willows from the riparian corridor or emergent species salvaged from the streambed will not adequately supply the replanting effort, additional seeding and planting by DPR staff will occur.

Seed & Plant Salvage

DPR Environmental staff will gather coastal prairie stock and/or seed from the Project site prior to construction and store it in their greenhouses, and later use it to mitigate the loss of coastal prairie. Other salvaged species will include cobwebby thistle and willow cuttings. The cuttings will be gathered from the same drainage or waterway where it is impacted during bridge installation activities.

Installation of salvaged plant materials will be conducted with the use of hand tools. The planting process involves: 1) excavation of the planting hole by hand; 2) placing stock into the hole; 3) backfilling excavated hole with native soil; and, 4) watering the individual.

Collected seed will be scattered in suitable areas. Wood chips and/or leaf litter may be used to ensure the success of seeding efforts by increasing water retention in the soil and providing a barrier to wildlife that could eat the seed before it sprouts.

Willow Cuttings and Emergent Clumps

- Willow cuttings will be planted at 5-foot centers.
- Prior to planting, an area two feet in diameter at each proposed plant site shall be manually cleared of all weed growth.
- All planting holes shall be dug to equal the depth and 1-1/2 times the width of the rootball or rhizome.
- After the soil has been well firmed around the rootball and watered, the crown of the rootball shall be at or above the surrounding finish grade or, on

slopes, an elevation equal to the slope elevation at the lower edge of the plant pit.

- Each plant shall be planted in the center of the pit, and backfilled with native material. No filling will be permitted on the top of trunks or stems if present. Rootballs or rhizomes should not be disturbed when planting.

Maintenance Plan

Watering

No irrigation is proposed as the areas to be restored as the area is often exposed to coastal fog much of the year. Planting will occur at the start of the rainy season and normal rainfall should supply adequate water for the type of plantings proposed.

DPR may need to water seeded and/or planted areas until they become established. Watering would occur by hand and access to those locations would occur on foot. Existing trails would be used so that no additional impacts occur to the surrounding habitats.

Weed Control and Herbicide Use

Weed control will be performed by hand methods during regularly scheduled monitoring site visits. As the bridges and boardwalks are located within and adjacent to waterways and/or wetlands, no herbicide would be used at or near those locations.

Debris Removal

Any debris and trash will be removed as necessary during the regularly scheduled monitoring visits.

Vandalism

Vandalism of the site is not expected. Any vandalism of restoration plantings that compromise success goals will be rectified with replacement plantings.

Remedial Planting

Remedial planting will be performed as necessary to remain in compliance with the targeted success goals/criteria. Any such plantings will be performed per the CMMRP planting methods and requirements.

Monitoring Plan

The success criteria used on this project will primarily be determined by the percentage of established hydrophytic plants and the percentage of established native vegetation cover and weed control.

In order to develop a standard and repeatable means of measuring success and to avoid the potential differences between different vegetation types, their success criteria will be treated differently. For instance, emergent wetland areas are often inundated with water, which can inhibit competition with non-native plants, whereas drier communities like coastal prairie may be more vulnerable to invasion and have a higher percent of non-native cover. Potential differences in percent native cover supports assessing each of these natural vegetation communities independently. The vegetation composition from year to year is highly dependent on the weather, including precipitation, fog, and frost. Therefore, monitoring will include comparisons to reference sites which will be used each year to establish success

Monitoring Schedule

For a three-year period, DPR will perform annual monitoring and will submit annual reports to the regulatory agencies. These reports will be submitted during the month of January each year following completion of construction, or by the date required in the regulatory permits received for the project.

Performance Goals

Annual surveys will occur within the project area to determine the success of restoration and revegetation efforts.

For the revegetated areas, the following criteria must be met at the end of the 5-year mitigation and monitoring period:

- 75% survival of planted stock; &
- 75% cover native vegetation in vegetated areas.*

*does not apply to bare areas and/or areas that are regularly inundated with freshwater

Photo Monitoring

Photo monitoring points will be established at sampling points in emergent wetland, arroyo willow riparian wetland, and coastal prairie that have easily recognizable landmarks and are easily repeatable in future years. Photos shall be representative of each habitat type and taken each year, starting with the first spring after planting.

DPR will monitor the success of creation, restoration and enhancement of the different vegetation communities throughout the monitoring period. These monitoring requirements are implemented in order to determine if the mitigation project is on track to meet performance standards and if adaptive management is necessary.

Other Attributes To Be Monitored

The presence of native volunteer species indicates that the site conditions are suitable for development of self-sustaining natural habitat. Non-native species occurrences must be removed before they produce seed. Monitoring activities will observe and record the presence of such species and determine if action is required.

All wildlife observed in and around the mitigation areas will be documented as to species, number, and functional use of habitat (i.e., feeding, nesting, roosting, etc.). Permanent photo points will be established throughout the mitigation site to assist in tracking the success of the mitigation program. Permanent photo points will also be established during the preparation of the as-built planting plan, and ground view photos will be taken during each monitoring year from the same vantage point.

Reporting Requirements

The monitoring reports will include plans such as as-built plans, maps, and photographs to illustrate site conditions. In addition, the reports may include both qualitative and quantitative measures of the functions provided by the compensatory mitigation project site and the presence/absence of species. Monitoring results to determine whether the project has met the success criteria will also be included.

All data will be collected by State Parks Natural Resources Program staff or a designee(contractor). All data will be managed by State Parks Natural Resources Program staff or a designee (contractor).

Listed and sensitive species survey data will be submitted to the California Natural Diversity Database (CNDDDB).

Completion of Compensatory Mitigation

DPR will notify the regulatory agencies in writing upon completion of the monitoring period and attainment of the success criteria. Following receipt of the final monitoring report, DPR understands that the agencies may request a site visit to confirm the completion of the compensatory mitigation effort and any jurisdictional delineation.

Contingency Measures

DPR is expecting successful mitigation efforts since the mitigation will occur adjacent to the area impacted and, when feasible, within the same habitat type. If performance standards are not met after the three years of monitoring, additional plantings, seeding, or weed control may be necessary. If so, DPR would be responsible for implementing this work and any other unforeseen. The actual monitoring results will be used to make adaptive management decisions.

The following unexpected events may occur within the mitigation areas and may require management action:

- **Wildfire:** Fire is a natural event in coastal grasslands and may be encouraged in some mitigation areas in the long-term. State Parks has fire management plans developed for several park units to help control invasive plants and maintain healthy grasslands and forests. If a plan is developed for this park unit, the use of controlled burning may be used to enhance native vegetation, in accordance with required permits.
- **Flood:** Flood conditions in the creeks and swales may cause erosion and loss of vegetation, but would be temporary in nature. Drainage areas would be anticipated to revegetate during the following growing season from persistent roots and a natural seed bank.
- **Drought:** If the area experiences a drought it is likely that some vegetation will not survive. Some plants have roots that are viable even if the above-ground portion of the plant perishes, and therefore have the potential to re-sprout the following growing season. If this drought event occurs within the plant establishment and monitoring period (first three years) additional water will be provided to the plants to keep them alive. Plants that do not survive will be replaced during this time. On-site seed collection and dispersal may be another option to regenerate plants on the site after a drought.
- **Weed infestation:** Eradicating all non-native vegetation is not a realistic goal, however once natives are established and regenerating, they compete well against non-natives. Weed “control” is the management goal and this will be best accomplished by establishing healthy native populations. During plant establishment a rigorous weed control plan will involve both hand-pulling and chemical control. If monitoring results indicate that non-native plants are not naturally being controlled (i.e. competition with natives) then DPR will use hand, mechanical, or chemical methods to control weeds.
- **Public use:** The area will be left open for access throughout the duration of mitigation. It is assumed that the public will remain on trail; however, individual areas planted for mitigation may be fenced and signed to inform

visitors of the sensitive restoration areas if it's determined to be warranted by DPR staff.

Long-Term Management

If it becomes apparent that the on-site mitigation will not attain the final success criteria within the expected time frame, DPR will begin an assessment of reasons for failure and will work with the involved regulatory agencies to determine an acceptable solution. If the site trends indicate that the success criteria will eventually be met but in a longer timeframe than anticipated, maintenance and monitoring will continue until the criteria have been satisfied.

Piedras Blancas Coastal Trail

California State Parks

Map A

Arroyo de la Cruz Parking

Legend:

- Caltrans Realignment R.O.W.
- Parking Area
- Caltrans Parcel
- State Park Boundary

Proposed Trail Features

- Bridge
- Boardwalk
- California Coastal Trail (3.9mi)

*Trail features widened for display purposes

35' Bridge

Scale: 0 to 1,000 Feet / 0 to 0.2 Mile

Inset Map: Shows the location of Map A (A) relative to other areas (B, C, D) in the Piedras Blancas area.

19



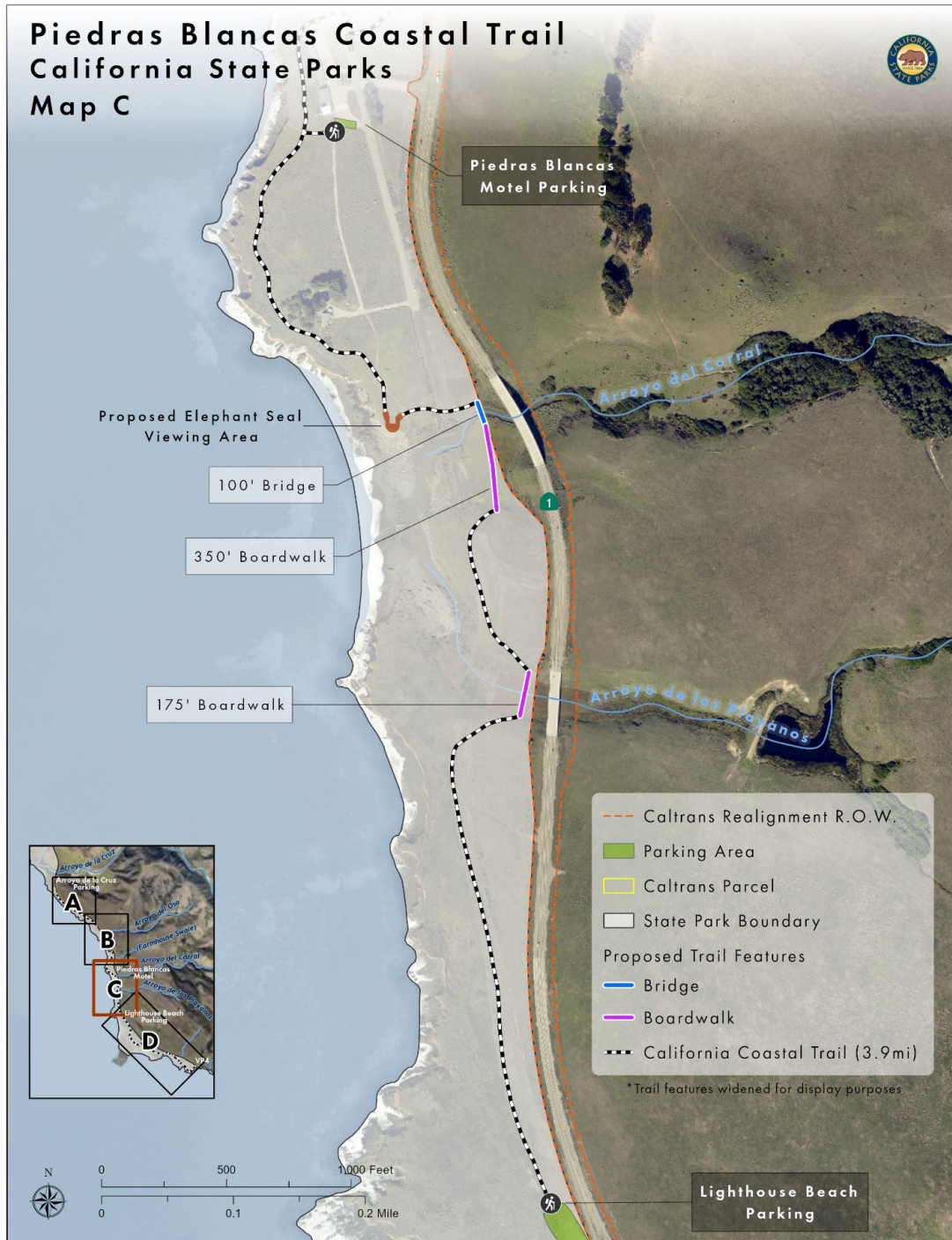


Figure 3: Piedras Blancas Costal Trail - Map C



Figure 4: Piedras Blancas Coastal Trail - Map D