DRAFT

INITIAL STUDY
MITIGATED NEGATIVE DECLARATION

CHINO HILLS STATE PARK
CHINO HILLS HABITAT RESTORATION

SCH# 2018081087



August 2018

Prepared for the California Department of Parks and Recreation
Inland Empire District

MITIGATED NEGATIVE DECLARATION

PROJECT: CHINO HILLS HABITAT RESTORATION

LEAD AGENCY: California Department of Parks and Recreation

AVAILABILITY OF DOCUMENTS: The Initial Study/Mitigated Negative Declaration is available for review at:

Inland Empire District
California Department of Parks & Recreation
17801 Lake Perris Drive,
Perris, CA 92571

Chino Hills State Park Discovery Center
4500 Carbon Canyon Road
Brea, CA 92823

Also on the internet at: http://www.parks.ca.gov/default.asp?page_id=983

ENVIRONMENTAL DETERMINATION:
Pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA), CDPR has independently reviewed and analyzed this Initial Study (IS) for the Proposed Project and finds that it reflects the independent judgment of CDPR. CDPR, as lead agency, confirms that the project mitigation measures detailed are feasible, will be implemented and will reduce all impacts to a less than significant level.

Kelly Elliott
Inland Empire District Superintendent

8.29.18
Date

Larrynn Carver
Inland Empire District Environmental Coordinator

8-28-2018
Date

EXECUTIVE SUMMARY

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will 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	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	☒ None

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 original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. 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** or its functional equivalent will be prepared. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents. ☐

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required. ☐



__ _____12/14/2017_____

Ken Kietzer Date

PROJECT DESCRIPTION:

Ecological Restoration - The project involves exotic plant removal and native plant community restoration on 23.5 acres of State Park land. This project will restore native habitat on critical portions of a bio-corridor that connects Chino Hills State Park and the surrounding Puente-Chino Hills and the Santa Ana River to the Cleveland National Forest and the Santa Ana Mountains. This project will improve the function of this habitat linkage, a critical point of connectivity for the plants and animals utilizing Chino Hills State Park and the surrounding Puente-Chino Hills. This action will help prevent local and regional species extinction.

PROJECT LOCATION:

The project will take place within Chino Hills State Park at the decommissioned Coal Canyon off-ramp and near the park's Easy Street Trail. Coal Canyon lies east of Gypsum Canyon Road and west of Green River Road within Orange County. Easy Street Trail is north of Rim Crest Drive. The nearest city is Yorba Linda (Figure 1).

FINDINGS:

A copy of the Initial Study is attached. Based upon this Initial Study, it has been determined that the proposed project would not have any significant impacts on the environment, once all proposed project mitigation requirements have been implemented:

PROJECT REQUIREMENTS:

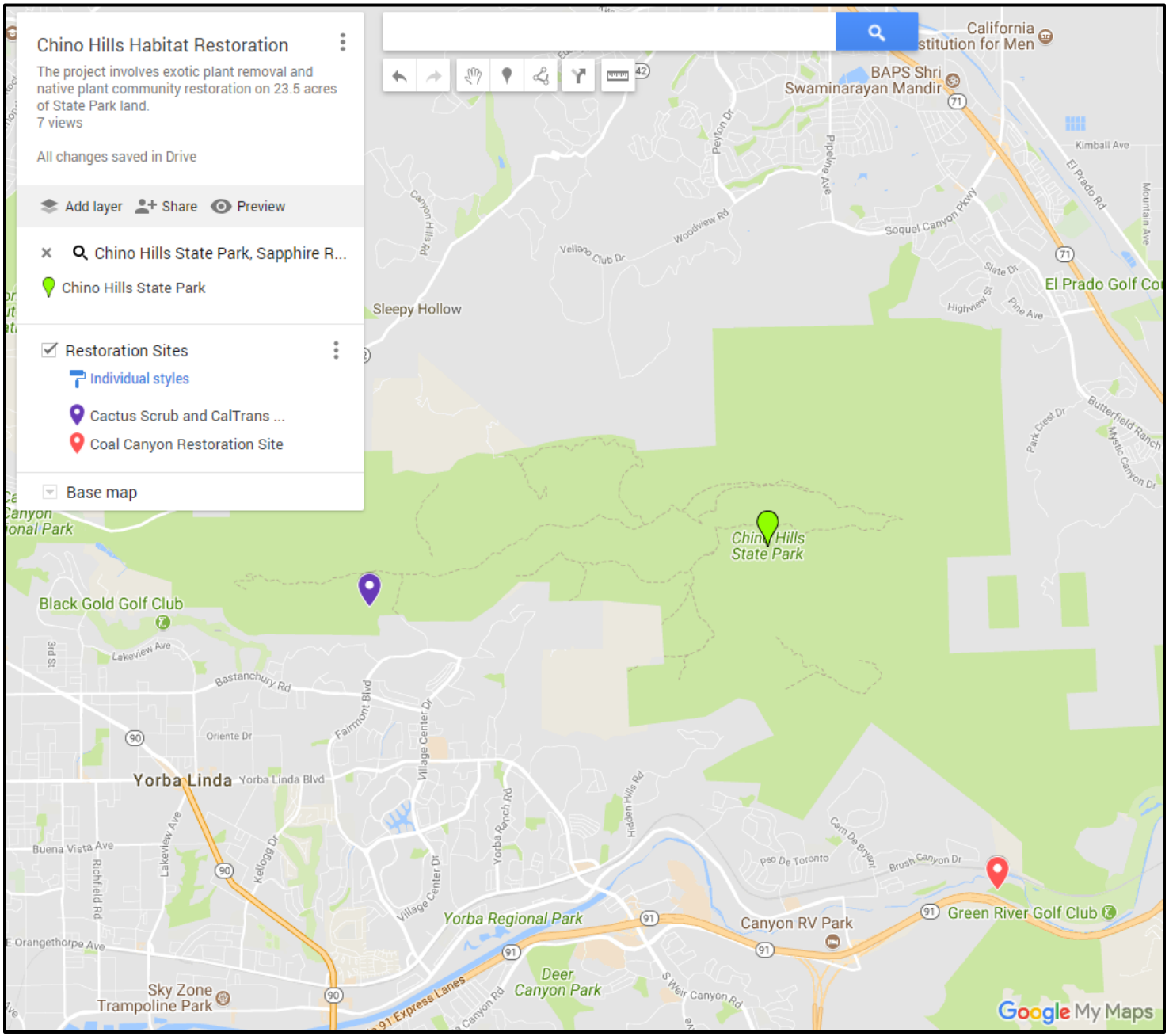
AIR QUALITY
MITIGATION MEASURES AIR-1

- Traffic speed on unpaved roads will be limited to 15 miles per hour (mph).
- Exposed stockpiles, if any, (dirt, sand, etc.) subject to wind erosion will be enclosed, covered, watered twice daily, or stabilized with (non-toxic) soil binders.
- 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.

BIOLOGICAL RESOURCES
MITIGATION MEASURES BIO-1

- ***Polioptila californica californica* (CA gnatcatcher):** In the region identified as coastal sage scrub (CSS), extensive devegetation will be kept to the minimum extent feasible. Construction activity will take place outside of *Polioptila californica californica* (CA gnatcatcher) breeding season (February 15 through August 30).
- **Raptor trees**: Eucalyptus removal will occur outside nesting season and should not impact any potentially nesting raptors. Surveys will be conducted by a State Park Environmental Scientist to identify any nesting occurrences. If raptors are nesting, those trees will be left in place until young have fledged. The area is closely associated with sycamore and cottonwood trees of the Santa Ana riparian, which provide alternate perching and nesting opportunities.

FIGURE 1: PROJECT LOCATION MAP



MITIGATION MEASURES BIO-2

- **Stream Channel and Adjacent Riparian**: Herbicide use will be kept to a minimum, involving localized and discrete application of a wetland-safe variety (e.g. Rodeo).

CULTURAL RESOURCES

MITIGATION MEASURES CULT-1

Not applicable.

GEOLOGY AND SOILS

MITIGATION MEASURES GEO-1

- Best Management Practices will be used in all areas to control soil and surface water runoff, such as re-contouring, placement of geotextiles or biodegradable reinforcement, and drainage and slope erosion control methods, as appropriate. Soil disturbance will be minimized during the rainy season, and temporary BMPs will employed, including such things as covering of any stockpiled soils, silt fences, straw bales, straw or rice wattles, and sediment detention basins to prevent soil loss and siltation into streams.

HAZARDS AND HAZARDOUS MATERIALS

MITIGATION MEASURES HAZMAT-1

- The contractor(s) will prepare an emergency spill response plan prior to the start of restoration and maintain a spill kit on site throughout the life of the project. This plan will include a map that delineates restoration staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical during restoration, in any physical form on or immediately adjacent to the park or on park property, the contractor will immediately notify the appropriate DPR staff (e.g., project manager or supervisor). Emergency containment procedures will be immediately initiated to prevent contamination of wetlands.
- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized location.
- A safety plan will be developed and reviewed by all project staff prior to the start of any work. Job site characteristics to reduce the potential for fire will be included.. Equipment operation will not occur during high fire danger warnings or advisories as determined by the National Weather Service and other State, National or Local agencies, (High Fire Danger Advisory; High Fire Danger Warning; Red Flag Conditions Advisory; Red Flag Conditions Warning), OR by park staff in the case when high winds and temperatures and low relative humidity exists on site and the aforementioned agencies have not declared the high risk level yet on the day and time of starting construction or maintenance activities that pose a safety risk.
- All equipment will have approved spark arrestors that comply with all Federal, State and local safety requirements.
- Vehicles and equipment will not drive off-road except for approved clearing of access and/or staging areas using mowing or vegetation clearing methods per the approved project plan, following all fire contingency guidelines stated herein. All vehicles must use existing cleared pull-outs for passing other vehicles, even if one vehicle must back to a pull-out. It is DPR's intent that vehicles not drive over natural vegetation, especially dry vegetation which could be ignited by a hot vehicle parts.

- Smoking on site will not be allowed by any personnel.
- Except during some winter and early spring conditions when the park vegetation may be saturated with ample moisture, all mowing activities should be conducted before 10:00 a.m. when the relative humidity is highest, unless otherwise authorized by the Park Superintendent, Environmental Scientist or Maintenance Chief.
- Except for normal patrol by vehicles on well maintained roads, all equipment operation will require separate, appropriately equipped fire spotter personnel who has been trained in the proper use of the equipment determined to best suit the circumstances to be present (see #7 for appropriate equipment descriptions). Their function is to watch for small sparks or fire starts during all equipment operation and immediately use their equipment to extinguish sparks or small fire starts should they occur. Fire spotters are dedicated to fire watch and do not perform additional duties on the project such as equipment operation. If a spark or small fire cannot be extinguished by the spotter immediately, evacuation procedures for all personnel will be ordered and the fire reported by calling 911 immediately. Any spark that starts a fire, no matter how small, will be reported to park staff within 24 hours.
- Fire extinguishing equipment should be used that is appropriate for conditions. For example, the use of water type extinguishers are preferable when in dry grassland surroundings because standard pressurized fire extinguishers can actually blow a small flame into a larger fire rapidly in light, dry fuels such as the grasslands prevalent in the park. A combination of regulation fire extinguishers with vehicles and water hogs or water trucks with hose and pumps and/or water backpack sprayers may be required.
- Under certain site and weather conditions, pre-wetting of vegetation may be required, such as when access routes to repair underground utilities must be mowed during semi dry or dry conditions.
- Under certain conditions, periodic pre-wetting of nearby vegetation and spark shields may be required for actions such as pipe cutting operations that may throw sparks.
- All contractors will submit an emergency action plan for their particular project that is specific to its location and needs that includes escape routes and evacuation procedures as well as implementation procedures and emergency contact information. Prior to commencement of the project, safety training will be conducted for all staff to insure familiarization with the plan and safety concerns. Regular safety meetings will be conducted throughout the duration of the project for review and to communicate project changes or new safety concerns. This will also insure that new personnel will receive the safety orientation whenever there are staff changes during the project.
- Under certain conditions, projects may be required to use “cold cutting” equipment instead of saws or torches that throw sparks

NOISE

MITIGATION MEASURES NOISE-1

- Restoration activities will be limited to daylight hours; alterations in this schedule will be made to address overriding restoration considerations or worker safety. No work will take place on weekends or holidays.
- Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for restoration will utilize the best available noise control techniques (e.g., engine

enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

- Stationary noise sources and staging areas will be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, stationary noise sources will be muffled to the extent feasible and/or, where practicable, enclosed within temporary sheds.

Questions or comments regarding this Initial Study/Mitigated Negative Declaration may be addressed to:

Ken Kietzer
Inland Empire District
California Department of Parks & Recreation
17801 Lake Perris Drive,
Perris, CA 92571
Phone: (951) 453-4250
Ken.Kietzer@parks.ca.gov

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.

INITIAL STUDY
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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

The Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed "Chino Hills Habitat Restoration" project at Chino Hills State Park (CHSP), Orange County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq*., and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq*. The project is being funded by Measure M2 funds from the Orange County Transportation Authority, with additional funding from Caltrans.

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

1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR. The contact person for the lead agency is:

Ken Kietzer
Inland Empire District
California Department of Parks & Recreation
17801 Lake Perris Drive,
Perris, CA 92571
Phone: (951) 453-4250
Ken.Kietzer@parks.ca.gov

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed Chino Hills Habitat Restoration Project at CHSP. Mitigation measures have also been incorporated into the project to eliminate any potentially significant impacts or reduce them to a less-than-significant level.

This document is organized as follows:

Chapter 1 - Introduction. This chapter provides an introduction to the project and describes the purpose and organization of this document.

Chapter 2 - Project Description. This chapter describes the reasons for the project, scope of the project, and project objectives.

Chapter 3 - Environmental Setting, Impacts, and Mitigation Measures. This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Mitigation measures are incorporated, where appropriate, to reduce potentially significant impacts to a less-than-significant level.

Chapter 4 - Mandatory Findings of Significance. This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the Initial Study.

Chapter 5 – Project Alternatives. This chapter summarizes the alternatives considered for the Chino Hills Habitat Restoration.

Chapter 6 - Summary of Mitigation Measures. This chapter summarizes the mitigation measures incorporated into the project as a result of the Initial Study.

Chapter 7 – References/Document Preparation. This chapter identifies the references and sources used in the preparation of this IS/MND. It also provides a list of those involved in the preparation of this document.

1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the Environmental (Initial Study) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project.

Based on the IS and supporting environmental analysis provided in this document, the proposed Chino Hills Habitat Restoration Project will result in less-than-significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, 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.

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

CHAPTER 2
PROJECT DESCRIPTION

2.1 INTRODUCTION

This IS/MND evaluates the environmental effects of the proposed Chino Hills Habitat Restoration Project. The project proposes to restore native vegetation on 18 acres adjacent to Easy Street Trail and 5.5 acres adjacent to Coal Canyon Road, in CHSP. This project will: improve the function of a major regional habitat linkage between CHSP and the Santa Ana Mountains and increase rare plant and animal habitat.

2.2 PROJECT LOCATION

CHSP is a designated unit of the State Park system. With approximately 14,000 acres, the park serves as an important biological conservation and recreation area. The Project is located at the southeastern corner of the park at State Route 91 and the decommissioned Coal Canyon off-ramp and near the park's Easy Street Trail. Coal Canyon lies east of Gypsum Canyon Road and west of Green River Road within Orange County. Easy Street Trail is north of Rim Crest Drive. The nearest city is Yorba Linda (Appendix A).

2.3 EXISTING FACILITIES AND NEED FOR THE PROJECT

State Park Facilities

There exists roughly 0.15 miles of trail on State Park land at the Coal Canyon project site. The Easy Street Trail project is adjacent to approximately 0.31 miles of South Ridge Trail. Coal Canyon is accessible to vehicles from State Parks and those organizations holding encumbrances associated with the area (Caltrans, Orange County Sanitation District, Southern California Edison, and American Tower Corporation). This trail is also accessible, via the Santa Ana River trail, to equestrians, hikers and mountain bikers. The Easy Street Trail restoration site is adjacent to South Ridge Trail which has encumbrances to various entities including Southern California Gas Company, Aera Energy, Southern California Edison, and is also accessible on Easy Street trail by equestrians, hikers, and mountain bikers.

Non-State Park Facilities

Non-State Park facilities are adjacent to and associated with the project area, and are closely tied to the need for the project, and therefore are worthy of mention here. They include:

Coal Canyon Project Site

- The County of Orange Santa Ana River Trail is immediately south of the project site

- State Route 91 runs along the length of the southern side of the project area, south of the Santa Ana River Trail. Caltrans Rights of Way is adjacent to the project area and Caltrans easements extend on to the project area footprint.
- The Coal Canyon underpass associated with State Route 91 connects State Park owned Coal Canyon watershed to the south of the SR 91 to the project area on the north. The existing freeway ramps associated with this underpass have been closed and gated by Caltrans and much of the asphalt has been removed in a step toward restoration. A single fenced lane with asphalt remains through the underpass to provide emergency vehicles, and other authorized vehicles the opportunity to use this as a turn around.

Easy Street Trail Project Site

- Blue Gum Drive to access Easy Street and S. Ridge Trails.

Need for Project

Biological Corridor: The Coal Canyon underpass is one of the only remaining viable habitat linkage between the Santa Ana Mountains and the Puente-Chino Hills. The underpass was restored in a prior project and this current project expands upon and improves the wildlife corridor benefits of the Coal Canyon corridor. Without continued habitat improvement and restoration of this critical linkage, as many as 21 vertebrate species are likely to be severely affected and possibly extirpated from the Puente Chino Hills. This project will provide much needed cover and native habitat near the Coal Canyon linkage that will improve the functionality of this connection for the majority of plants and animals of the region. Restoration of this biological corridor is likely to benefit coastal sage scrub and cactus scrub specialists of the Santa Ana Mountains, as this habitat is not common in the Santa Ana Mountains but prevalent in the Puente-Chino Hills. It will also facilitate the movement of large carnivores, the loss of which from the Puente-Chino Hills would likely result in an increase in medium sized predators, with potentially profound negative impacts on bird communities.

Re-vegetation and Exotic Plant Control: Coastal sage scrub and cactus scrub are recognized as rare plant communities through CA Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDB). These plant communities were historically present on this site but destroyed by previous land uses. The Federally Threatened California Gnatcatcher (*Polioptila californica californica*) depends upon these sage scrub habitats that have been greatly reduced throughout Southern California. This project will restore up to 23.5 acres of coastal sage scrub, cactus scrub, and Riversidian alluvial fan sage scrub habitat to benefit this declining animal. The site is currently dominated by exotic vegetation (primarily *Lepidium latifolium, Silybum marinum, Conium maculatum, Ricinus communis, Brassica nigra, Marrubium vulgare*, and *Eucalyptus spp*) that will be controlled as part of this project.

Aesthetics, Recreation and Interpretation: Currently, the project area is highly degraded and scarred from previous use. This project will improve the aesthetic value of

the area, which will improve the park visitors' experience as well as those driving on SR 91.

2.4 PROJECT OBJECTIVES

The purpose of this project is to increase the functionality of the biological corridor at Coal Canyon and sensitive habitat resources in the overall State Park. Project features will provide:

- Greater movement of wildlife through the biological corridor due to improved cover and native habitat on the north side of SR 91.
- Rare plant communities: coastal sage scrub, and cactus scrub.
- Endangered species habitat (*Polioptila californica californica*)
- Improved water quality for the Santa Ana River
- Increased native habitat diversity
- Improved aesthetic qualities

The proposed project, as outlined above, will further the Department's mission by:

- Preserving biological diversity through the restoration of high quality habitat and habitat connectivity.
- Improving the quality of life in California by protecting valuable natural resources, increasing the diversity and availability of high quality recreational experiences and opportunities.
- Providing and maintaining a supportive infrastructure for continued park use and maintenance, and the protection of park resources.

2.5 Project Description

DPR proposes to restore native vegetation on approximately 23.5 acres, 18 acres adjacent to Easy Street Trail and 5.5 acres adjacent to Coal Canyon, in CHSP (Figure 1 and Appendix A).

Priority 1: The main goals of this project are to increase the value of this area as a bio-corridor and to create quality coastal sage scrub and cactus scrub habitats.

Priority 2: Secondary priorities include those regions directly adjacent to priority 1 areas, tying them together in a cohesive restoration unit and linking them with the river corridor and adjacent areas being restored by other entities.

Priority 3: The final priority is to complete native plant community restoration throughout the remainder of the Project.

The following is a summary of the project:

2.5.1 Restoration of Plant Communities

Exotic vegetation removal - Up to but not exceeding 23.5 acres of exotic vegetation will be removed. We will utilize an integrated pest management approach utilizing a combination of exotic plant control techniques including (1) hand spraying of herbicide, (2) clear and grub and scrape, and (3) raking. Techniques will vary depending upon the location and exotic species within the site. Hand spraying of State-approved herbicides will be employed throughout the majority of the site. 'Round-up' (or a comparable herbicide) will be used on upland vegetation, and 'Rodeo' (or a comparable wetland-safe herbicide) will be used on exotic vegetation closer to riparian habitat or a watercourse and 'Garlon 4' (or comparable herbicide) may be applied to control woody species as necessary. Herbicide will be applied up to three times in a grow/kill treatment throughout the rainy season of 2018. In regions of the site where remnant native shrubs exist, exotic vegetation and thatch will be manually raked out and native plants preserved. Herbicide application shall be limited to the extent practical and shall be applied only by, or under the supervision of a State of California, Department of Pe sticide Regulation Qualified Pesticide Applicator licensee. Herbicide will be applied in accordance with all applicable laws and regulations. Best management practices, sited in Appendix C. will be employed to reduce the potential for application to non-target species. A person who has knowledge of, and can recognize California native plant species will oversee application of herbicide to assure avoidance of native species. Herbicide will only be applied during suitable weather conditions and as directed by the product label and Safety Data Sheets and Pest Control Recommendations for the project sites.

Re-vegetation of rare plant communities- Re-vegetation efforts will focus on the restoration of coastal sage scrub (CSS) and cactus scrub. Coastal sage scrub and cactus scrub are considered rare plant communities in the California Natural Diversity Database (CNDDB). Re-vegetation is likely to be accomplished with a combination of seeding and potted plants. All plant material will consist of genetic stock from locally derived sources. Species used, distribution, and cover will be based on State Park Environmental Scientist's vegetation surveys of the site and surrounding park land, including relevé surveys of CSS and Cactus Scrub conducted within representative high quality regions of these habitats within proximity of the Project.

2.5.2 Restoration of Stream Channel and Landform

Landform Work - The furthest extent of landform work required for this project will be 2ftx2ftx2ft hole for the container plants that will be promptly infilled.

2.5.3 Access Roads

All vehicular access to the roads on site is limited to authorized vehicles through locked gates at the decommissioned SR 91 'Coal Canyon' off-ramp.

Authorized vehicular traffic will also take place on the fire roads commonly known as Easy Street Trail and South Ridge Trail via Blue Gum Drive.

2.6 Project Restoration

The restoration window for this project will be from September 2018 to May 2023. All initial planting and re-vegetation activities are anticipated to take place from September 2018 to March 2019. Follow-up restoration maintenance will take place from April 2019 to May 2023, with activities and work windows subject to State Park Environmental Scientist's approval. Improvements will be limited to those areas that were disturbed in the past or are otherwise devoid of sensitive resources. All work will occur during daylight hours.

2.7 Attendance History

CHSP annual attendance for FY 16/17 was 405,371 up sharply from the late 1990's when is averaged around 200,000. The majority of Park visitors are currently concentrated in regions other than the Coal Canyon area but do frequent the Easy Street/ Southridge Trail Area.

2.8 Consistency with Local Plans and Policies

The project improves the quality of the biological resources for the region and increases recreational and environmental educational opportunities. This project is consistent with local plans and policies and the CHSP General Plan.

2.9 Discretionary Approvals

DPR has approval authority for the proposed "Chino Hills Habitat Restoration" project at CHSP. In addition, we have approvals by CA Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

2.10 Related Projects

Currently there is one restoration project under way on Scully Hill in Lower Aliso Canyon; this project is 16 acres of coastal sage scrub and is mitigation for Riverside County

Transportation Commission's, 91 Corridor Improvement Project. There is an additional habitat restoration project which is expected to begin implementation in 2018 at the mouth of Lower Aliso Canyon. This will be 22 acres of coastal sage scrub restoration which is mitigation for a Pulte Homes housing development.

CHAPTER 3
ENVIRONMENTAL SETTING

3.1 GENERAL ENVIRONMENTAL DESCRIPTION

Chino Hills State Park (CHSP) is a designated unit of the State Parks system and consists of approximately 14,000 acres. It is located in Orange, San Bernardino, and Riverside Counties.

3.1.1 Aesthetics

Aesthetics at CHSP are related to the natural and cultural features such as the plants, animals, waters, geologic features, buildings and archaeological sites. Natural quiet, solitude, space, scenery, a sense of history, sounds of nature, and clear night skies also contribute to the Park's aesthetics. The project site has the potential to positively contribute to the aesthetics of the area, however, the site is heavily disturbed due to previous land uses. Multiple roads, land scars, erosion and exotic vegetation dominate the viewshed. This restoration will increase the aesthetic quality of the area.

3.1.2 Agricultural Resources

Roughly 30 acres of citrus groves exist across the Santa Ana River to the Northwest. This is not a directly adjacent land use and the project will have no impact this agricultural resource. There are no other agricultural resources within or closely associated with the project site.

3.1.3 Air Quality

The project site is located in the South Coast Air Basin, as defined in the CA Almanac of Emissions and Air Quality. Air quality data for 2016 is provided at the South Coast Air Quality Management District website and is summarized in attachment # 1.

3.1.4 Biological Resources

Environmental Setting

The project site is located on the alluvial delta deposits of Coal Canyon at the confluence with the Santa Ana River and adjacent to Easy Street Trail where it meets Blue Gum Drive. Previous on-site land uses highly degraded the area. On-site vegetation may be classified as 'ruderal', consisting primarily of exotic grasses and shrubs, eucalyptus trees. A network of dirt roads and utilities exist. State Route 91 borders the site to the south and riparian and sage scrub associated with the Santa Ana River lie to the north, east, and

west. The Santa Ana River trail lies between the site and SR 91, contributing a high level of associated recreation.

SPECIAL STATUS SPECIES

Due to the highly disturbed and developed nature of the project site, none of the potential special status plant or wildlife species are expected to depend upon the project site to any significant degree.

Table 2.

TABLE LISTING SENSITIVE NATIVE SPECIES AND NATURAL COMMUNITIES WITH THE POTENTIAL TO OCCUR WITHIN CHINO HILLS STATE PARK

This list was compiled from the following: California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) July 2017; CDFW Special Animals List, Quarterly Publication; CDFW Special Vascular Plants, Bryophytes and Lichens List, Quarterly Publication; the most current CDFW List of Vegetation Alliances and Associations as of July 2017; and California State Parks records.

ANIMALS					
Species	**Fed.[1] Listing**	**State[1] Listing**	**Element Ranks[1]**	**Other Status[1]**	**Potential[2] Occurrence**
INVERTEBRATES - INSECTS					
Crotch bumble bee *Bombus crotchii*	---	---	G3G4 S1S2	IUCN: EN	Present, F
monarch butterfly- California overwintering population *Danaus plexippus*	---	---	G4T2T3 S2S3	USFS:S	Present, M, F (individuals only)
Quino checkerspot (butterfly) *Euphydryas editha quino*	FE	---	G5T1T2 S1S2	XERCES: CI	Low, H
FISHES					
arroyo chub *Gila orcuttii*	---	---	G2 S2	CDFW:SSC AFS:VU USFS:S	Present
Santa Ana sucker *Catostomus santaanae*	FT	---	G1 S1	AFS:TH IUCN:VU	Moderate
steelhead – southern California DPS[3]	FE	---	G5T1Q S1	CDFW:SSC AFS:EN	Low, H

Oncorhynchus mykiss irideus					
AMPHIBIANS					
arroyo toad *Anaxyrus californicus*	FE	---	G2G3 S2S3	CDFW:SSC IUCN:EN	Low, H
coast range newt *Taricha torosa*	---	---	G4 S4	CDFW:SSC	Low
western spadefoot (toad) *Spea hammondii*	---	---	G3 S3	CDFW:SSC IUCN:LC BLM:S	Present

[1] See **KEY TO FEDERAL AND STATE LISTINGS, ELEMENT RANKS AND OTHER STATUS CODES.**
[2] See **KEY TO POTENTIAL OCCURRENCE DESIGNATIONS.**
[3] DPS indicates Distinct Population Segment.

Species	Fed. Listing	State Listing	Element Ranks	Other Status	Potential Occurrence
REPTILES					
California glossy snake *Arizona elegans occidentalis*	---	---	G5T2 S2	CDFW:SSC	Moderate
California legless lizard *Anniella sp.*[4]	---	---	G3G4 S3S4	CDFW:SSC	Low
coastal whiptail (lizard) *Aspidoscelis tigris stejnegeri*	---	---	G5T5 S3	CDFW:SSC	Present
coast horned lizard *Phrynosoma blainvillii*	--- --- ---	--- --- ---	G3G4 S3S4	CDFW:SSC IUCN:LC BLM:S	Present
coast patch-nosed snake *Salvadora hexalepis virgultea*	---	---	G5T4 S2S3	CDFW:SSC	Present
orange-throated whiptail (lizard) *Aspidoscelis hyperythra*	---	---	G5 S2S3	CDFW:WL IUCN:LC USFS:S	Present
red-diamond rattlesnake *Crotalus ruber*	---	---	G4 S3	CDFW:SSC USFS:S	Present

San Bernardino ringneck snake *Diadophis punctatus modestus*	---	---	G5T2T3Q S2?	USFS:S	Present
San Diego banded gecko *Coleonyx variegatus abbotti*	---	---	G5T3T4 S1S2	CDFW:SSC	Moderate
south coast gartersnake *Thamnophis sirtalis* ssp.[5]	---	---	G5T1T2 S1S2	CDFW:SSC	Low
two-striped gartersnake *Thamnophis hammondii*	---	---	G4 S3S4	CDFW:SSC IUCN:LC USFS:S BLM:S	Low
western pond turtle Emys marmorata	---	---	G3G4 S3	CDFW:SSC IUCN:VU USFS:S BLM:S	Present
BIRDS					
American peregrine falcon *Falco peregrinus anatum*	D	D	G4T4 S3S4	CDFW:FP USFWS:BCC CDF:S	Low, M, W

[4] All legless lizards in California are now designated CDFW:SSC. CNDDB recognizes *Anniella* sp. currently after being split from 1 species into 5 and the new taxons are being evaluated further for SSC designations.

[5] CDFW recognizes coastal southern California occurrences of south coast gartersnake as a subspecies.

Species	Fed. Listing	State Listing	Element Ranks	Other Status	Potential Occurrence
bald eagle *Haliaeetus leucocephalus*	D	SE	G5 S3	CDFW:FP USFWS:BCC IUCN:LC USFS:S BLM:S CDF:S	Low, M
Bell's sage sparrow *Artemisiospiza belli belli*	---	---	G5T2T4 S3	CDFW:WL USFWS:BCC	Present
black-crowned night heron	---	---	G5 S4	IUCN:LC	High

Nycticorax nycticorax					
burrowing owl *Athene cunicularia*	---	---	G4 S3	CDFW:SSC USFWS:BCC IUCN:LC BLM:S	Low, H
California gull *Larus californicus*	---	---	G5 S4	CDFW:WL IUCN:LC	Moderate
California horned lark *Eremophila alpestris actia*	---	---	G5T4Q S4	CDFW:WL IUCN:LC	Present
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	---	---	G5T3Q S3	CDFW:SSC USFWS:BCC USFS:S	Present, N
coastal California gnatcatcher *Polioptila californica californica*	FT	---	G4G5T2 S2	CDFW:SSC NABCI:YWL	Present, N
Cooper's hawk *Accipiter cooperii*	---	---	G5 S4	CDFW:WL IUCN:LC	Present, N
Costa's hummingbird *Calypte costae*	---	---	G5 S4	USFWS:BCC IUCN:LC	Present, N
double-crested cormorant *Phalacrocorax auritus*	---	---	G5 S4	CDFW:WL IUCN:LC	Present
golden eagle *Aquila chrysaetos*	---	---	G5 S3	CDFW:FP CDFW:WL USFWS:BCC IUCN:LC CDF:S BLM:S	Present, F
grasshopper sparrow *Ammodramus savannarum*	---	---	G5 S3	CDFW:SSC IUCN:LC	Present, N
great blue heron *Ardea herodias*	---	---	G5 S4	IUCN:LC CDF:S	Present

Species	Fed. Listing	State Listing	Element Ranks	Other Status	Potential Occurrence
great egret *Ardea alba*	---	---	G5 S4	IUCN:LC CDF:S	Present

Lawrence's goldfinch *Spinus lawrencei*	---	---	G3G4 S3S4	USFWS:BCC IUCN:LC NABCI:YWL	Moderate
least Bell's vireo *Vireo bellii pusillus*	FE	SE	G5T2 S2	IUCN:NT NABCI:RWL	Present, N
Lewis' woodpecker *Melanerpes lewis*	---	---	G4 S4	USFWS:BCC IUCN:LC NABCI:YWL	Present, M,W
loggerhead shrike *Lanius ludovicianus*	---	---	G4 S4	CDFW:SSC USFWS:BCC IUCN:LC	Present, N
long-eared owl *Asio otus*	---	---	G5 S3?	CDFW:SSC IUCN:LC	Low
merlin *Falco columbarius*	---	---	G5 S3S4	CDFW:WL IUCN:LC	Present, M,W
northern harrier *Circus cyaneus*	---	---	G5 S3	CDFW:SSC IUCN:LC	Present
oak titmouse *Baeolophus inornatus*	---	---	G4 S4	USFWS:BCC IUCN:LC NABCI:YWL	Present
osprey *Pandion haliaetus*	---	---	G5 S4	CDFW:WL IUCN:LC CDF:S	Low, M
prairie falcon *Falco mexicanus*	---	---	G5 S4	CDFW:WL USFWS:BCC IUCN:LC	Low, M, W
rufous hummingbird *Selasphorus rufus*	---	---	G5 S1S2	USFWS:BCC IUCN:LC NABCI:YWL	High, M
sharp-shinned hawk *Accipiter striatus*	---	---	G5 S4	CDFW:WL IUCN:LC	Present, M,W
snowy egret	---	---	G5	IUCN:LC	Present

Egretta thula			S4		
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	---	---	G5T3 S3	CDFW:WL	Present, N

Species	Fed. Listing	State Listing	Element Ranks	Other Status	Potential Occurrence
southwestern willow flycatcher *Empidonax traillii extimus*	FE	SE	G5T2 S1	NABCI:RWL	Present, M
Swainson's hawk *Buteo swainsoni*	---	ST	G5 S3	USFWS:BCC IUCN:LC BLM:S	Low, M, H
tricolored blackbird *Agelaius tricolor*	---	SCE	G2G3 S1S2	CDFW:SSC USFWS:BCC IUCN:EN NABCI:RWL BLM:S	Low, M
Vaux's swift *Chaetura vauxi*	---	---	G5 S2S3	CDFW:SSC IUCN:LC	Low, M
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT	SE	G5T2T3 S1	USFWS:BCC NABCI:RWL USFS:S BLM:S	Low, H
white-faced ibis *Plegadis chihi*	---	---	G5 S3S4	CDFW:WL IUCN:LC	Present
white-tailed kite *Elanus leucurus*	---	---	G5 S3S4	CDFW:FP IUCN:LC BLM:S	Present
yellow-breasted chat *Icteria virens*	---	---	G5 S3	CDFW:SSC IUCN:LC	Present, N
yellow warbler *Setophaga petechia*	---	---	G5 S3S4	CDFW:SSC	Present, N

				USFWS:BCC	
MAMMALS					
American badger *Taxidea taxus*	---	---	G5 S3	CDFW:SSC IUCN:LC	Low, H
fringed myotis (bat) *Myotis thysanodes*	---	---	G4 S3	WBWG:H IUCN:LC USFS:S BLM:S	Low
hoary bat *Lasiurus cinereus*	---	---	G5 S4	WBWG:M IUCN:LC	Present
long-eared myotis (bat) *Myotis evotis*	---	---	G5 S3	WBWG:M IUCN:LC BLM:S	Moderate
long-legged myotis (bat) *Myotis volans*	---	---	G5 S3	WBWG:H IUCN:LC	Low
Species	**Fed. Listing**	**State Listing**	**Element Ranks**	**Other Status**	**Potential Occurrence**
northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	---	---	G5T3T4 S3S4	CDFW:SSC	Moderate
pallid bat *Antrozous pallidus*	---	---	G5 S3	CDFW:SSC WBWG:H IUCN:LC USFS:S BLM:S	Present
pocketed free-tailed bat *Nyctinomops femorosaccus*	---	---	G4 S3	CDFW:SSC WBWG:M IUCN:LC	Present
ringtail (aka: ring-tailed cat) *Bassariscus astutus*	---	---	G5 SNR	CDFW:FP IUCN:LC	Moderate
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	---	---	G5T3T4 S3S4	CDFW:SSC	Present
San Diego desert woodrat *Neotoma lepida intermedia*	---	---	G5T3T4 S3S4	CDFW:SSC	Present
spotted bat *Euderma maculatum*	---	---	G4 S3	CDFW:SSC WBWG:H IUCN:LC	Low

				BLM:S	
Townsend's big-eared bat *Corynorhinus townsendii*	---	---	G3G4 S2	CDFW:SSC WBWG:H IUCN:LC USFS:S BLM:S	Low
western yellow bat *Lasiurus xanthinus*	---	---	G5 S3	CDFW:SSC WBWG:H IUCN:LC	Low
western mastiff bat *Eumops perotis californicus*	---	---	G5T4 S3S4	CDFW:SSC WBWG:H BLM:S	Present
western red bat *Lasiurus blossevillii*	---	---	G5 S3	CDFW:SSC WBWG:H IUCN:LC	Present
western small-footed myotis (bat) *Myotis ciliolabrum*	---	---	G5 S3	WBWG:M IUCN:LC BLM:S	Moderate

Species	Fed. Listing	State Listing	Element Ranks	Other Status	Potential Occurrence
Yuma myotis (bat) *Myotis yumanensis*	---	---	G5 S4	WBWG:LM IUCN:LC BLM:S	Present
VASCULAR PLANTS, BRYOPHYTES AND LICHENS					
VASCULAR PLANTS					
Allen's pentachaeta *Pentachaeta aurea* ssp. *allenii*	---	---	G4T1 S1	CRPR:1B.1	Low
Brand's star phacelia *Phacelia stellaris*	---	---	G1 S1	CRPR:1B.1	Low
Braunton's milk-vetch *Astragalus brauntonii*	FE	---	G2 S2	CRPR:1B.1	Present
Brewer's calandrinia *Calandrinia breweri*	---	---	G4 S4	CRPR: 4.2	Moderate

California beardtongue *Penstemon californicus*	---	---	G3 S2	CRPR: 1B.2 USFS: S	Low
Catalina mariposa lily *Calochortus catalinae*	---	---	G4 S4	CRPR: 4.2	Present
chaparral nolina *Nolina cismontana*	---	---	G3 S3	CRPR: 1B.2 USFS: S	Present
chaparral sand-verbena *Abronia villosa* var. *aurita*	---	---	G5T2T3 S2	CRPR: 1B.1 USFS: S BLM: S	Low
Coulter's matilija poppy *Romneya coulteri*	---	---	G4 S4	CRPR: 4.2	Present
Coulter's saltbush *Atriplex coulteri*	---	---	G3 S1S2	CRPR: 1B.2	Low
Engelmann oak *Quercus engelmannii*	---	---	G3 S3	CRPR: 4.2	Low, H
Fish's milkwort *Polygala cornuta* var. *fishiae*	---	---	G5T4 S4	CRPR: 4.3	Present
heart-leaved pitcher sage *Lepechinia cardiophylla*	---	---	G3 S2S3	CRPR: 1B2 USFS: S	Moderate
Hubby's phacelia *Phacelia hubbyi*	---	---	G4 S4	CRPR: 4.2	Moderate
intermediate mariposa lily *Calochortus weedii* var. *intermedius*	---	---	G3G4T2 S2	CRPR: 1B.2 USFS: S	Present
intermediate monardella *Monardella hypoleuca* ssp. *intermedia*	---	---	G4T2? S2?	CRPR: 1B.3	Moderate

Species	Fed. Listing	State Listing	Element Ranks	Other Status	Potential Occurrence
Jokerst's monardella *Monardella australis* ssp. *jokerstii*	---	---	G4T1 S1	CRPR: 1B.1 USFS: S	Low, H
lucky morning-glory *Calystegia felix*	---	---	GHQ SH	CRPR: 3.1	Low, H
Malibu baccharis *Baccharis malibuensis*	---	---	G1 S1	CRPR: 1B.1	Low

many-stemmed dudleya *Dudleya multicaulis*	---	---	G2 S2	CRPR: 1B.2 USFS: S BLM: S	Present
mesa horkelia *Horkelia cuneate* var. *puberula*	---	---	G4T1 S1	CRPR: 1B.1 USFS: S	Low
ocellated Humboldt lily *Lilium humboldtii* ssp. *ocellatum*	---	---	G4T3 S3	CRPR: 4.2	Low
Palmer's grapplinghook *Harpagonella palmeri*	---	---	G4 S3	CRPR: 4.2	Moderate
paniculate tarplant *Deinandra paniculata*	---	---	G4 S4	CRPR: 4.2	Low, H
Plummer's mariposa lily *Calochortus plummerae*	---	---	G4 S4	CRPR: 4.2	Present
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	---	---	G5T3 S3	CRPR: 4.3	Low, H
Santa Ana River woollystar *Eriastrum densifolium* ssp. *sanctorum*	FE	SE	G4T1 S1	CRPR: 1B.1	Low, H
small-flowered microseris *Microseris douglasii* ssp. *platycarpha*	---	---	G4T4 S4	CRPR: 4.2	Moderate
small-flowered morning-glory *Convolvulus simulans*	---	---	G4 S4	CRPR: 4.2	Low, H
smooth tarplant *Centromadia pungens* ssp. *laevis*	---	---	G3G4T2 S2	CRPR: 1B.1	Low, H
southern California black walnut *Juglans californica*	---	---	G3 S3	CRPR: 4.2	Present

Species	Fed. Listing	State Listing	Element Ranks	Other Status	Potential Occurrence
Tecate cypress *Hesperocyparis forbesii*	---	---	G2 S2	CRPR: 1B.1 USFS: S BLM: S	Present

thread-leaved brodiaea *Brodiaea filifolia*	FT	SE	G2 S2	CRPR: 1B.1	Low
vernal barley *Hordeum intercedens*	---	---	G3G4 S3S4	CRPR: 3.2	Low
white rabbit-tobacco *Pseudognaphalum leucocephalum*	---	---	G4 S2	CRPR: 2B.2	Low
BRYOPHYTES AND LICHENS (No potential occurrences currently known)					
SPECIAL STATUS NATURAL COMMUNITIES					
AQUATIC [6]					
COMMUNITY	**Fed. Listing**	**State Listing**	**Element Ranks**	**Other Status**	**Potential Occurrence**
Southern California Arroyo Chub/Santa Ana Sucker Stream	---	---	---	SNR (Included in the CNDDB - vital for both fish species.) AFS lists both species as VU.	Present
Duckweed blooms- freshwater aquatic vegetation	---	---	G5 S4?	---	Present
TERRESTRIAL[6]					
bigberry manzanita chaparral	---	---	G4 S4	---	Present
California poppy fields	---	---	G4 S4	---	Present
California rose briar patches	---	---	G3 S3	---	Present
California sagebrush-black sage scrub	---	---	G4 S4	---	Present
California sagebrush-California buckwheat scrub	---	---	G4 S4	---	Present
California sycamore woodland	---	---	G3 S3	---	Present

California walnut woodland	---	---	G2 S2.1	---	Present
Community	**Fed. Listing**	**State Listing**	**Element Ranks**	**Other Status**	**Potential Occurrence**
Chamise chaparral	---	---	G4 S4	---	Present
coastal sage chaparral scrub	---	---	G3 S3.2	---	Present
coast prickly pear scrub	---	---	G4 S3	---	Present
Diegan coastal sage scrub	---	---	G3 S3.1	---	Present
giant wild rye grassland	---	---	G3 S3	---	Present
mulefat thickets	---	---	G5 S4	---	Present
poison oak scrub	---	---	G4 S4	---	Present
purple sage scrub	---	---	G4 S4	---	Present
Riversidian alluvial fan sage scrub	---	---	G1 S1.1	---	Present
scale broom scrub	---	---	G3 S3	---	Present
scrub oak-chamise chaparral	---	---	G4 S4	---	Present
southern coast live oak riparian forest	---	---	G4 S4	---	Present
southern cottonwood willow riparian forest	---	---	G3 S3.2	---	Present
southern interior cypress forest	---	---	G2 S2.1	---	Low[7]
southern mixed riparian forest	---	---	G2 S2.1	---	Present
southern riparian scrub	---	---	G3 S3.2	---	Present
southern sycamore alder riparian woodland (see Calif. sycamore woodland above)	---	---	G4 S4	---	?
southern willow scrub	---	---	G3 S2.1	---	Present
thick leaf yerba santa scrub	---	---	G3 S3	---	Present

[6] Natural Communities with G or S Ranks 1,2,3 or 4 are included in this list. (Rank 5 is not considered imperiled.)
[7] A few individual Tecate cypress trees are present within the park, too few currently to be classified as forest.

KEY TO FEDERAL AND STATE LISTINGS, ELEMENT RANKS AND OTHER STATUS CODES

The following table includes all status codes used by the California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) as of July, 2017. These designations are used to track the status of sensitive plant and animal species and sensitive natural communities in California.

FEDERAL AND STATE LISTING CODES The following designations are used for species listed as threatened or endangered per the Federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA).	
Designation	**Code**
Federally listed Endangered	FE
Federally listed Threatened	FT
Federally listed as a Candidate for listing (formerly Category 1 candidates)	FC
Federally Proposed Endangered	FPE
Federally Proposed Threatened	FPT
Federally Proposed for Delisting	FD
State listed Endangered	SE
State listed Threatened	ST
State listed Rare	SR
State Candidate for listing	SC
State Candidate for listing as Endangered	SCE
State Candidate for listing as Threatened	SCT
State Candidate for Delisting	SCD
Federal or State Delisted	D

OTHER STATUS CODES USED FOR ANIMALS	
Organization	**Abbreviation**
American Fisheries Society – Endangered	AFS: EN
American Fisheries Society – Threatened	AFS: TH
American Fisheries Society – Vulnerable	AFS: VU
Bureau of Land Management – Sensitive	BLM: S
California Department of Forestry and Fire Protection – Sensitive	CDF: S
California Department of Fish & Wildlife – Fully Protected	CDFW: FP
California Department of Fish & Wildlife – Species of Special Concern	CDFW: SSC
California Department of Fish & Wildlife – Watch List	CDFW: WL
IUCN (International Union for Conservation of Nature) - Critically Endangered	IUCN: CR

IUCN – Endangered	IUCN: EN
IUCN – Near Threatened	IUCN: NT

Organization	Abbreviation
IUCN – Vulnerable	IUCN: VU
IUCN – Least Concern – Species faces significant threats but is widespread and/or is too abundant to list as CR, EN, NT, or VU currently.	IUCN: LC
IUCN – Data Deficient	IUCN: DD
Marine Mammal Commission – Species of Special Concern	MMC: SSC
National Marine Fisheries Service – Species of Concern	NMFS: SC
North American Bird Conservation Initiative – Red Watch List	NABCI: RWL
North American Bird Conservation Initiative – Yellow Watch List	NABCI: YWL
U. S. Forest Service – Sensitive	USFS: S
U. S. Fish and Wildlife Service - Birds of Conservation Concern	USFWS: BCC
Western Bat Working Group – High Priority	WBWG: H
Western Bat Working Group – Medium-High Priority	WBWG: MH
Western Bat Working Group – Medium Priority	WBWG: M
Western Bat Working Group – Low-Medium Priority	WBWG: LM
Xerces Society (an invertebrate conservation NPO) – Critically Imperiled	XERCES: CI
Xerces Society – Imperiled	XERCES: IM
Xerces Society – Vulnerable	XERCES: VU
Xerces Society – Data Deficient	XERCES: DD

CALIFORNIA RARE PLANT RANKS – CRPR

These ranks were Developed by the California Native Plant Society (CNPS) and were formerly known as the CNPS lists.

Description	Rank
Plants presumed extinct in California and rare/extinct elsewhere	CRPR: 1A
Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California	CRPR: 1B.1
Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California	CRPR: 1B.2
Plants rare, threatened or endangered in California and elsewhere; not very threatened in California	CRPR: 1B.3
Plants presumed extirpated in California, but more common elsewhere	CRPR: 2A
Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California	CRPR: 2B.1
Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California	CRPR: 2B.2
Plants rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California	CRPR: 2B.3

Plants about which we need more information; seriously threatened in California	CRPR: 3.1
Plants about which we need more information; fairly threatened in California	CRPR: 3.2
Description	**Rank**
Plants about which we need more information; not very threatened in California	CRPR: 3.3
Plants of limited distribution; seriously threatened in California	CRPR: 4.1
Plants of limited distribution; fairly threatened in California	CRPR: 4.2
Plants of limited distribution; not very threatened in California	CRPR: 4.3
GLOBAL (G) AND STATE (S) ELEMENT RANKS (VALUE OF IMPERILMENT) FOR ANY SPECIES OR NATURAL COMMUNITY [8]	
Critically imperiled in its global range	G1
Imperiled in its global range	G2
Vulnerable in its global range	G3
Apparently secure in its global range	G4
Secure in its global range	G5
Presumed extinct or eliminated globally in its natural range with no likelihood of rediscovery	GX
Presumed extinct in the wild; exists in cultivation	GXC
Subspecies critically imperiled in its global range	T1
Subspecies imperiled in its global range	T2
Subspecies vulnerable in its global range	T3
Subspecies apparently secure in its global range	T4
Subspecies secure in its global range	T5
Critically imperiled in California	S1
Critically imperiled in California; serious threat rank (80% or more at risk)	S1.1
Critically imperiled in California; moderate threat rank (20-80% at risk)	S1.2
Critically imperiled in California; low threat rank (less than 20% at risk)	S1.3
Imperiled in California	S2
Imperiled in California; serious threat rank (80% or more at risk)	S2.1
Imperiled in California; moderate threat rank (20-80% at risk)	S2.2
Imperiled in California; low threat rank (less than 20% at risk)	S2.3
Vulnerable in California	S3
Vulnerable in California; serious threat rank (80% or more at risk)	S3.1
Vulnerable in California; moderate threat rank (20-80% at risk)	S3.2
Vulnerable in California; low threat rank (less than 20% at risk)	S3.3
Apparently secure in the state of California	S4
Secure in state of California	S5
Indicates less certainty for that rank	?
Possibly extinct or eliminated globally or in California; known only from historical records of occurrence, some hope of rediscovery	H

Species is rare but there are taxonomic questions about it	Q
Indicates species is not ranked in the state of California.	SNR

[8] Two G, S or T ranks together indicate a rank value that is between the two.

KEY TO POTENTIAL OCCURRENCE DESIGNATIONS

DEFINITION/EXPLANATION	DESIGNATION
Species or Natural Community has been observed recently within Chino Hills State Park (CHSP)	Present
Species or Natural Community has a high potential to occur within CHSP based on ample suitable habitat or appropriate physical conditions present and/or recent nearby occurrence records	High
Species or Natural Community has moderate potential to occur within CHSP based on moderate amounts of suitable habitat and/or appropriate physical conditions present and/or recent nearby occurrence records	Moderate
Species or Natural Community has low potential to occur within CHSP based on low amounts of suitable habitat and/or appropriate physical conditions present or other unfavorable factors are present, and few, if any, recent nearby occurrence records exist	Low
Species known to forage in CHSP	F
Species has been observed recently in CHSP during migration	M
Species has been recently documented to nest in CHSP	N
Species has potential to be a winter visitor in CHSP and vicinity	W
Species was historically documented within or near park boundaries, but there have been no verified occurrences for at least 20 years within CHSP	H
Designation of Species or Natural Community may be uncertain	?

Sensitive Natural Communities

Sensitive natural communities are those that are regionally uncommon, unusually diverse, or of special concern to local, state, and federal agencies. Elimination or substantial degradation of these communities would constitute a significant impact under CEQA. No sensitive natural communities are found at the project site.

Wetlands and Waters of the United States

This project does not involve or effect the wetlands and waters of the United States.

3.1.5 Cultural Resources

Ethnographic Setting

CHSP is located in the inland southern portion of the traditional Gabrielino territory, in close proximity to the Juaneño, Luiseño, Serrano, and Cahuilla groups. Kroeber (1925:620-621) describes Gabrielino territory as extending from the San Gabriel Mountains through Orange County south to Aliso Creek, and including Santa Catalina and San Clemente Islands. Bean and Smith (1978) include San Nicholas Island as well. Like the neighboring Luiseño, Juaneño, Cahuilla, and Serrano, the Gabrielino spoke a Uto-Aztecan Shoshonean language. Bordering the Shoshonean speaking groups to both the north and south were Hokan speaking peoples, the Chumashan above Malibu Creek and Yuman groups in San Diego County. This separation of Hokan speaking groups by Shoshonean speakers has been referred to as the "Shoshonean wedge" and was likely the result of a series of migrations of Shoshonean speakers into Southern California (Koerper 1983; Macko 1987).

For most of the year the Gabrielino occupied village sites in large domed circular structures thatched with tules or ferns. The villages were located near the coast or inland watercourses. The people traveled to various gathering sites within their territory as various resources became seasonally available. Kroeber (1925:649) names twenty varieties of seeds and six varieties of acorns used by the neighboring Luiseño. It is assumed that the Gabrielino exploited similar vegetable resources. Fish and shellfish were a primary source of protein in coastal areas; additionally, a variety of large and small terrestrial vertebrates was hunted with bow and arrow or trapped with nets.

The climate was undemanding, and clothing was simple. Men typically wore loincloths and women the double apron commonly found throughout California. All wore deerskin, fur, or bird skin capes when weather was poor. The Gabrielino manufactured steatite bowls and decorative items, stone mortars and pestles, manos, drills, knives, and projectile points. Bone was utilized to manufacture fishhooks, needles, and awls. Shell was made into fishhooks, beads and spoons. They also manufactured baskets, nets, and coiled paddle and anvil pottery (Barter 1983).

The Gabrielino participated in an extensive exchange network, providing them access to exotic resources such as obsidian, certain foods, and other commodities that were unavailable within their own territory. The most intensively used source of steatite in prehistoric California was within Gabrielino territory on Santa Catalina Island, and manufactured goods as well as raw materials were exchanged with other groups. Additionally, shell beads, dried fish, and sea otter furs were traded with inland peoples for deerskins, acorns, and seeds from the interior (Macko 1987).

Spanish colonization permanently and completely altered the cultures of the people inhabiting Southern California, removing them from their villages and incorporating them into the labor pool necessary to maintain the mission system (Barter 1983).

San Gabriel Mission baptism records suggest that four villages were located in the Santa Ana River basin, immediately adjacent to the Chino Hills. The people of these villages would likely have exploited the resources available in the present-day park (DPR 1999:31). Three pre-contact archaeological sites and numerous isolated

occurrences located within the park indicate that the area was used for hunting and gathering. Testing at SBr-3690 revealed an appreciable occupational deposit dating between 1070-2380 years before present, including dart points, milling stones, and charred animal bone (Macko and Weil 1989). Site SBr-5286 was also tested and determined to be a single-use campsite with no subsurface component (Alcorn 1986:14).

Native American Consultation

A copy of this document was sent to ten representatives listed by the Native American Heritage Commission (NAHC) as having ties to the project area on February 13, 2018. As of August 2018, there has been no response from any of these representatives. A similar restoration project in Coal Canyon ten years ago also received no response. Two bands on the NAHC list, the Pala Band of Mission Indians and Rincon Band of Mission Indians, have indicated on prior consultation that Chino Hills SP is not within their traditional use area and do not require consultation on projects in this area.

3.1.6 Geology/Soils

Topography

The Chino Hills are part of a group of hills that also includes the Puente Hills to the northwest. The Chino Hills and the Puente Hills form a roughly triangular area of approximately 35 square miles of valleys, canyons, hills, and steep slopes. The hills are bounded on the northwest by the San Gabriel Valley, on the northeast by the San Bernardino Valley, and on the south by the Santa Ana River Canyon and the Los Angeles Basin. The highest elevations in the park are San Juan Hill (1,781 feet) and Gilman Peak (1,865 feet). The lowest elevations occur along the Santa Ana River (430 feet).

Geology/Soils

The Chino Hills are made up of a thick sequence of middle to upper Miocene marine sedimentary rocks of the Puente Formation, deposited from five to fifteen million years ago. The Puente Formation has been divided into four members from oldest to most recent: the La Vida, Soquel, Yorba, and Sycamore Canyon members.

The hills are a result of uplift and folding along the Whittier fault zone and the Chino fault. Both the Whittier fault zone and the Chino fault may be branches of the Elsinore fault, which is a major structural feature of the Peninsular Ranges Geomorphic Province to the south. The state geologist classifies the Whittier fault zone as active. A branch of the Whittier fault cuts through the park in the vicinity of Telegraph and Carbon Canyons. Damage to structures or facilities could result from seismic shaking. Landslides could also be generated, especially if the slopes are saturated.

CHSP is located in Soil Region VII – Southern California. In this region, upland soils have clay or clay-loam surfaces, neutral to basic reacting, and often-calcareous subsoil. Alluvial soils are mostly sandy loam, light brown in color, and have neutral reactions. The Chino Hills area soils are primarily upland soils, formed in place with only minor occurrences of alluvial soils.

In CHSP, the Soil Conservation Service has mapped 39 soil units representing 20 soil series. These soils vary widely in depth, fertility, permeability, and other important characteristics. Two important characteristics of the soils in the park, which may affect potential land uses, are erosion hazard and shrink-swell potential.

The steepness of watershed lands, past land-use practices, and the rapid surface runoff create a high potential for erosion throughout CHSP. The park is riddled with a network of roads, fences, transmission easements, power lines, and gas lines. In some places livestock have created linear paths along steep fence lines, leading to development of gullies, loss of soil and vegetative resources, and potentially contributing to development of new landslides. The roads promote gullying, mass wasting, and loss of vegetative resources. Increased water runoff results from water concentration through culverts, removal of vegetation, and diversion from natural watercourses. Ditches, berms, and improperly constructed water bars also lead to erosion of the roads and adjacent lands in the park.

3.1.7 Hazards

CHSP has major geologic hazards and sensitivities. The Chino Hills are prone to frequent landslides. In fact, the area around and including the park has been identified as the most landslide-prone area in southwestern San Bernardino County. Even though many of the landslides occurred long ago by human standards, they must still be considered as areas of instability, because the landslide deposits are generally perched precariously on hill-slopes, awaiting only the proper climatic, hydrologic, and perhaps seismic conditions to become activated.

3.1.8 Hydrology and Water Quality

The Chino Hills are part of the divide between the Los Angeles and Santa Ana Hydrologic Basins. Most of CHSP is in the Carbon Canyon and Aliso Canyon watersheds. Bane Canyon and Water Canyon are part of the Aliso Canyon watershed and are completely within the park, as is 87 percent of Aliso Canyon. The Carbon Canyon Watershed includes Carbon Canyon, Soquel Canyon, Sonome Canyon, and Telegraph Canyon. Coal Canyon is also a significant watershed within the Park. It is relatively undeveloped and encompasses roughly 2 square miles.

All of the park's watersheds drain to the Santa Ana River and portions of the project site may be flooded when this river reaches extremely high levels. The U.S. Army Corps of

Engineers is currently working on a project with Orange County Flood to increase the bank armoring in the vicinity of the project.

The construction of State Route 91 involved the diversion of the ephemeral flows of Coal Canyon through a box culvert system underneath the freeway. The box culvert outflow has resulted in an incised creek channel on State Park property which flows directly into the Santa Ana River. This situation has altered the natural meander and habitat-diversifying processes of the creek, and increases sediment discharge into the Santa Ana River.

3.1.9 Land Use & Planning

The site is part of Chino Hills State Park and is contiguous with land designated as "Core Habitat Zone" in the General Plan. (1999). Existing land use in CHSP includes protection of biological and cultural resources, recreation, interpretation, and maintenance use.

3.1.10 Minerals

Petroleum and associated gas have been extracted from oil fields in the region since the late 1800s. In 1885 the first commercial production of oil in the Los Angeles Basin was at the old Puente oil field west of the park. Although numerous oil wells have been drilled in the Chino Hills, there is no record of commercial production in the park.

3.1.11 Noise

The Project site is directly adjacent to State Route 91, which is the primary contributor of noise at this region. The Rail Road line managed by Burlington Northern and Santa Fe Rail Road Company lies just across the Santa Ana River and also contributes significant amounts of noise to the project site.

3.1.12 Population and Housing

The closest community to the project site, the City of Yorba Linda, has a total population of 68,235 consisting of 14.4% Hispanic, 65.7% white, 1.3% African American, 0.4%, 15.6% Asian, and 4% Mixed race. However the project area lies in close proximity to the Greater Orange County Metropolitan Area, which has a population base of 3,172,532, consisting of 41% white, 34.3% Hispanic, 2.1% African American, 1.1% American Indian, 20.4% Asian, and 3.4% mixed race. The area surrounding the project site has a low population density residing in primarily single-family households. (US Census-2016)

3.1.13 Public Services

DPR rangers with support from allied state, county and local police departments provide law enforcement for the Chino Hills SP. Cal Fire, Orange County Fire Authority and other local agencies provide fire protection and ambulance services.

3.1.14 Recreation

The proximity of its natural open space to urban populations and extensive trail network make CHSP a popular and valuable recreational resource. Visitors enjoy both active and passive forms of recreation that focus primarily on trail use. People frequently visit the park from adjacent communities to walk, jog, bike, or ride horses. The park is also a popular spot for family and equestrian campers, as well as picnickers. The Santa Ana River Trail directly adjoins the southern border of the project site, providing a high level of recreational use through the area.

3.1.15 Transportation/Traffic

The Chino Hills Habitat Restoration is accessible via SR 91. The exiting off-ramps have been closed and gated by Caltrans and much of the asphalt has been removed. A single fenced lane with asphalt remains through the underpass to provide emergency vehicles the opportunity to use this as a turn-around.

All vehicular access to the roads on site is limited to authorized vehicles through locked gates at the decommissioned SR 91 'Coal Canyon' off-ramp. Access to the site for construction and monitoring will primarily be through the unpaved portion of the under-crossing. Ingress will be through the western locked gate on the south side of SR 91 and egress through the eastern locked gate on the south side of SR 91. A primitive road currently exists along the south perimeter of State Park property and provides access to a cell phone tower on the western corner of the site. The roads mentioned above will be open to non-motorized recreational use.

Other various primitive roads cut through the site from South to North. Authorized vehicular traffic will also take place on the fire roads commonly known as Easy Street Trail and South Ridge Trail via Blue Gum Drive.

3.1.16 UTILITIES

Sewer

The SARI (Santa Ana River Interceptor) line brings saline water from various sources in the Inland Empire to Fountain Valley treatment plants, and then out to the Pacific Ocean. This line runs along the northern edge of the site and includes two access manholes. This line is managed primarily by Orange County Sanitation District in this area.

WATER
Water will be provided by the Yorba Linda Water District via a temporary construction water meter.

Electric
A Southern California Edison easement exists adjacent to the Santa Ana River Trail (SART) and two other electric line easements travel north and south at two locations between the SART and the river. There are other Edison easements through the main part of the park as well however they are not in close proximity to the project site.

Telephone
Closely associated with the site on the Caltrans property, running along the SART, exists fiber optic and phone trunk lines.

Sempra Energy/ Southern Cal Gas
Sempra Energy/ Southern California Gas has an easement for a high pressure gas line which runs through the park and parallel to South Ridge Trail adjacent to part of the project area. The project will not take place within the Gas Company easement.

3.1.17 Easements and Adjacent Land Owners

The Coal Canyon project site is surrounded by property owned by the County of Orange including the Santa Ana River Trail to the south, the Green River Golf Course to the east, and land on the north and west. Featherly Regional Park is 4 miles away and Canyon RV Park is one mile away. The Easy Street Trail project site is adjacent to single family residences to the south. Aera Energy owns a two acre in-holding immediately west and adjacent to the project site. An open space parcel owned by Orange County Transportation Authority is approximately one mile north of the Easy Street Trail project site. A privately-owned, undeveloped parcel is located approximately one mile east of the Easy Street Trail project site.

Easements
An easement to Southern California Edison, Orange County Sanitation District, and American Tower Corporation runs along the southern border of the Coal Canyon project site and encompasses the existing dirt road.

Orange County Flood
Orange County Flood is seeking a flood easement across the Coal Canyon property to accommodate occasional high-flow events of the Santa Ana River. The flooding activity associated with this easement is not thought to be inconsistent with the natural processes of the site. However, the effect that this potential flooding may have on un-established re-vegetation areas and State Park patrol roads must be assessed.

Santa Ana Watershed Project Authority and Orange County Sanitation
There is an easement associated with the brineline that runs along the northern edge of the Coal Canyon project site. The restoration activities are designed to protect access and function of the brineline.

County of Orange
The County of Orange manages the Santa Ana River Trail that runs along the southern border of the Coal Canyon project site. This agency owns the land that borders the site to the north (riparian corridor and Santa Ana River.

Rail Road
North of the Santa Ana River lies the rail road line managed by Burlington Northern and Santa Fe Rail Road Company. Metro link and Amtrak also utilize this rail.

3.2 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION	
1. Project Title:	Chino Hills Habitat Restoration
2. Lead Agency Name & Address:	California Department of Parks and Recreation
3. Contact Person & Phone Number:	Ken Kietzer, (951) 453-4250
4. Project Location:	Chino Hills State Park (CHSP)
5. Project Sponsor Name & Address:	Inland Empire District California Department of Parks & Recreation 17801 Lake Perris Drive, Perris, CA 92571
6. General Plan Designation:	State Park
7. Zoning:	Park Land/Open Space
8. Description of Project:	
Ecological Restoration. • Restoration of plant communities • Restoration of stream channel and landforms • Interpretive elements	
9. Surrounding Land Uses & Setting:	Refer to Section IX, Land Use Planning in this chapter.
10. Approval Required from Other Public Agencies	None

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will 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	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	☒ None

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 original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. 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** or its functional equivalent will be prepared. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents. ☐

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required. ☐



__ _____12/14/2017_____

Ken Kietzer Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, restoration, and operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.

4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:

a) Identify the earlier analysis and state where it is available for review.

b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.

c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.

6. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist or appendix (e.g., general plans, zoning ordinances, biological assessments). Reference to a previously prepared or outside document should include an indication of the page or pages where the statement is substantiated.

7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.

8. Explanation(s) of each issue should identify:

a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question **and**
b) the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

3.2.1 ENVIRONMENTAL ANALYSIS

The Environmental Analysis (Initial Study) Checklist was prepared to assess the impact of the proposed project's impact on the environment. The environmental setting for each topic is described in Section 3.1 above. Potential environmental impacts, identified by checklist point, are addressed in the discussion section. For each impact identified as "less than significant with mitigation," mitigation measures have been specified to reduce the impact to a less than significant level.

I. AESTHETICS

WILL THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	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?	☐	☐	☐	☒
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 will adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

(a-d) Although the site disturbance during restoration may be regarded as a detriment to aesthetics, it is not considered an impact due to short window in which the site will be disturbed before the native plants start to recover. All restoration will take place within daylight hours. No Impact.

II. AGRICULTURAL RESOURCES

WILL THE PROJECT*:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in	☐	☐	☐	☒

conversion of Farmland to non-agricultural use?

*In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

DISCUSSION

a-c) CHSP is not zoned for agriculture. Roughly 30 acres of citrus groves exist across the Santa Ana River to the Northwest. This in not a directly adjacent land use and the project will have no impact this agricultural resource. This project contains no component that will have an effect on any category of California Farmland, conflict with any existing zoning for agricultural use or Williamson Act contract, or interfere with the use or result in the conversion of agricultural land to a non-agricultural use. No impact.

III. AIR QUALITY

WILL THE PROJECT*:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Conflict with or obstruct implementation of the applicable air quality plan or regulation?	☐	☐	☐	☒
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 in 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.g., children, the elderly, individuals with compromised respiratory or immune systems)?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

*Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations.

DISCUSSION

a) Work proposed with this project is not in conflict with and will not obstruct implementation of any applicable air quality plan. No impact.

MITIGATION MEASURE AQ-1

- Traffic speed on unpaved roads will be limited to 15 miles per hour (mph).
- Exposed stockpiles, if any, (dirt, sand, etc.) subject to wind erosion will be enclosed, covered, watered twice daily, or stabilized with (non-toxic) soil binders.
- 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.

e) The proposed work will not result in the long-term generation of odors. Also, part of the project site is located just adjacent to SR 91, which is a much more significant source of related odors. Potential odor impacts will be considered less than significant.

IV. BIOLOGICAL RESOURCES

Would the project:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the 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, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands, as defined by §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?	☐	☐	☐	☒

MITIGATION MEASURE BIO-1

- ***Polioptila californica californica* (CA gnatcatcher):** In the region identified as coastal sage scrub (css), extensive exotic de-vegetation will be kept to the minimum extent feasible. Construction activity will take place outside of *Polioptila californica californica* (CA gnatcatcher) breeding season (February 15 through August 30).
- **Raptor trees**: Eucalyptus removal will occur outside of the nesting season and should not impact any potentially nesting raptors. Surveys will be conducted by a State Park Environmental Scientist to identify any nesting occurrences. If Raptors are nesting, those trees will be left in place until young have fledged. The area is closely associated with sycamore and cottonwood trees of the Santa Ana riparian, which provide alternate perching and nesting opportunities.

a) No sensitive plant communities are present on site. Riparian habitat occurs adjacent to the north but will not be negatively impacted during restoration. Less than significant impact.

MITIGATION MEASURE BIO-2
• **Stream Channel and Adjacent Riparian**: Herbicide use will be kept to a minimum, involving localized and discrete application of a wetland-safe variety (e.g. Rodeo).

b) The proposed project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service. No impact.

c) The proposed project will not conflict with federally protected wetlands. No impact.

d) No impact.

e) The proposed project does not conflict with any HCP, NCCP, or any other local, regional, or state habitat conservation Plan. No impact.

f) No impact.

V. CULTURAL RESOURCES

WILL THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

DISCUSSION

The proposed project is not anticipated to have any impact upon archaeological resources. A records search conducted January 14, 2004 at the South Central Coastal Information Center identified seven previous studies of the general project area; none identified any cultural resources within the area of potential effect for the present project. Similarly, the Associate State Archaeologist has examined the proposed restoration area and did not identify any resources. Due to the disturbance of the area by previous development, as well as its location within the floodplains of Coal Creek and the Santa Ana River, discoveries of cultural resources are not anticipated. No impact.

VI. GEOLOGY AND SOILS

WILL THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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 will 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 (1997), creating substantial risks to life or properties?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems, where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☐	☒

DISCUSSION

A As noted in the Environmental Setting in Section 3.1, the project locations lie within a seismically active region subject to the effects of moderate to large earthquake events along major faults, as defined by the State of California Department of Conservation, California Geological Survey (formerly known as the Division of Mines and Geology). However the proposed project does not increase the potential exposure of people or structures to adverse effects. No impact.

MITIGATION MEASURE GEO-1 EROSION

- Best Management Practices will be used in all areas to control soil and surface water runoff, such as re-contouring, placement of geotextiles or biodegradable reinforcement, and drainage and slope erosion control methods, as appropriate. Soil disturbance will be minimized during the rainy season, and temporary BMPs will employed, including such things as covering of any stockpiled soils, silt fences, straw bales, straw or rice wattles, and sediment detention basins to prevent soil loss and siltation into streams.

c) The site is flat and lies on granitic alluvium. The site is generally considered to be stable and there are no areas immediately adjacent to the project with the potential for lateral spreading, subsidence, or collapse. The level of liquefaction hazards at the proposed facility locations would be low to moderate. Impacts will be less than significant.

d) The soils are not considered to be expansive in the vicinity of the project as defined in Table 18- 1-B of the Uniform Building Code (1997). No impact.

e) No impact.

g) There are no known unique paleontological resource or site or unique geologic features within the proposed project areas. No impact.

GREENHOUSE GAS EMISSIONS

Environmental Setting

Greenhouse gas emissions shall occur from the operation of construction equipment within the Proposed Project's footprint. These emissions would be temporary and amounts would be based on the equipment used and duration of use. There will not be any emissions from the project after installation. The plants installed will provide a small benefit to reducing overall greenhouse gases.

Environmental Impact Evaluation

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

Discussion

a) Construction equipment would create a short-term release of additional GHGs during the construction phase of the Proposed Project. These additional emissions shall be minimal and result in less than significant impacts.

b) CDPR is aware of the need to reduce the emissions of greenhouse gases. However, no specific CDPR policy currently exists for the reduction of emissions. The Proposed Project would not create any significant source of greenhouse gases and as such would result in less than significant impact.

VII. HAZARDS AND HAZARDOUS MATERIALS.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL 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/or accident conditions involving the release of hazardous materials, substances, or waste 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 §65962.5, and, as a result, create a significant hazard to the public or environment?	☐	☐	☐	☒
e) Be 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? If so, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Be located in the vicinity of a private airstrip? If so, will 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 from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

DISCUSSION

a) Project activities will require the use of certain potentially hazardous materials, such as fuels, oils, and solvents. These materials are generally used for motorized equipment such as weed whips and chain saws, and will be contained within vessels engineered for safe storage. Large quantities of these materials will not be stored at the restoration site. Spills, leaks, or other restoration-related accidents could result in a release of fuel or other hazardous substances into the environment.

MITIGATION MEASURE HAZMAT-1 SPILLS

- The contractor(s) will prepare an emergency spill response plan prior to the start of restoration and maintain a spill kit on site throughout the life of the project. This plan will include a map that delineates restoration staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical during restoration, in any physical form on or immediately adjacent to park property, the contractor will immediately notify the appropriate DPR staff (e.g., project manager or supervisor). Emergency containment procedures will be immediately initiated to prevent contamination of the area.
- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized location.
- A safety plan will be developed and reviewed by all project staff prior to the start of any work. Job site characteristics to reduce the potential for fire will be included.. Equipment operation will not occur during high fire danger warnings or advisories as determined by the National Weather Service and other State, National or Local agencies, (High Fire Danger Advisory; High Fire Danger Warning; Red Flag Conditions Advisory; Red Flag Conditions Warning), OR by park staff in the case when high winds and temperatures and low relative humidity exists on site and the aforementioned agencies have not declared the high risk level yet on the day and time of starting construction or maintenance activities that pose a safety risk.
- All equipment will have approved spark arrestors that comply with all Federal, State and local safety requirements.
- Vehicles and equipment will not drive off-road except for approved clearing of access and/or staging areas using mowing or vegetation clearing methods per the approved project plan, following all fire contingency guidelines stated herein. All vehicles must use existing cleared pull-outs for passing other vehicles, even if one vehicle must back to a pull-out. It is DPR's intent that vehicles not drive over natural vegetation, especially dry vegetation which could be ignited by a hot vehicle parts.
- Smoking on site will not be allowed by any personnel.
- Except during some winter and early spring conditions when the park vegetation may be saturated with ample moisture, all mowing activities should be conducted before 10:00 a.m. when the relative humidity is highest, unless otherwise authorized by the Park Superintendent, Environmental Scientist or Maintenance Chief.
- Except for normal patrol by vehicles on well-maintained roads, all equipment operation will require separate, appropriately equipped fire spotter personnel who has been trained in the proper use of the equipment determined to best suit the circumstances to be present (see #7 for appropriate equipment descriptions). Their function is to watch for small sparks or fire starts during all equipment operation and immediately use their equipment to extinguish sparks or small fire starts should they occur. Fire spotters are dedicated to fire watch and do not perform additional duties on the project such as equipment operation. If a spark or small fire cannot be extinguished by the spotter immediately, evacuation procedures for all personnel will be ordered and the fire reported by calling 911 immediately. Any spark that starts a fire, no matter how small, will be reported to park staff within 24 hours.

- Fire extinguishing equipment should be used that is appropriate for conditions. For example, the use of water type extinguishers are preferable when in dry grassland surroundings because standard pressurized fire extinguishers can actually blow a small flame into a larger fire rapidly in light, dry fuels such as the grasslands prevalent in the park. A combination of regulation fire extinguishers with vehicles and water hogs or water trucks with hose and pumps and/or water backpack sprayers may be required.
- Under certain site and weather conditions, pre-wetting of vegetation may be required, such as when access routes to repair underground utilities must be mowed during semi dry or dry conditions.
- Under certain conditions, periodic pre-wetting of nearby vegetation and spark shields may be required for actions such as pipe cutting operations that may throw sparks.
- All contractors will submit an emergency action plan for their particular project that is specific to its location and needs that includes escape routes and evacuation procedures as well as implementation procedures and emergency contact information. Prior to commencement of the project, safety training will be conducted for all staff to insure familiarization with the plan and safety concerns. Regular safety meetings will be conducted throughout the duration of the project for review and to communicate project changes or new safety concerns. This will also insure that new personnel will receive the safety orientation whenever there are staff changes during the project.
- Under certain conditions, projects may be required to use “cold cutting” equipment instead of saws or torches that throw sparks

b) See the VII (a) discussion above. Mitigation Measure **HAZMAT-1** will reduce the potential for adverse impacts to a less than significant level.

c) There are no schools or proposed schools within one-quarter mile of the project site. Therefore, this section does not apply to this project. No impact.

d) The Chino Hills SP is not included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5. Therefore, no impact will occur with project development. However, the contamination hazards addressed above are addressed here:

e,f) CHSP is not located within a private airport land-use plan, or within two miles of a public airport or public-use airport. Therefore, no impact will occur as a result of this project.

g) All restoration activities associated with the project will occur within the boundaries of CHSP and work will not restrict access to or block any public road. Therefore, the impact of this project on an emergency response or evacuation plan will be less than significant.

h) The project will not add any new uses that could create additional long-term or permanent increased fire risks non-native grasslands. No impact.

VIII. HYDROLOGY AND WATER QUALITY

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there will 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 will drop to a level that will 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 alteration of the course of a stream or river, in a manner which will result in substantial on- or off-site erosion or siltation?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in on- or off-site flooding?	☐	☐	☐	☒
e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted	☐	☐	☒	☐
f) 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 structures that will impede or redirect flood flows within a 100-year flood hazard area?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam?	☐	☐	☐	☒
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

DISCUSSION

a) The CHSP is within the jurisdiction of the Santa Ana Regional Water Quality Control District (SARWQCD). The project will be in compliance with all applicable water quality standards and waste discharge requirements. (See Mitigation Measure HAZMAT 1 regarding potential impacts from accidents, spills, or upset.) Ground disturbance will be minimal, further lessening the chance of any impact to surface water quality. The project scope does not

include waste discharge work of any kind and will not increase or alter existing conditions. Project location, design, in combination with the mitigation measures indicated above for accidental hazardous material exposure and use of BMPs, will control soil erosion and surface water runoff and insure no water quality standards are violated. Also see discussion and mitigation 'Biological Resources part C' above. This will result in a less than significant impact to water quality and waste discharge.

b) There will be no impact to water supplies.

c) No impact.

d) See 'Biological Resources (C)' discussion above. This project will minimally alter surficial drainage in a manner that will positive ecological and environmental benefits to the drainage patterns in the area. Less than significant impact

e) See VIII (c) discussion above. This project will not exceed the capacity of the existing drainage system and will not introduce polluted runoff into the existing system. Less than significant impact.

f) The project will result in improved water quality. Less than significant impact.

g) No housing included in this project. No impact.

h) No impact.

i) No impact.

j) The project is located far from the coast and would not likely be affected by seiche or tsunamis. The project will not change the likelihood of either of these events. No impact.

IX. LAND USE AND PLANNING

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a 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?	☐	☐	☐	☒

DISCUSSION

a) The project will not divide an established community because there are none existing within the boundaries of CHSP. No impact.

b) This project is consistent with all applicable state and local land use plans, policies, and regulations. With certification of this Mitigated Negative Declaration, the project will be in compliance with CEQA. No impact.

c) The project is not in conflict with any habitat or community conservation plans.

X. MINERAL RESOURCES

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
a) Result in the loss of availability of a known mineral resource that is or will 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?	☐	☐	☐	☒

DISCUSSION

a) No easily retrieved mineral resources of local or regional importance have been identified within project boundaries by the Mineral Land Classification Program (administered by the California Department of Mines and Geology). (Refer to Section 3.1.10). Therefore, no loss of mineral resources will occur as a result of the proposed project. No impact.

b) The project site has not been classified or nominated as a locally important mineral resource recovery site. No impact.

XI. NOISE.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☒	☐	☐
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	☐	☐	☐	☒
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	☐	☐	☐	☒
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project?	☐	☐	☒	☐
e) Be 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? If so, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) Be in the vicinity of a private airstrip? If so, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a) The project is directly adjacent to SR 91 and just across the Santa Ana River from the Burlington Northern and Santa Fe Rail Line, two sources of excessive noise. Project noise levels at and near the project area will fluctuate, depending on the type and number of construction vehicles operating at any given time. There are no noise-sensitive land uses located in the vicinity of the project site that will be substantially affected by the proposed restoration-related activities. However, short-term increases in ambient noise levels could result in a potential increase in annoyance to passers by and those who may be recreating in the general vicinity of the project. As a result, construction-generated noise will be considered to have a potentially significant short-term impact to nearby noise-sensitive receptors (e.g., passers by). Implementation of the following mitigation measures will reduce those potential impacts to a less than significant level.

Mitigation Measure Noise 1
• Restoration activities will be limited to daylight hours; alterations in this schedule will be made to address overriding project considerations or worker safety. No work will take place on weekends or holidays. • Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for restoration will utilize the best available noise control techniques (e.g.,

engine enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.

- Stationary noise sources and staging areas will be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, stationary noise sources will be muffled to the extent feasible and/or, where practicable, enclosed within temporary sheds.

b) No impact.

c) Once the proposed project is completed, all related construction noise will disappear. Nothing within the scope of the proposed project will result in a substantial permanent increase in ambient noise levels.

d) See XI (a) discussion above. Mitigated to a less than significant impact.

e,f) The project area is not located within an private airport land-use plan, or within two miles of a public airport or public-use airport. Therefore, no impact will occur as a result of this project.

XII. POPULATION AND HOUSING

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL 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?	☐	☐	☐	☒

DISCUSSION

a) Work proposed by this project is designed primarily to meet the needs of State Park employees to provide public services. The project will not have a housing component and all work will take place within the confines of the park boundaries, with no additions or changes to the existing local infrastructure. Therefore, it will have no impact on population growth in the area.

b) As noted in the XII (a) discussion above, the project will have no housing component and will neither modify nor displace any existing housing. No impact.

c) As noted in the XII (a) discussion above, the project will have no housing component and will displace no one, either temporarily or permanently. No impact.

XIII. PUBLIC SERVICES

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, 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?	☐	☐	☐	☒

DISCUSSION

a) There will be no need to create or alter any government facilities with implementation of this project. Alterations to the area as a result of the proposed project will be designed to provide an improved environment and habitat. Any impact on services will be temporary and nothing in the project scope will contribute to the need for an increase in the level of public services. No impact.

XIV. RECREATION

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

DISCUSSION

a) No project component will substantially increase visitation or demands to this or any other park or recreational facility in the area. No impact.

b) The primitive roads will be open to the public for non-vehicular use. It is anticipated that recreationists from the Santa Ana River trail will use these roads for a variety of purposes including experiencing the restoration project and accessing the Santa Ana River. Less than significant.

XV. TRANSPORATION/TRAFFIC

WILL THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Cause 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) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that will substantially increase hazards?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

DISCUSSION

a) A significant increase in visitation to the area of CHSP is not anticipated as a result of the proposed project. All restoration activities associated with the project will occur within the boundaries of the park and work will not restrict access to or block any public road. The addition of several vehicles entering and leaving during daylight hours will not constitute a substantial increase in traffic volume or result in congestion at the park entrances, or restrict the public's access to adjacent areas. Additionally, most heavy equipment will be stored on park property for the duration of the project, further reducing the traffic impacts. Therefore, the project will result in a less than significant impact.

b) Per the XV (a) discussion above, the impact on congestion resulting from the additional construction vehicles to normal traffic, which is typically light, will be minimal and have no impact on the acceptable Level Of Service for this area.

c) The CHSP is not located within a private airport land-use plan or within two miles of a public airport or public-use airport. Nothing in the proposed project will in any way affect or change existing air traffic patterns in the area. Therefore, no impact will occur as a result of this project.

d) As noted in the XV (a) discussion above, all construction activities associated with the project will occur within the boundaries of the CHSP, and work will not restrict access to or block any public road. There are no incompatible uses related to this proposed project. No impact.

e) All restoration activities associated with the project will occur within the boundaries of the CHSP and work will not restrict access to or block any public road. No Impact.

f) Project restoration will generate a temporary demand for construction worker vehicle parking. This parking demand will not be substantial and will likely be accommodated in the restoration staging areas. No impact.

g) There are no policies, plans, or programs supporting alternative transportation that apply to the project or project area. The project will have no impact.

XVI. UTILITIES AND SERVICE SYSTEMS

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
a) Exceed wastewater treatment restrictions or standards 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?	☐	☐	☐	☒
Will the construction of these facilities cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	☐	☐	☐	☒
Will the construction of these facilities 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 that serves or may serve the project, that it has adequate capacity to service the project's anticipated 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 as they relate to solid waste?	☐	☐	☐	☒

DISCUSSION

a) The project is within the jurisdiction of the Santa Ana Regional Water Quality Control District. The project will be in compliance with all applicable water quality standards and waste discharge requirements. No wastewater or wastewater facilities are involved in this project. (See Mitigation Measure **HAZMAT**-1 regarding potential impacts from accidents, spills, or upset.) No impact.

b) No restrooms or wastewater facilities are included in this project. It contains no elements that will have an impact on public water or wastewater treatment facilities. No impact.

c) No impact

d) The project will not increase consumption of water. Rainfall or water trucks will provide any water needs for dust suppression and plant establishment. No impact.

e) No impact.

f) The proposed work will not increase the Park's solid waste disposal needs over current park uses and will be in compliance with federal, state, and local statutes and regulations, therefore, this project will have no impact.

g) This project will comply with federal, state and local statues and regulations as they relate to solid waste. All debris and materials removed from the site will be disposed of according to state, federal, and local waste disposal standards. This debris will be disposed of in an appropriate landfill. No impact would result from this project.

CHAPTER 4
MANDATORY FINDINGS OF SIGNIFICANCE.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WILL THE PROJECT:				
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?	☐	☐	☐	☒
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
c) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects?)	☐	☐	☒	☐
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION

a) The proposed project was evaluated for potential significant adverse impacts to the natural environment. Because the project area currently has a high degree of disturbance of the natural environment, the restoration will improve the quality of environment and habitat. No negative impact.

b) The proposed project will not eliminate important examples of major periods of California history or prehistory by disturbing potential archaeological features and resources. No archeological sites were found in the vicinity of the proposed project. The site has been completely disturbed from previous development. There are also no historic resources in the project area.

c) DPR often has other smaller maintenance programs and rehabilitation projects planned for a park unit. Because the mission of CHSP is to protect and preserve the natural and cultural resources of the area, while making them available for public enjoyment, there may be numerous maintenance and restoration projects on-going at any time. Ongoing maintenance/rehabilitation activities are designed to protect and enhance areas of public use within Parks and typically do not have a negative effect on the environment, either individually or cumulatively. No other additional projects, other than routine maintenance, are planned for the proposed project area in the foreseeable future. Moreover, impacts from

other environmental issues addressed in this evaluation do not overlap in such a way as to result in cumulative impacts that are greater than the sum of the parts. Less than significant impact.

d) Most project-related environmental effects have been determined to pose a less than significant impact on humans. However, possible impacts from construction accidents (Hazards and Hazardous Waste), as well as noise, though temporary in nature, have the potential to result in significant adverse effects on humans. These potentially significant adverse impacts will be reduced to a less than significant level when all mitigation measures incorporated into this project are fully implemented.

CHAPTER 5
PROJECT ALTERNATIVES

Three alternatives were considered for this project: the proposed project, Alternative 1, and Alternative 2. Alternatives 1 and 2 were rejected prior to the Initial Study.

Proposed Project

This project proposes to restore native vegetation, landforms, and alluvial processes on 18 acres adjacent to Easy Street Trail and 5.5 acres adjacent to coal canyon road near the 91, in CHSP (23.5 acres total). This Project will: improve the function of a major regional habitat linkage between CHSP and the Santa Ana Mountains, increase rare plant and animal habitat, and provide recreational trails and interpretative displays.

Alternative 1 (No project)

This would not improve the environment or habitat for that area.

CHAPTER 6
SUMMARY OF MITIGATION MEASURES

The following mitigation measures will be implemented by DPR as part of the CHSP Coal Canyon Wildlife Corridor Restoration project.

AIR QUALITY

MITIGATION MEASURES AIR-1

- Traffic speed on unpaved roads will be limited to 15 miles per hour (mph).
- Exposed stockpiles, if any, (dirt, sand, etc.) subject to wind erosion will be enclosed, covered, watered twice daily, or stabilized with (non-toxic) soil binders.
- 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.

BIOLOGICAL RESOURCES

MITIGATION MEASURES BIO-1

- ***Polioptila californica californica* (CA gnatcatcher):** In the region identified as coastal sage scrub (CSS), extensive devegetation will be kept to the minimum extent feasible. Construction activity will take place outside of *Polioptila californica californica* (CA gnatcatcher) breeding season (February 15 through August 30).
- **Raptor trees**: Eucalyptus removal will occur outside nesting season and should not impact any potentially nesting raptors. Surveys will be conducted by a State Park Environmental Scientist to identify any nesting occurrences. If raptors are nesting, those trees will be left in place until young have fledged. The area is closely associated with sycamore and cottonwood trees of the Santa Ana riparian, which provide alternate perching and nesting opportunities.

MITIGATION MEASURES BIO-2

- **Stream Channel and Adjacent Riparian**: Herbicide use will be kept to a minimum, involving localized and discrete application of a wetland-safe variety (e.g. Rodeo).

CULTURAL RESOURCES

MITIGATION MEASURES CULT-1

Not applicable.

GEOLOGY AND SOILS

MITIGATION MEASURES GEO-1

- Best Management Practices will be used in all areas to control soil and surface water runoff, such as re-contouring, placement of geotextiles or biodegradable reinforcement, and drainage and slope erosion control methods, as appropriate. Soil disturbance will be minimized during the rainy season, and temporary BMPs will employed, including

such things as covering of any stockpiled soils, silt fences, straw bales, straw or rice wattles, and sediment detention basins to prevent soil loss and siltation into streams.

HAZARDS AND HAZARDOUS MATERIALS

MITIGATION MEASURES HAZMAT-1

- The contractor(s) will prepare an emergency spill response plan prior to the start of restoration and maintain a spill kit on site throughout the life of the project. This plan will include a map that delineates restoration staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical during restoration, in any physical form on or immediately adjacent to the park or on park property, the contractor will immediately notify the appropriate DPR staff (e.g., project manager or supervisor). Emergency containment procedures will be immediately initiated to prevent contamination of wetlands.
- Equipment will be cleaned and repaired (other than emergency repairs) outside the park boundaries. All contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries, at a lawfully permitted or authorized location.
- A safety plan will be developed and reviewed by all project staff prior to the start of any work. Job site characteristics to reduce the potential for fire will be included.. Equipment operation will not occur during high fire danger warnings or advisories as determined by the National Weather Service and other State, National or Local agencies, (High Fire Danger Advisory; High Fire Danger Warning; Red Flag Conditions Advisory; Red Flag Conditions Warning), OR by park staff in the case when high winds and temperatures and low relative humidity exists on site and the aforementioned agencies have not declared the high risk level yet on the day and time of starting construction or maintenance activities that pose a safety risk.
- All equipment will have approved spark arrestors that comply with all Federal, State and local safety requirements.
- Vehicles and equipment will not drive off-road except for approved clearing of access and/or staging areas using mowing or vegetation clearing methods per the approved project plan, following all fire contingency guidelines stated herein. All vehicles must use existing cleared pull-outs for passing other vehicles, even if one vehicle must back to a pull-out. It is DPR's intent that vehicles not drive over natural vegetation, especially dry vegetation which could be ignited by a hot vehicle parts.
- Smoking on site will not be allowed by any personnel.
- Except during some winter and early spring conditions when the park vegetation may be saturated with ample moisture, all mowing activities should be conducted before 10:00 a.m. when the relative humidity is highest, unless otherwise authorized by the Park Superintendent, Environmental Scientist or Maintenance Chief.
- Except for normal patrol by vehicles on well maintained roads, all equipment operation will require separate, appropriately equipped fire spotter personnel who has been trained in the proper use of the equipment determined to best suit the circumstances to be present (see #7 for appropriate equipment descriptions). Their function is to watch for small sparks or fire starts during all equipment operation and immediately use their equipment to extinguish sparks or small fire starts should they occur. Fire spotters are dedicated to fire watch and do not perform additional duties on the project such as

equipment operation. If a spark or small fire cannot be extinguished by the spotter immediately, evacuation procedures for all personnel will be ordered and the fire reported by calling 911 immediately. Any spark that starts a fire, no matter how small, will be reported to park staff within 24 hours.

- Fire extinguishing equipment should be used that is appropriate for conditions. For example, the use of water type extinguishers are preferable when in dry grassland surroundings because standard pressurized fire extinguishers can actually blow a small flame into a larger fire rapidly in light, dry fuels such as the grasslands prevalent in the park. A combination of regulation fire extinguishers with vehicles and water hogs or water trucks with hose and pumps and/or water backpack sprayers may be required.
- Under certain site and weather conditions, pre-wetting of vegetation may be required, such as when access routes to repair underground utilities must be mowed during semi dry or dry conditions.
- Under certain conditions, periodic pre-wetting of nearby vegetation and spark shields may be required for actions such as pipe cutting operations that may throw sparks.
- All contractors will submit an emergency action plan for their particular project that is specific to its location and needs that includes escape routes and evacuation procedures as well as implementation procedures and emergency contact information. Prior to commencement of the project, safety training will be conducted for all staff to insure familiarization with the plan and safety concerns. Regular safety meetings will be conducted throughout the duration of the project for review and to communicate project changes or new safety concerns. This will also insure that new personnel will receive the safety orientation whenever there are staff changes during the project.
- Under certain conditions, projects may be required to use “cold cutting” equipment instead of saws or torches that throw sparks

NOISE

MITIGATION MEASURES NOISE-1

- Restoration activities will be limited to daylight hours; alterations in this schedule will be made to address overriding restoration considerations or worker safety. No work will take place on weekends or holidays.
- Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for restoration will utilize the best available noise control techniques (e.g., engine enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.
- Stationary noise sources and staging areas will be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, stationary noise sources will be muffled to the extent feasible and/or, where practicable, enclosed within temporary sheds.

CHAPTER 7
DOCUMENT PREPARATION

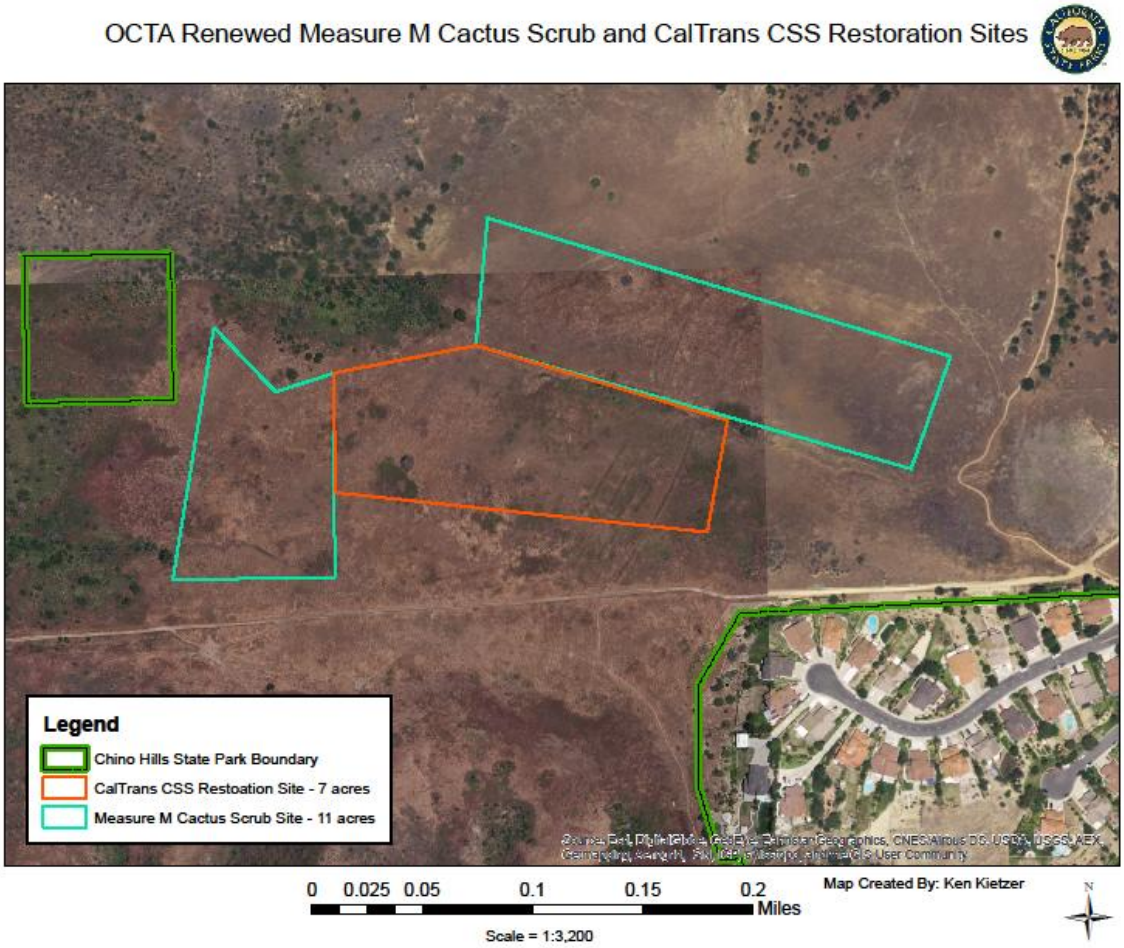
Appendices

A MAPS/FIGURES

Figure 2.



Figure 3.


OCTA Renewed Measure M Cactus Scrub and CalTrans CSS Restoration Sites
Legend
Chino Hills State Park Boundary
CalTrans CSS Restoation Site - 7 acres
Measure M Cactus Scrub Site - 11 acres
0 0.025 0.05 0.1 0.15 0.2
Miles
Scale = 1:3,200
Map Created By: Ken Kietzer
N

Attachment #1

DRAFT

2016 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2016

Source/Receptor Area No.	Location	Station No.	Carbon Monoxide a)			Ozone b)										Nitrogen Dioxide c)				Sulfur Dioxide d)		
										Number of Days Standard Exceeded												
			No. Days of Data	Max Conc. in ppm 1-hour	Max Conc. in ppm 8-hour	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour	Fourth High Conc. ppm 8-hour	Old Federal > 0.124 ppm 1-hour	Current Federal > 0.070 ppm 8-hour	2008 Federal > 0.075 ppm 8-hour	1997 Federal > 0.084 ppm 8-hour	Current State > 0.09 ppm 1-hour	Current State > 0.070 ppm 8-hour	No. Days of Data	Max Conc. in ppb 1-hour	98th Percentile Conc. ppb 1-hour	Annual Average AAM Conc. ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99th Percentile Conc. ppb 1-hour
LOS ANGELES COUNTY																						
1	Central LA	087	361	1.9	1.4	364	0.103	0.078	0.071	0	4	1	0	2	4	366	64.7	61.0	20.8	366	13.4	2.5
2	Northwest Coastal LA County	091	366	2.2	1.1	365	0.085	0.073	0.066	0	2	0	0	0	2	366	54.5	49.3	11.6	--	--	--
3	Southwest Coastal LA County	820	362	1.6	1.3	361	0.087	0.080	0.067	0	2	1	0	0	3	348	81.5	54.7	10.1	363	9.7	5.7
4	South Coastal LA County 1	072	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 3	033	363	3.3	2.2	365	0.079	0.059	0.055	0	0	0	0	0	0	366	75.6	66.3	18.5	366	17.8	12.0
4	I-710 Near Road#	032	--	--	--	--	--	--	--	--	--	--	--	--	--	366	95.3	76.6	23.9	--	--	--
6	West San Fernando Valley	074	366	2.4	1.9	364	0.122	0.098	0.086	0	23	14	4	9	23	355	55.5	45.9	12.9	--	--	--
8	West San Gabriel Valley	088	366	1.5	1	358	0.126	0.090	0.082	1	18	15	3	12	19	366	71.9	58.4	15.4	--	--	--
9	East San Gabriel Valley 1	060	366	1.3	1.2	366	0.146	0.106	0.095	4	39	25	10	30	40	366	74.2	58.3	16.6	--	--	--
9	East San Gabriel Valley 2	591	364	1.1	1	362	0.148	0.114	0.098	6	52	31	16	38	55	365	65.4	45.7	11.6	--	--	--
10	Pomona/Walnut Valley	075	361	1.7	1.3	360	0.127	0.092	0.087	1	26	14	5	20	29	360	69.3	62.5	20.1	--	--	--
11	South San Gabriel Valley	085	366	2.8	1.7	359	0.111	0.081	0.074	0	6	2	0	9	6	361	63.2	60.1	20.0	--	--	--
12	South Central LA County	112	366	4.4	3.9	365	0.098	0.071	0.064	0	1	0	0	1	1	366	63.7	58.4	15.6	--	--	--
13	Santa Clarita Valley	090	366	1.3	1.1	366	0.130	0.115	0.100	2	57	35	15	29	59	361	46.4	39.4	10.2	--	--	--
ORANGE COUNTY																						
16	North Orange County	3177	366	3.1	1.5	365	0.103	0.078	0.075	0	6	3	0	3	7	359	60.4	51.5	14.7	--	--	--
17	Central Orange County	3176	355	2.6	2.1	354	0.103	0.074	0.071	0	4	0	0	2	4	354	64.3	56.7	14.8	--	--	--
17	I-5 Near Road#	3131	360	3.7	2.2	--	--	--	--	--	--	--	--	--	--	357	75.2	60.1	23.4	--	--	--
18	North Coastal Orange County	3195	366	2.1	1.7	366	0.090	0.069	0.065	0	0	0	0	0	0	349	59.8	51.2	10.1	366	3.3	2.1
19	Saddleback Valley	3812	353	1.3	0.7	365	0.122	0.093	0.079	0	13	6	3	5	13	--	--	--	--	--	--	--
RIVERSIDE COUNTY																						
22	Corona/Norco Area	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	359	1.7	1.3	357	0.142	0.104	0.097	1	69	47	20	33	71	366	73.1	52.2	14.9	366	5.6	2.0
23	Metropolitan Riverside County 3	4165	366	1.9	1.4	365	0.140	0.106	0.095	1	65	43	23	34	70	366	64.9	48.3	13.6	--	--	--
24	Perris Valley	4149	--	--	--	366	0.131	0.098	0.092	1	55	30	11	23	56	--	--	--	--	--	--	--
25	Elsinore Valley	4158	298*	1.2	0.6	360	0.124	0.093	0.087	0	44	25	7	15	45	345*	51.3	35.6	8.1	--	--	--
26	Temecula Valley	4031	--	--	--	355	0.092	0.081	0.077	0	19	6	0	0	20	--	--	--	--	--	--	--
29	San Gorgonio Pass	4164	--	--	--	358	0.128	0.106	0.094	1	52	39	14	26	54	348	46.9	42.6	7.9	--	--	--
30	Coachella Valley 1**	4137	361	3.1	1.5	363	0.103	0.092	0.087	0	46	20	4	6	48	363	42.6	34.4	6.0	--	--	--
30	Coachella Valley 2**	4157	--	--	--	331	0.099	0.089	0.081	0	27	12	2	3	29	--	--	--	--	--	--	--
30	Coachella Valley 3**	4032	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																						
32	Northwest San Bernardino Valley	5175	366	1.7	1.3	366	0.156	0.116	0.110	10	88	65	33	53	89	366	70.1	55.1	16.5	--	--	--
33	I-10 Near Road#	5035	366	1.7	1.3	--	--	--	--	--	--	--	--	--	--	362	93.4	74.3	29.3	--	--	--
33	CA-60 Near Road#	5036	--	--	--	--	--	--	--	--	--	--	--	--	--	361	89.8	71.3	31.0	--	--	--
34	Central San Bernardino Valley 1	5197	359	1.7	1	362	0.139	0.105	0.098	3	49	39	16	34	52	357	71.7	56.4	18.2	363	6.3	2.0
34	Central San Bernardino Valley 2	5203	358	2.2	1.7	366	0.158	0.118	0.114	10	106	76	41	70	108	355	60.1	51.4	16.6	--	--	--
35	East San Bernardino Valley	5204	--	--	--	364	0.145	0.119	0.103	3	97	71	40	55	100	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	--	365	0.163	0.121	0.116	9	101	80	54	64	103	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	DISTRICT MAXIMUM			4.4	3.9		0.163	0.121	0.116	10	106	80	54	70	108		95.3	76.6	31.0		17.8	12.0
	SOUTH COAST AIR BASIN			4.4	3.9		0.163	0.121	0.116	17	132	103	63	83	132		95.3	76.6	31.0		17.8	12.0

* Incomplete data. ** Salton Sea Air Basin -- Pollutant not monitored

ppm – Parts Per Million parts of air, by volume ppb – Parts Per Billion parts of air, by volume AAM – Annual Arithmetic Mean

a) The federal and state 8-hour CO standards (9 ppm and 9.0 ppm) were not exceeded. The federal and state 1-hour CO standards (35 ppm and 20 ppm) were not exceeded, either.

b) The current (2015) O_3 federal standard was revised effective December 28, 2015.

c) The NO_2 federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO_2 > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm and 0.030 ppm.

d) The federal SO_2 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO_2 > 0.25 ppm (250 ppb) and 24-hour average SO_2 > 0.04 ppm (40 ppb).

Four near-road sites measuring one or more of the pollutants $PM_{2.5}$, CO and/or NO_2 are operating near the following freeways: I-5, I-10, CA-60 and I-710.

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4182
www.aqmd.gov

For information on the current standard levels and most recent revisions please refer to "Appendix II – Current Air Quality" of the " 2016 AQMP" which can be accessed at http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-ii.pdf?sfvrsn=4. Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD Current Hourly Air Quality Map at http://www2.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx. A printed map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

DRAFT

2016 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2016

Source/Receptor Area No.	Location	Station No.	Suspended Particulates PM10[e]					Fine Particulates PM2.5[g]					Lead[i]		PM10 Sulfate[j]	
			No. Days of Data	Max. Conc. in µg/m³ 24-hour	No. (%) Samples Exceeding Standards Federal > 150 µg/m³ 24-hour	No. (%) Samples Exceeding Standards State > 50 µg/m³ 24-hour	Annual. Average Conc.[f] (AAM) µg/m³	No. Days of Data	Max. Conc. in µg/m³ 24-hour	98th Percentile Conc. in µg/m³ 24-hour	No. (%) Samples Exceeding Federal Std > 35 µg/m³ 24-hour	Annual Average Conc.[h] (AAM) µg/m³	Max. Monthly Average Conc. µg/m³	Max. 3-Months Rolling Averages µg/m³	No. Days of Data	Max. Conc. in µg/m³ 24-hour
LOS ANGELES COUNTY																
1	Central LA	087	277*	67	0	18(6%)	32.4	357	44.39	27.3	2(0.6%)	11.83	0.016	0.01		
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	--	--		
3	Southwest Coastal LA County	820	60	43	0	0(0%)	21.6	--	--	--	--	--	0.006	0.01		
4	South Coastal LA County 1	072	--	--	--	--	--	356	29.37	23.56	0	10.36	--	--		
4	South Coastal LA County 2	077	60	56	0	3(5%)	27.8	350	28.93	22.05	0	9.62	0.008	0.01		
4	South Coastal LA County 3	033	59	75	0	8(14%)	31.9	--	--	--	--	--	--	--		
4	I-710 Near Road#	032	--	--	--	--	--	352	33.31	26.09	0	12.03	--	--		
6	West San Fernando Valley	074	--	--	--	--	--	113	30.05	24.59	0	9.23	--	--		
8	West San Gabriel Valley	088	--	--	--	--	--	119	29.21	25.38	0	9.59	--	--		
9	East San Gabriel Valley 1	060	60	74	0	12(20%)	33.7	122	32.17	29.01	0	10.15	--	--		
9	East San Gabriel Valley 2	591	362	74	0	21(6%)	29.8	--	--	--	--	--	--	--		
10	Pomona/Walnut Valley	075	----	----	--	--	--	--	--	--	--	--	--	--		
11	South San Gabriel Valley	085	--	--	--	--	--	120	46.59	25.13	2(1.7%)	11.75	0.011	0.01		
12	South Central LA County	112	--	--	--	--	--	115	36.35	26.35	1(0.9%)	11.13	0.016	0.01		
13	Santa Clarita Valley	090	60	96	0	1(2%)	23.4	--	--	--	--	--	--	--		
ORANGE COUNTY																
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--		
17	Central Orange County	3176	353	74	0	3(1%)	24.4	349	44.45	24.02	1(0.3%)	9.47	--	--		
17	I-5 Near Road#	3131	--	--	--	--	--	--	--	--	--	--	--	--		
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--		
19	Saddleback Valley	3812	59	59	0	1(2%)	21.0	117	24.79	13.41	0	7.36	--	--		
RIVERSIDE COUNTY																
22	Corona/Norco Area	4155	51*	62	0	7(14%)	31.7	--	--	--	--	--	--	--		
23	Metropolitan Riverside County 1	4144	302*	82	0	58(19%)	36.9	357+	39.12	31.65	4(1.1%)	12.54	0.007	0.01		
23	Metropolitan Riverside County 3	4165	356+	116	0	175(49%)	49.0	352+	45.64	35.14	6(1.7%)	14.02	--	--		
24	Perris Valley	4149	57	76	0	5(9%)	32.2	--	--	--	--	--	--	--		
25	Elsinore Valley	4158	366	99	0	4(1%)	21.4	--	--	--	--	--	--	--		
26	Temecula Valley	4031	--	--	--	--	--	--	--	--	--	--	--	--		
29	San Gorgonio Pass	4164	57	65	0	3(5%)	24.0	--	--	--	--	--	--	--		
30	Coachella Valley 1**	4137	355+	113	0	6(2%)	20.8	112	14.71	12.43	0	5.53	--	--		
30	Coachella Valley 2**	4157	313*+	137	0	56(18%)	36.9	115	25.84	15.04	0	7.74	--	--		
30	Coachella Valley 3**	4032	272*+	150	0	76(28%)	43.0	--	--	--	--	--	--	--		
SAN BERNARDINO COUNTY																
32	Northwest San Bernardino Valley	5175	363	72	0	5(1%)	25.0	--	--	--	--	--	0.007	0.01		
33	I-10 Near Road#	5035	--	--	--	--	--	--	--	--	--	--	--	--		
33	CA-60 Near Road#	5036	--	--	--	--	--	347*+	44.14	33.02	6(1.7%)	14.73	--	--		
34	Central San Bernardino Valley 1	5197	61	94	0	15(25%)	38.1	111+	30.45	26.25	0	12.04	--	--		
34	Central San Bernardino Valley 2	5203	333*	91	0	33(10%)	33.1	113+	32.54	27.12	0	10.84	0.010	0.01		
35	East San Bernardino Valley	5204	56	72	0	4(7%)	27.8	--	--	--	--	--	--	--		
37	Central San Bernardino Mountains	5181	61	46	0	0(0%)	17.1	--	--	--	--	--	--	--		
38	East San Bernardino Mountains	5818	--	--	--	--	--	55	28.42	22.14	0	6.83	--	--		
	DISTRICT MAXIMUM			150+	0+	175+	49.0+		46.6+	35.1+	6+	14.73+	0.016++	0.01++		
	SOUTH COAST AIR BASIN			116+	0+	181+	49.0+		46.6+	35.1+	9+	14.73+	0.016++	0.01++		

* Incomplete data due to the site improvement. ** Salton Sea Air Basin µg/m³ – Micrograms per cubic meter of air AAM – Annual Arithmetic Mean -- Pollutant not monitored

e) PM10 statistics listed above are based on combined Federal Reference Method (FRM) and Federal Equivalent Method (FEM) data.

f) State annual average (AAM) PM10 standard is > 20 µg/m³. Federal annual PM10 standard (AAM > 50 µg/m³) was revoked in 2006.

g) PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations for real-time alerts and forecasting only.

h) Both Federal and State standards are annual average (AAM) > 12.0 µg/m³.

i) Federal lead standard is 3-months rolling average > 0.15 µg/m³; state standard is monthly average ≥ 1.5 µg/m³. Lead standards were not exceeded.

j) State sulfate standard is 24-hour ≥ 25 µg/m³. There is no federal standard for sulfate. Sulfate data is not available at this time.

\+ High PM10 (≥ 155 µg/m³) data recorded in Coachella Valley (due to high winds) and the Basin (due to Independence Day fireworks) are excluded in accordance with the U.S. EPA Exceptional Event Rule.

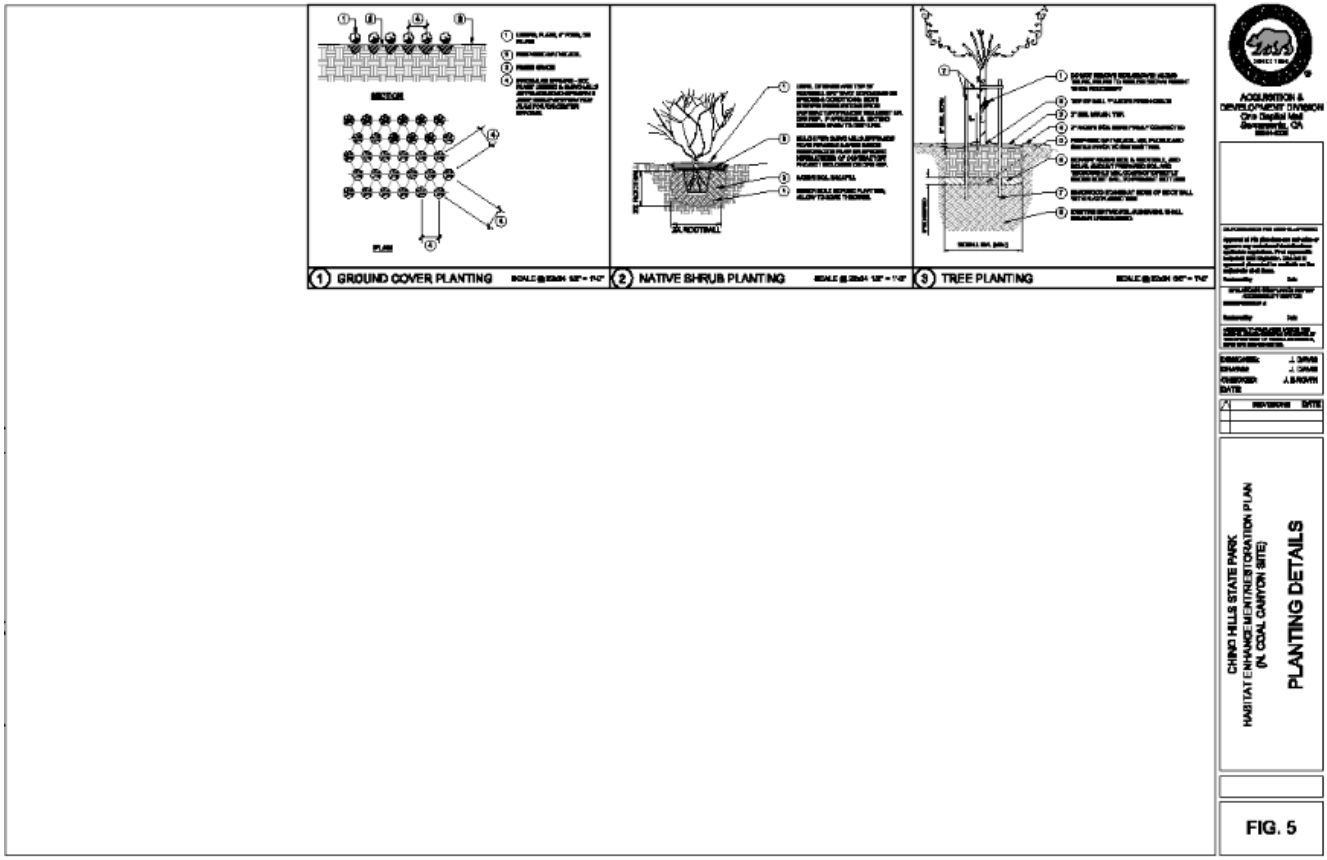
++ Higher lead concentrations were recorded at near-source monitoring sites immediately downwind of stationary lead sources. Maximum monthly and 3-month rolling averages recorded were 0. 088 µg/m³ and 0.06 µg/m³, respectively.

\# Four near-road sites measuring one or more of the pollutants PM2.5, CO and/or NO2 are operating near the following freeways: I-5, I-10, CA-60 and I-710.

Printed on Recycled Paper

B PROJECT DESIGN GRAPHICS

Plant spacing for ideal ground cover and success rates



C PROJECT HERBICIDE USAGE INFORMATION

Integrated Pest Management Memo:

Integrated Pest Management (IPM) is a strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.

The IPM strategy for this project includes the application of herbicides, and mechanical weed control, specifically clearing, grubbing and raking of debris. Combining these methods will reduce the volume of herbicides that will be necessary to control the non-native and invasive plant species known and/ expected to occur within the proposed restoration plots. The project site will be cleared prior to herbicide treatment such that only resprouts of seedlings will require treatment with herbicide. This approach will reduce the surface area of plant which requires treatment along with reducing interference of residual thatch from standing dead skeletons of spent annual plants.

Along with the Best Management Practices outlined below the IPM approach for this project will reduce the overall volume of herbicide necessary to control exotic plant species and allow for the successful restoration of the native plant community targeted by the project.

GENERALIZED HERBICIDE APPLICATION BMPS FOR ALL HERBICIDES AND LINKS
Source: Best Management Practices for Control of Non-Native Invasives. 2009.
Montgomery County, Maryland, Department of Parks | mongtomeryparks.org
Park Planning and Resource Stewardship Division | parkplanningandstewardship.org
Natural Resources Stewardship Section | parksnaturalresources.org

APPLICATION METHODS FOR RECOMMENDED HERBICIDE TREATMENTS
Cut Stem Treatments
Cut stem (or cut surface) treatments involve cutting woody stems and applying concentrated herbicides directly to the exposed stem surface. They are useful for treating vines, shrubs, and trees. Two methods are most often used – “cut stump” or “cut stem,” and “hack and squirt.” The advantages of these methods are: 1) economy, 2) minimal probability of non-target damage, 3) minimal application time, and 4) they can be used in the winter as long as the ground is not frozen or snow-covered and air temperatures will be above freezing during the middle of the day. Backpack sprayers or spray bottles are very effective for these methods.
 Cut Stump/Cut Stem Method: Cut plant stems horizontally at or near ground level; all cuts should be level, smooth, and free of debris. Immediately apply the herbicide to the cut surface, making sure to cover the outer 25% of the stump; this is where the actively growing tissue is. Delayed application may reduce the effectiveness of treatment.
 Hack and Squirt Method: This is sometimes called the “injection method.” Using a hatchet or similar cutting tool, make uniformly spaced cuts around the stem at chest height. The cuts should angle downward, be less than 2 inches apart, and extend into the sapwood. Apply (“inject”) herbicide to each cut to the point of overflow.

Basal Bark Treatments
Basal bark treatments involve the spraying or painting of woody stems with concentrated herbicides mixed with oil so that the chemical penetrates the outer bark. No cutting is required. Basal bark treatments are effective for controlling woody vines, shrubs, and trees. Treatments can be made any time of year, including the winter months, except when snow or water prevents spraying the basal parts of the stem. Basal bark treatments will have reduced effectiveness at temperatures below 40 degrees F. Proper plant identification is crucial during the dormant season due to the absence of foliage.

Apply herbicide in accordance with label instructions. To treat vegetation with a basal stem diameter of less than 3 inches, apply the specified herbicide-oil mixture on one side of the basal stem to a height 6 inches. Apply herbicide to the point of run-off; within an hour the mixture should have moved through the plant's vascular tissue to encircle the stem. For stems greater than 3 inches basal diameter or with thick bark, treat two sides of the stem to a height of 12 – 18 inches.

Re-entry guidelines and posting signage in application areas

Some herbicides require signage to be posted after application to notify those entering the area and minimize their exposure. However, all the herbicides commonly used by State Parks are labeled with the "Caution" signal word and posting is not required after application according to the product label. Areas where these herbicides are used are considered safe to enter, based on the label information, after the herbicide has completely dried. It is the responsibility of individual districts to determine how or where to close the area to public use after herbicide application until the herbicide is dry, which may take some time in cool coastal areas. It is also suggested that staff or contractors completing the applications should be able to explain the project to interested individuals or have a card with contact information for the project manager so the public can contact someone directly with questions. Details on the posting requirements on herbicide labels for the known active ingredients used by State Parks are included in Table C-1.

Foliar Treatments

Foliar applications involve spraying the leaves of target species with a low concentration mixture of herbicide **in accordance with label instructions**. Foliar treatments should be done during the active growing season, after full leaf expansion in the spring and before fall colors are visible. Foliar spraying is most effective when temperatures are between 60 and 90 degrees F, the air is humid, there is a light breeze (9 mph or less), and rain is not expected for 8 to 12 hours (these factors vary with type of herbicide and type of plant – **follow label instructions**). Rain too soon after spraying can wash unabsorbed herbicide off of leaves and transport it into nearby streams. It may also be necessary to re-treat the affected area.

Use a nonionic surfactant with foliar spray herbicides that do not contain surfactant in the formulation (e.g., Rodeo or Aqua Neat), unless otherwise specified by the manufacturer's label. Surfactants increase the effectiveness of the herbicide by 1) reducing surface tension and ensuring complete foliar coverage, and 2) increasing the rate of absorption through the leaf cuticle.

Equip your backpack sprayer, hand-operated pump sprayer, or spray bottle with a flat spray tip or adjustable cone nozzle. Apply herbicide to the leaves of target plants using a consistent motion. Cover foliage thoroughly, but not to the point of run-off. Foliar treatments should not be done where leaves of target plants are above applicator's shoulder height.

For all chemical application methods:

- We recommend adding an EPA-approved blue marker dye to foliar spray solutions in order to keep track of which plants have been treated.
- Always use the lowest herbicide concentration that proves effective.
- Remember, the label is the law. Always apply herbicides in accordance with specific label instructions, which include personal protective equipment and storage requirements.
- If you have questions about safety gear, first aid procedures, or herbicide use call the manufacturer at the number listed on the label for customer inquiries.

Links to Safety Data Sheets for herbicides to be used for this project:

Round-up Pro Concentrate:
http://www.monsantoito.com/docs/RoundupProConcentrate_MSDS.pdf

Rodeo: http://www.cdms.net/ldat/mp4TN006.pdf

Garlon 4 Ultra: https://assets.greenbook.net/M86132.pdf