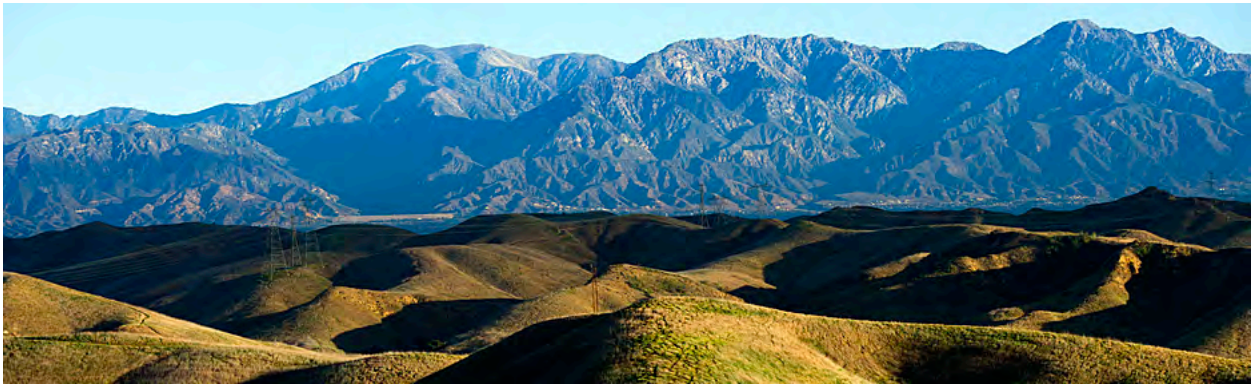
Chino Hills State Park
Road and Trail Management Plan



FINAL DRAFT
October 2020

California State Parks
Inland Empire District
Chino Hills State Park

Chino Hills State Park
Road and Trail Management Plan

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EXECUTIVE SUMMARY

Trails are fundamental to fulfilling the mission of the California Department of Parks and Recreation (Department) to create opportunities for high-quality outdoor recreation. This Road and Trail Management Plan (RTMP) for Chino Hills State Park (CHSP) describes the existing roads and trails of the park and provides specific direction for management and operations in the future. The goal is to ensure that recreational trail opportunities are made available at their fullest potential, while protecting the park's cultural and natural resources.

CHSP lies within the densely populated urban communities in the East Los Angeles Basin of the southern California metropolitan complex. Approximately 15 million people live within a one-hour drive of the park. This number will escalate, as rural communities in the vicinity of the park are rapidly transformed into subdivisions. Set aside by the State in 1981, CHSP contains approximately 71 miles of roads and 18 miles of trails.

The RTMP was prepared in accordance with Departmental Notice 2012-06 and applicable state and federal regulations for resource protection and public participation. The planning team consisted of multi-disciplinary staff from the park district and headquarters. A base map was developed and park routes were characterized and categorized per the Department's guidelines. Data was gathered through field studies, park user surveys, and stakeholder meetings.

Issues such as trail sustainability, safety, adequate infrastructure, connectivity, land use compatibility, and potential user conflicts were identified. Various plan alternatives were considered and a preferred plan identified. The preferred plan was publicly reviewed and modified, as necessary, to incorporate public comments. The final RTMP and related Negative Declaration are included herein.

The final plan includes over-arching recommendations that apply to the park's entire trail system, such as the need to make all new trails and trail alterations accessible to the extent possible, remove all non-system trails, and maintain all trails to the appropriate standard.

Area specific recommendations were made for three identified areas of the park – Discovery Center/Telegraph Canyon Area, Bane Canyon/Rolling M Ranch Area, Santa Ana River/Coal Canyon Area. Within these areas, specific roads and trails were identified for removal, re-engineering, reconstruction, or re-routing, to address sustainability, resource protection, and accessibility concerns. New and upgraded trails and associated amenities, such as signage and shade structures, were also recommended to improve the visitor experience.

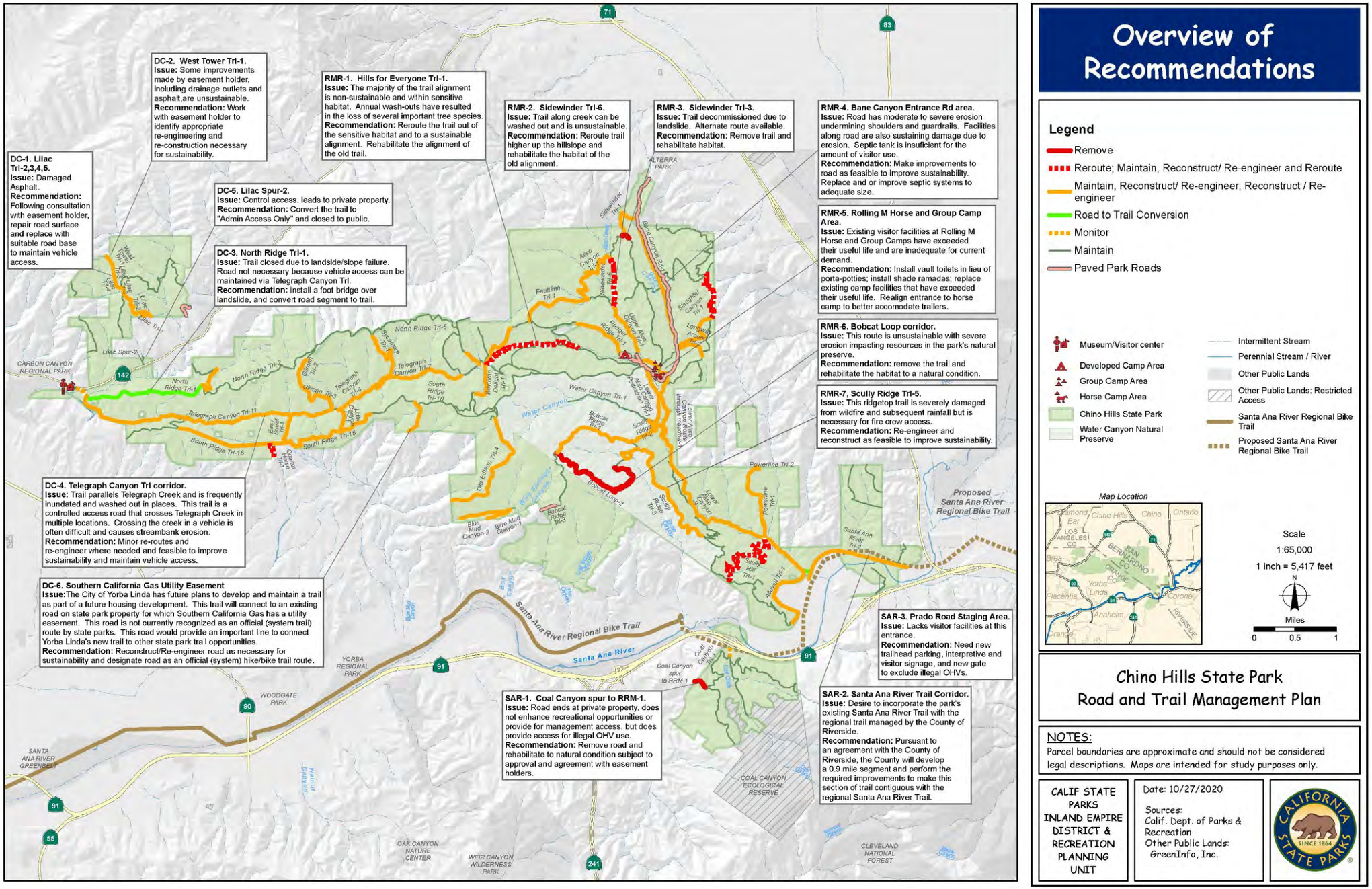
Plan recommendations include:

- The types of permissible trail uses (hike, bike, horse) for over 89 miles of roads and trails.
- Annual and cyclical trail maintenance, including brushing, logging out, slough and berm removal, and drainage maintenance.

- Annual and cyclical road maintenance, including brushing, grading, rock armoring, and drainage maintenance.
- Re-engineer, reconstruct, and/or reroute approximately 40 miles of road or trail.
- Decommission and restore to natural conditions approximately 3.7 miles of obsolete, harmful, or dangerous roads and trails.
- Remove a minimum of nine miles of user-created ("volunteer" or "non-system") trails and rehabilitate the vegetation where they intersect with system routes.
- Re-engineer identified drainage structures, addressing the most significantly affected drainage structures first (See Appendix 8.3 Maps: Potential Significance to Water Resources, Drainage Structure Condition Index, and Erosion Severity).
- Convert the failed section of the North Ridge Trail from road to trail and install appropriate erosion control devises.
- Convert to "admin access only" those trail segments that have no useful recreational connections but that are necessary for administrative and/or easement purposes.
- Reroute the Hills for Everyone Trail out of the sensitive habitat and to a sustainable alignment.
- Improve the Rolling M Horse and Group Camp Area and replace structures and facilities that have exceeded their useful life.
- Remove the Bobcat Loop Corridor that is impacting natural resources in the park's natural preserve and rehabilitate the habitat to a natural condition.
- Continue partnership with the County of Riverside to develop the Santa Ana River Trail through the park.
- Designate Lower Aliso Canyon Trail to Telegraph Canyon Trail as the route of the Bautista de Anza Trail through the park and execute a National Historic Trails agreement with the National Park Service.
- Install and/or improve gates to service roads where illegal OHV use occurs.
- Improve road and trail signage to enhance safety and better facilitate way-finding and interpretive opportunities.
- Develop simple visitor serving amenities such as shade structures and benches at trail destinations including the McLean Overlook, San Juan Hill, and Easy Street at South Ridge.

Maps that illustrate the existing conditions, as well as recommendations for planning and maintenance, are included.

Map: Overview of Planning Recommendations



Section 1 INTRODUCTION

Trails are a key component of public recreation and, therefore, are critical to fulfilling the mission of the California Department of Parks and Recreation (Department). The Department is committed to providing the highest quality trails for a diverse user group by planning and developing trails pursuant to the Department's Trails Policy:

> *The Department, through a public planning process, will strive to meet the recreational, educational, and interpretation needs of its diverse trail users by developing trails within state park units, consistent with unit classification, general plan directives, cultural and natural resource protection, public safety, accessibility, use compatibility, and other legal and policy mandates. Multi-use trails and trail connectivity with adjacent public trail systems will be considered in the development of trail plans or individual trails.*

1.1 Purpose

The purpose of a Road and Trail Management Plan (RTMP) is to provide specific guidance and direction for implementing the goals and objectives of the park's approved General Plan (California State Parks Planning Handbook, 2010). It describes the existing road and trail conditions in a park and provides a roadmap for future management including specific actions for individual roads and trails. It takes into consideration the park's values and mission to achieve the following goals.

- Maximize visitor use and experiences;
- Reduce potential safety issues;
- Minimize impacts to natural and cultural resources;
- Coordinate with local and regional planning efforts;
- Provide access to surrounding public lands;
- Reduce maintenance and management costs;
- Provide an appropriate range of recreational opportunities and associated infrastructure;
- Limit impacts on the natural environment to a level acceptable under CEQA;
- Prioritize roads and trails projects.

Developing a comprehensive RTMP is paramount to ensuring that recreational trail opportunities are made available at their fullest potential, while providing sufficient and often enhanced protection for cultural and natural resources. Although planning can be implemented on a single trail basis, park-wide and regional trail system planning remain the preferred and the most effective methods for identifying and establishing linked recreational trail corridors. Comprehensive planning also reduces construction and maintenance costs.

1.2 Planning Need

In most parks, roads and trails are the primary avenue for park visitors to access park features and facilities. When properly sited, designed, constructed, maintained, and managed, roads and trails can provide quality recreational opportunities while also protecting sensitive natural and cultural resources by focusing recreational activity on less sensitive park lands.

Frequently, a park's trail system has evolved from trails and unpaved roads that were on the property when it was acquired. They were constructed to meet the needs of the original property owners, such as ranchers and loggers, and seldom serve the needs of the park unit adequately or meet trail standards currently identified in the Department's Trails Handbook (2019). Old trails are often improperly sited, poorly designed and constructed, or inadequately maintained. Additionally, older trails may have limited accessibility or other deficiencies. Trails also may fail to adequately protect the park's natural or cultural resources.

A Trail Management Plan was drafted in 2003 but never finalized. This RTMP supersedes the draft plan from 2003 and provides an opportunity for Department managers to address concerns regarding old roads and trails, propose new trails for development, and revisit, refine, and prioritize previous road and trail management recommendations.

1.3 Project Setting

Chino Hills State Park (CHSP) lies within the densely populated urban communities of the East Los Angeles Basin of the southern California metropolitan complex, and is situated in the counties of Orange, Riverside, and San Bernardino. Nearby transportation corridors include the Riverside Freeway (State Highway 91), which traverses the southern part of the park, State Highway 71, which passes to the east, and Carbon Canyon Road (State Highway 142), which crosses through the northwestern portion of the park. CHSP is bordered on the northeast by the City of Chino Hills, on the south by the City of Yorba Linda, on the west by the City of Brea, and is close to the communities of Chino, Olinda Village, Sleepy Hollow, Anaheim, Diamond Bar, and Corona. The City of Riverside is approximately 16 miles to the east of the park along Highway 91.

As of 2020, CHSP encompassed approximately 14,173 acres, most of which are made up of rolling hills. The entire park is a vital link in the 31-mile-long Puente-Chino Hills Wildlife Corridor, which extends north and west into the Los Angeles Basin from the north end of the Santa Ana Mountains. The dominant vegetation type in the park is non-native annual grassland. However, walnut woodlands, coastal sage scrub, coast live oak woodland, sycamore woodland, chaparral, and riparian scrub are also important components.

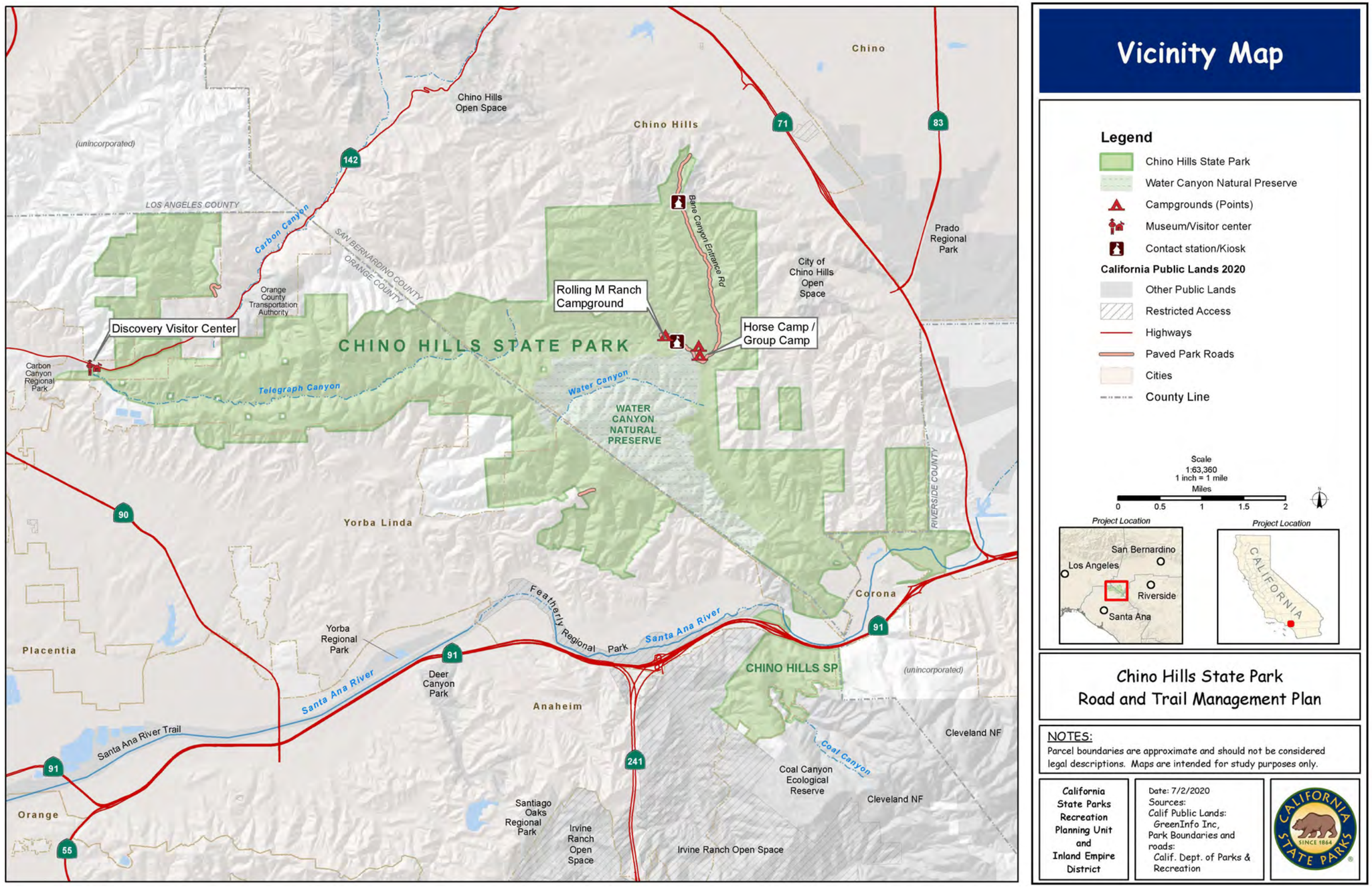
Within the central portion of the park is Water Canyon Natural Preserve, encompassing the entire watershed of Water Canyon Creek. The preserve contains key habitat for many threatened, endangered, and sensitive species, making it one of the park's most ecologically sensitive areas. In addition, a one-mile-long section of the Santa Ana River and its associated Fremont cottonwood riparian woodland are within park boundaries. This section of the Santa Ana River is the only remaining natural stretch of the river downstream of Prado Dam in Orange and Riverside Counties.

Cleveland National Forest in the Santa Ana Mountains is just two miles south of Highway 91, adjacent to the park boundary. It is biologically connected to CHSP via the Coal Canyon biocorridor, which is the only remaining viable biological link between these properties.

CHSP was acquired and was officially classified as a "state park" by the State Park and Recreation Commission in 1984. This RTMP shall apply to all of CHSP and its sub-units. Recommendations in this RTMP are consistent with the California Public Resources Code Section 5019.53, which provides the overriding directive on the use and management of trails in a state park as follows:

> ….to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of ecological regions of California …

Map: Park Region



Vicinity Map

Legend

- Chino Hills State Park
- Water Canyon Natural Preserve
- Campgrounds (Points)
- Museum/Visitor center
- Contact station/Kiosk

California Public Lands 2020

- Other Public Lands
- Restricted Access
- Highways
- Paved Park Roads
- Cities
- County Line

Scale
1:63,360
1 inch = 1 mile
Miles
0 0.5 1 1.5 2

Project Location

Project Location

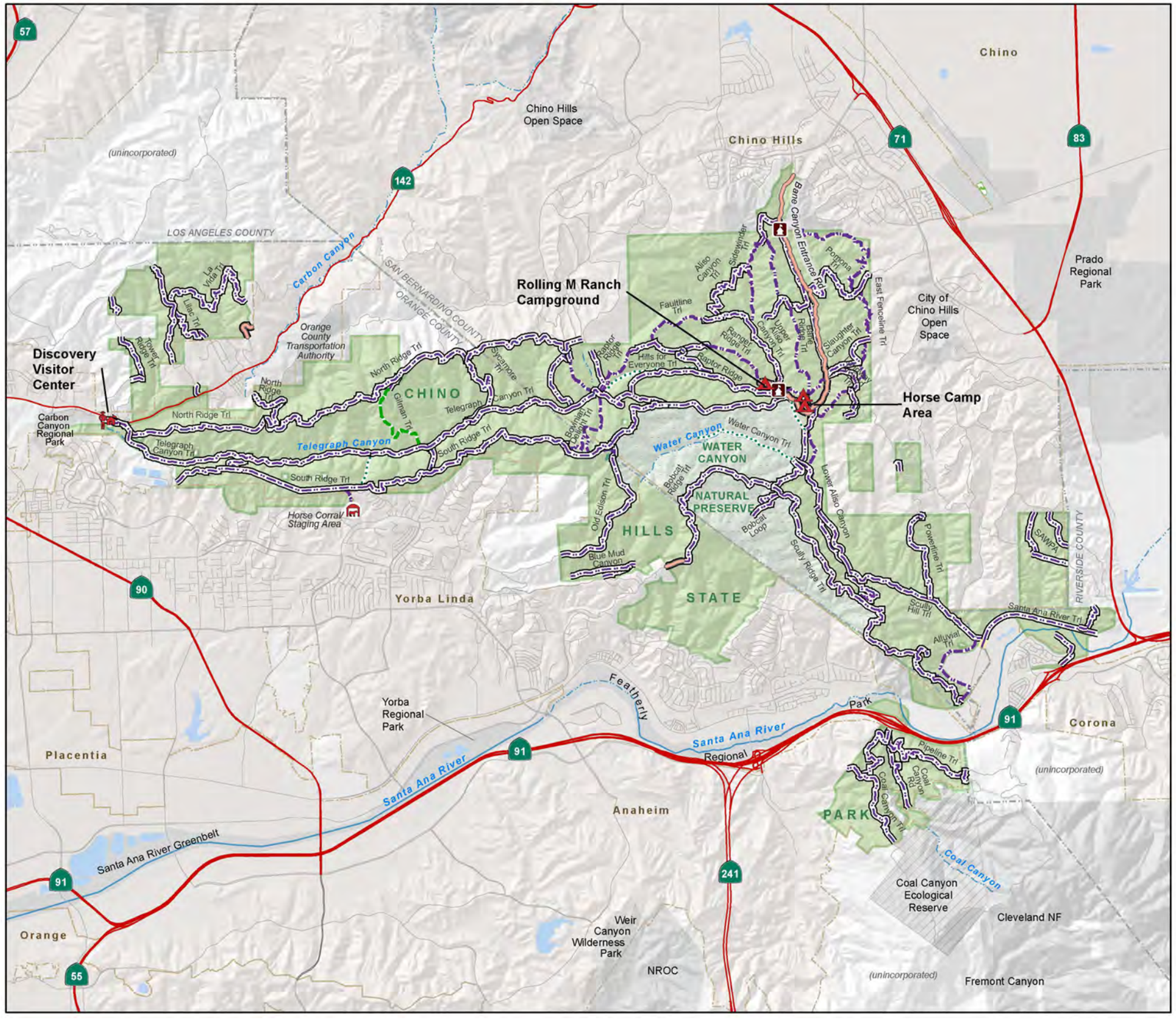
Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

California State Parks Recreation Planning Unit and Inland Empire District

Date: 7/2/2020
Sources:
Calif Public Lands: GreenInfo Inc,
Park Boundaries and roads:
Calif. Dept. of Parks & Recreation

Map: Existing Roads and Trails at Chino Hills State Park



Parkwide Existing Roads and Trails

Existing State Park Roads and Trails by Designation

- Paved Park Roads
- State Park Rd, Hike, Bike and Horse
- State Park Rd, None
- State Park Rd, Trl on Rdbed (no vehicles), Hike, Bike and Horse
- State Park Trl, Hike
- State Park Trl, Hike and Horse
- State Park Trl, Hike, Bike and Horse
- State Park Trl, Not Determined

- Chino Hills State Park
- Water Canyon Natural Preserve
- Campgrounds
- Museum/Visitor center
- Entrance station/Kiosk

California Public Lands

- Other Public Lands
- Restricted Access on Other Public Lands
- Highways
- Local Roads
- Cities
- County Line

Route Mileage by Recreational Designation

Designation	Miles
Hike	3.31
Hike and Horse	2.68
Hike, Bike and Horse	85.89

Project Location

Scale 1:63,360
1 inch = 1 mile
Miles
0 0.5 1 1.5 2

Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

CALIFORNIA STATE PARKS INLAND EMPIRE DISTRICT AND RECREATION PLANNING

Date: 7/1/2020
Sources:
Calif Public Lands: GreenInfo Inc,
Park Boundaries, Park Roads and Trails: Calif. Dept. of Parks & Recreation

Section 2 THE PLANNING PROCESS

Developing an RTMP is a dynamic process that can take several years to complete. Per the Department's Trails Policy, opportunities for public participation in the planning process must be provided. Specifically, an RTMP should:

- Meet guidelines provided by the unit's general plan;
- Address stakeholder needs;
- Incorporate and coordinate with local and regional planning documents;
- Adhere to existing laws and regulations;
- Include the public and all potential user groups in the planning process;
- Provide user accessibility;
- Protect resources; and
- Provide a mechanism to monitor outcomes.

2.1 RTMP Planning Process

Preparation of this RTMP followed the process outlined below and was in compliance with Departmental Notice 2012-06 regarding the review and approval of management plans, as well as applicable state and federal regulations for resource protection and public participation.

1. Develop the planning team. The planning team consists of multi-disciplinary staff from the park, sector, district, and headquarters.

2. Inventory and Mapping. A road and trail inventory is conducted and a base map with associated attributes is created. This inventory and assessment process was developed to provide an objective and consistent method for determining road and trail infrastructural problems and associated solutions as well as to officially record road and trail information such as physical characteristics and allowed uses. The data collection process relies on easily repeatable and non-controversial measurements of features and conditions. Terminology and methods are standardized and applicable throughout the state and across various environments to provide reliable comparisons between watersheds, parks, or other geographic areas of interest. The base map and route attributes conform to the Department's established guidelines for categorization, segmentation, and classification of roads and trails.

3. Stakeholder Input. As appropriate to the park, data is gathered from park users and other stakeholders. Typically, data includes information on issues pertinent to road and trail use and sustainability. Public or stakeholder workshops are held to allow those people to assist in identifying needs, suggesting routes and restoration opportunities, and providing general comments. Trail use surveys are conducted during different seasons and times to solicit input from trail users.

4. Evaluate and synthesize data. Data is collated, compared, and assessed. Issues such as trail sustainability, safety, adequacy of infrastructure, connectivity, land use compatibility, and potential user conflicts are identified.

5. Development of proposal and alternatives. To develop alternatives, staff considers stakeholder input, accessibility needs, resource issues, National Historic or Recreation Trail certification and/or nomination, and linkages to transit and other recreational trails and facilities outside

the park. Recommendations for plan alternatives may include maintenance strategies, new routes, new or alterations to trailhead facilities, or change-in-use designations.

6. Administrative Draft RTMP. A preferred plan is developed for review by Department staff.

7. Draft RTMP. Following review and necessary revisions of the Administrative Draft, a Draft RTMP is developed. A public meeting, as determined by plan specifics, may be initiated to solicit comments related to the plan.

8. Final Draft RTMP/Environmental Document. The Final Draft Plan is developed including the appropriate draft environmental document as required by law. Public comments are solicited through the required environmental review process.

9. Public Review. Department staff receive and evaluate public comments and respond as appropriate per CEQA guidelines. The draft may be modified, as necessary, to incorporate public comments or concerns.

10. Final RTMP/Environmental Document. The final RTMP and associated environmental document, including changes resulting from public comments as required, is produced and recommended for adoption.

CHSP Planning Specifics

A Trail Management Plan based on direction from the 1999 General Plan was drafted in 2003 but never finalized. For this RTMP, goals and recommendations from the 1999 General Plan and the 2003 Draft Trail Management Plan were reviewed and incorporated as appropriate. In addition, in 2012/13 Department staff conducted a road and trail inventory, including components, condition assessment, and preliminary recommendations. The purpose of this assessment was to:

- Integrate field data into the management process;
- Provide the current status of the roads and trails for decision making purposes; and
- Provide a knowledge-base for ongoing assessment, monitoring, and planning.

The park's roads and trails were evaluated to determine: 1) roads critical for fire, public safety, resource management, and general circulation; 2) non-system roads and trails to be decommissioned or incorporated into the system; 3) system roads and trails that require maintenance; and 4) system roads and trails that require redesign, reconstruction, or reroute to meet Departmental standards. Information was also gathered through an existing conditions assessment in which existing uses of each road and trail were identified.

A thorough, inclusive, and transparent public process was initiated to gather data regarding public perceptions of the appropriate types and locations of roads and trails, and to analyze the relative impacts of proposals. Stakeholder meetings were held on October 1, 2013 and March 30, 2014 in the local community to receive comments and recommendations about the park's roads and trails. Meetings were held with representatives of user groups, adjoining land management agencies, permitting agencies, cooperating associations, and other stakeholders, including Carbon Canyon Fire Safe Council, Hills For Everyone, Chino Hills State Park Interpretive Association, Share Mountain Bike Club, Orange County

Parks, Riverside County Parks, San Bernardino County, Orange County Fire Authority, and local residents.

A subsequent public meeting was held in July 2019 to review the first public draft of this RTMP. Public comments from that draft were collected and responses provided on the Department's website. In some cases, the public comments resulted in changes to the draft document.

2.2 Change-in-Use Evaluation

No change-in-use evaluations were performed as part of the development of this RTMP. Future change-in-use requests will be evaluated in accordance with the Department's change-in-use program. This program facilitates and makes consistent the review of change-in-use proposals that would add or remove uses from existing recreational roads and trails in the state park system. This process is intended to identify those changes that best accommodate accessibility and recreational activities appropriate for each road or trail. Specifically, the process is intended to achieve the following objectives:

- Implement the Department's Trail Policy, including consideration of multi-use trails and trail connectivity;
- Ensure that projects can be implemented in a manner that avoids or mitigates significant impacts to the environment;
- Inform decision-making including the diversity of resources and users at each park unit;
- Ensure that changes are considered in a transparent process; and
- Establish a process for decision making with objective criteria for evaluating proposed changes to trails.

A Change-in-Use Evaluation (see appendix) can provide park managers with critical information, including:

- Existing conditions
- Compatibility with the park's classification and other trail uses
- Effects to trail circulation patterns
- Effects to trail safety
- Effects to trail sustainability
- Effects or impacts to natural and cultural resources
- Effects or impacts to facility maintenance and operational costs

Recommendations based on survey results typically fall into one of the following categories:

- Conditional approval that includes design modifications or repairs
- Conditional approval that includes management options
- Approval
- Disapproval
- Put on hold

When a change-in-use is conditionally approved, all proposed conditions need to be implemented, project specific environmental compliance completed, and funding secured prior to the change taking affect.

A process flow chart has been developed to assist staff in the evaluation process (see appendix). The principal steps are outlined below. The first four steps are completed as part of the RTMP process. The second half is conducted for each individual project.

1. Request for change-in-use submitted to district by a user group, Departmental staff, neighboring agency, or other stakeholder.
2. Inventory of Existing Conditions
3. Change-in-Use Evaluation completed.
4. Recommendation by evaluation team.
5. Input gathered from the public and stakeholders
6. Final Change-in-Use decision
7. Prepare project plans and designs
8. CEQA and permitting compliance
9. Construction cost estimate prepared.
10. Work plan developed.
11. Project implemented.

The Department's CIU process was vetted through a Programmatic Environmental Impact Report (PEIR). The purpose of the PEIR was to evaluate the environmental effects of adoption and implementation of the CIU process and was prepared pursuant to the California Environmental Quality Act (Public Resources Code Section 21000, et seq.). Additional information on the Department's Trail Change-in-Use process and PEIR can be found at http://www.parks.ca.gov/?page_id=28461.

2.3 Plan Consistency

Recommendations in this RTMP are consistent with California Public Resources Code Section 5019.53, which provides the overarching directive on the purpose of improvements, such as trails, in a state park. Specifically, the section stipulates that:

> *Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations.*

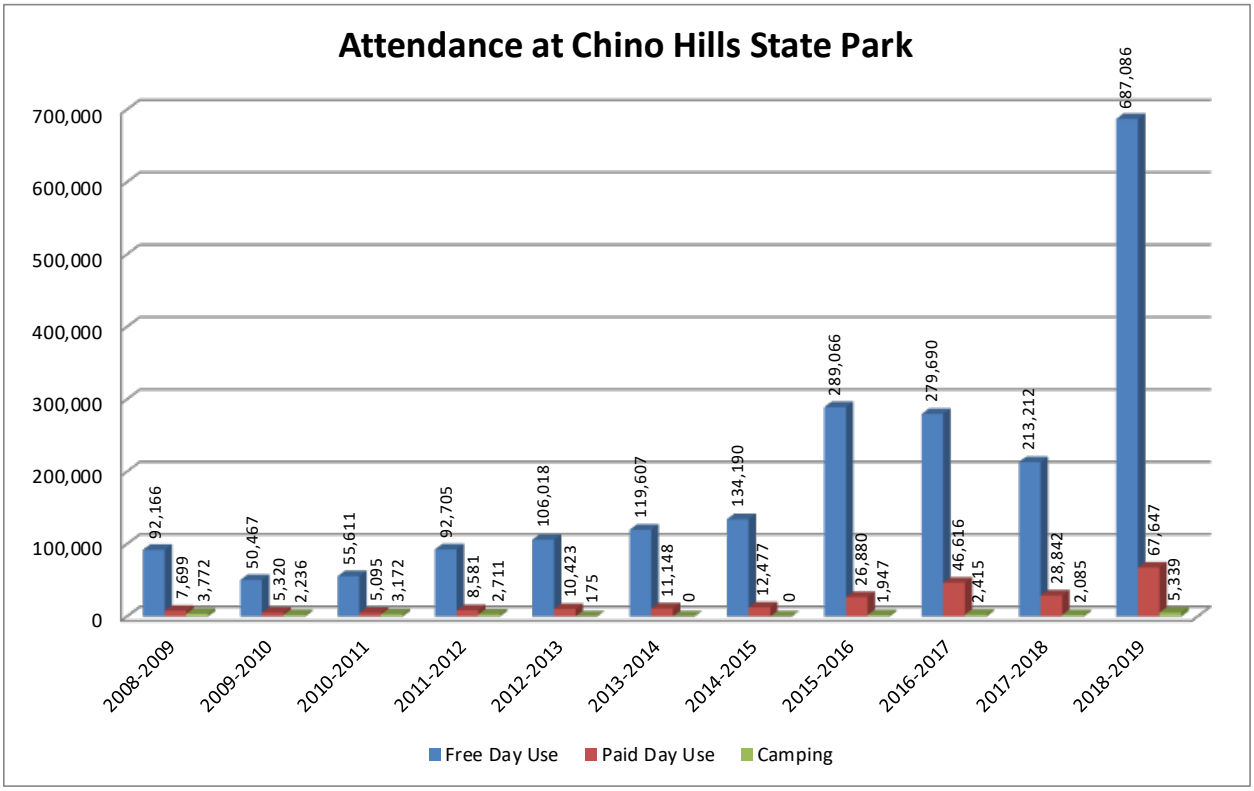
In addition, this RTMP is consistent with the park unit's classification and general plan and follows guidelines and policies established in other management and interpretive plans; departmental manuals; local, regional, and statewide plans; sensitive natural and cultural resources documents; deed restrictions; and regulatory agency policies, including:

- Chino Hills State Park General Plan (1999)
- California State Parks Trails Handbook (1991)
- California State Parks General Planning Handbook (2010)
- Western Riverside County Multi Species Habitat Conservation Plan (2004)
- Shell/ Metropolitan Water District Habitat Conservation Plan (1993)
- Natural Communities Conservation Planning Act of 1991
- Santa Ana Mountains Tecate Cypress Management Plan (2010)

Section 3 PARK CONDITIONS

3.1 Park Visitation

Visitor attendance for the park from July 1, 2016 to June 30, 2017 was 328,721 people including 46,616 paid day users, 279,690 free day users, and 2,415 campers. Since there are many ways to enter the park, annual visitation numbers are likely to be underestimated. There was no camping between 2012-2015 because the road to the campground was closed for reconstruction. The heaviest recreational use occurs from March through September annually. In addition, planned communities are slated for development on all sides of the park, which is likely to increase public demand for trails and trail connections in the area.



3.2 Existing Recreational Resources

CHSP lies within the densely populated urban communities of the East Los Angeles Basin in the southern California metropolitan complex. Approximately 15 million people live within a one-hour drive of the park. The proximity of the park 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. The park contains approximately 88 miles of system ("official") trail routes. 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 campground offers comfortable and appealing sites suitable for families, small groups, and equestrians. Several family picnic sites occur along the interior of the park.

Popular Park Destinations
Some of the more popular destinations in the park are described below.

Rolling M Ranch
Rolling M Ranch provides an interpretive look at historic cattle ranching and features a historic barn, cattle chute, and scale. It is located in the northeast portion of the park and is accessible by vehicle from Bane Canyon Road in the City of Chino Hills. Recreational opportunities at Rolling M Ranch include 20 campsites (each containing a picnic table, charcoal grill, lantern hanger, tent pad, and parking pad), a primitive equestrian camp corral, two primitive group camps, a group picnic area, an outdoor amphitheater equipped with screen, and access to major trails including Lower and Upper Aliso Canyon Trails, Telegraph Canyon Trail, South Ridge Trail, and Bane Canyon Road. Rolling M Ranch contains full restroom and shower facilities and a day use parking lot with accessible parking stalls. There is an accessible interpretive trail between the day use parking facilities and the campground, which showcases a variety of the park's native plant species.

Discovery Center
CHSP Discovery Center is located on the northwest portion of the park and is accessible by vehicle from Carbon Canyon Road in the City of Brea. It features a 2,000-square-foot indoor exhibit center that interprets regional biodiversity, the urban/wildlife interface, and the importance of bio-corridors.

McLean Overlook
McLean Overlook scenic vista point can be accessed by trail users from Bane Canyon Road via Longway Around Trail. It provides 360 degree views of CHSP and surrounding open space. There is a small, level viewing area, which can be reserved for special events. There are no structures or other facilities at this destination.

Glider Point
Glider Point, located along South Ridge Trail, is a scenic vista point that boasts views over the City of Yorba Linda and across Orange County to the Pacific Ocean.

San Juan Hill
San Juan Hill, located along South Ridge Trail, is a scenic vista point overlooking the cities of Corona, Anaheim, and Yorba Linda. At 1,781 feet of elevation, it is also the highest point within the park.

Gilman Peak
Gilman Peak, located at the intersection of Gilman and North Ridge Trails, is a scenic vista point located 1,685 feet above sea level that provides views over Telegraph and Carbon Canyon.

Coal Canyon

Coal Canyon is a vitally important component of the Puente-Chino Hills Wildlife Corridor linking the Puente-Chino Hills and Prado Basin to Santa Ana Mountains. It includes 29 acres north of State Route 91 as well as the only portion of CHSP located south of State Route 91. Coal Canyon is accessible by foot, horseback, and bicycle only. The closest vehicle parking is the Santa Ana River Trail parking lot located on Green River Road near the Green River Golf Course in the City of Corona. Facilities include a small shade ramada and bench. There are no restroom facilities. Coal Canyon provides access to trails in the Santa Ana Mountains, including the Coal Canyon Trail, Pipeline Trail, and trail connectivity to Cleveland National Forest, California Department of Fish and Wildlife's Tecate Cypress Preserve, and the County of Orange through the Irvine Ranch Open Space. However, public access to Irvine Ranch Open Space is controlled and arrangements to enter must be made in advance.

Park Entrances

Bane Canyon Road

Located at 4721 Sapphire Road in the City of Chino Hills, this entrance provides paved road access to the northeast portion of CHSP. Visitors have access to the entrance kiosk, trailheads, Rolling M Ranch, Rolling M Ranch campground, amphitheater, day use parking, and several accessible scenic viewpoints. This entrance provides access to trailheads for Pomona, Upper and Lower Aliso, Slaughter Canyon, Bane Canyon, Telegraph Canyon, and South Ridge trails.

Discovery Center

Located at 4500 Carbon Canyon Road in the City of Brea, this entrance provides a gravel and paved accessible parking lot providing access to the CHSP Discovery Center and the northwest portion of CHSP. Telegraph Canyon and North Ridge trailheads can be accessed from this location.

Quarterhorse Drive

On Quarterhorse Drive in the City of Yorba Linda is a parking lot owned and maintained by the City of Yorba Linda that provides access to the southwest section of the park. It is the only official entrance to CHSP that provides legal public access to the southwest portion of the park from the City of Yorba Linda. The entrance is popular with equestrians and provides parking for vehicles and trailers, as well as an equestrian staging area, accessible parking, picnic tables, and restroom facilities. From this point, visitors can access to the South Ridge and Glider Point trails.

East Santa Ana River

Access to CHSP and the Santa Ana River is available on Prado Road east of the Green River Golf Course near the 91 Freeway using the Green River Road off ramp in the City of Corona. Vehicle parking in this area is limited to street parking. This part of the park is south of the Santa Ana River and includes viewpoints of a natural stretch of the Santa Ana River. There are no other facilities at this location.

Popular Trail Routes

Popular trail routes not listed above as destinations in themselves are listed below. A complete list of trails and their designated uses is included in the appendix. Many of the trails are popular because they are part of a loop or they lead to a visitor or scenic destination.

Discovery Trail

This short and easy walk can accommodate trail users of all abilities. Located adjacent to the Discovery Center, this fully accessible trail offers visitors a way to easily experience the biological diversity of CHSP. The trail highlights the multiple ecological habitats contained within CHSP, including coastal sage scrub, woodland, grassland, riparian, and chaparral. Examples of each habitat including interpretive signs are viewable from the trail.

Telegraph Canyon Trail

Telegraph Canyon Trail is the primary east/west trail in the park and runs from the Rolling M Ranch to the Discovery Center. This multi-use trail is popular with mountain bikers, hikers, trail runners, and equestrians. It also provides access for emergency vehicles. There are several trail connections to both North and South Ridge trails, which run parallel to the Telegraph Canyon Trail. It is one of several major trails that converge at the Four Corners Trailhead, which offers a shade ramada, picnic tables, and chemical toilets. Due to its proximity to Telegraph Creek, much of the surrounding habitat is riparian, coastal sage scrub, grassland, woodland, and other plant communities, which can also be experienced from this trail.

North Ridge Trail

Just north of and parallel to the Telegraph Canyon Trail is the North Ridge Trail. Also a multi-use trail, North Ridge Trail is popular among users accessing the park from the Discovery Center. Erosion has created dangerous conditions that have necessitated closure of the section of the trail from Gilman to Telegraph Canyon trails until repairs can be made. North Ridge Trail can also be accessed from Rolling M Ranch via the Four Corners trailhead. North Ridge Trail also provides access to Gilman Peak scenic overlook located at the intersection of North Ridge and Gilman trails.

South Ridge Trail

Just south of and parallel to Telegraph Canyon Trail is the South Ridge Trail. Also a multi-use trail, South Ridge Trail is popular among users accessing the park from Quarterhorse Drive and other access points in the City of Yorba Linda, such as utility right-of-ways and private property. South Ridge is also accessible from Rolling M Ranch and the Four Corners Trailhead. A popular destination along South Ridge Trail is Glider Point. A second, less popular scenic look-out accessible from the South Ridge Trail is San Juan Hill, which, at an elevation of 1,781 feet, is the highest point in the park.

Aliso Canyon Trail

The Aliso Canyon Trail spans north/south from the Santa Ana River Trail near the City of Corona to Upper Aliso Canyon adjacent to the City of Chino Hills. This multi-use trail traverses from the northeasterly section of the park through the Rolling M Ranch area to the southeasterly section of the park and is popular among hikers, equestrians, and mountain bikers. The Aliso Canyon Trail can be accessed via trailheads near Rolling M Ranch and from the Santa Ana River Trail.

Scully Ridge Trail

The Scully Ridge Trail is a multi-use trail that borders the eastern edge of Water Canyon Natural Preserve, and continues south to the Santa Ana River Trail. Access to Scully Ridge Trail is from the Santa Ana River Trail or from Aliso Canyon Trail via Bobcat Ridge Trail. Both Aliso Canyon and Scully Ridge trails traverse through Lower Aliso Canyon, which serves as part of the wildlife corridor linking the Puente Chino Hills to Cleveland National Forest.

Bobcat Ridge Trail

Bobcat Ridge Trail is a multi-use trail that traverses through Water Canyon Natural Preserve from the Aliso Canyon Trail to Hidden Hills Road in Yorba Linda. The Bobcat Loop is an unsustainable trail that intersects the Bobcat Ridge Trail on the east and west ends of Water Canyon Natural Preserve.

Coal Canyon Trail

Located at the north end of the Santa Ana Mountains in Coal Canyon, the multi-use Coal Canyon Trail runs south from the Santa Ana River Trail, under State Route 91, and toward Cleveland National Forest and California Department of Fish and Wildlife's Tecate Cypress Preserve. Coal Canyon is among the most environmentally sensitive areas of the park, providing a vital link in the Puente - Chino Hills Wildlife Corridor and habitat for numerous sensitive, threatened, or endangered species.

Most Popular riding/hiking/biking trails:

- Coal Canyon – hike, bike, horse
- Bane Canyon Road – hike, bike, horse
- Telegraph Canyon Road – hike, bike, horse
- South Ridge Trail – hike, bike, horse
- Lower Aliso Trail - hike, bike, horse
- North Ridge Trail – hike, bike, horse
- Easy Street Trail – hike
- Little Canyon Trail – hike, bike, horse
- Sycamore Trail – hike, bike, horse
- McDermont Trail – hike, bike, horse
- Diemer Trail – hike, bike, horse
- Raptor Ridge Trail – hike, bike, horse
- Bane Ridge Trail – hike, bike, horse
- Upper Aliso Trail - hike, bike, horse
- Sidewinder Trail – hike, bike, horse
- Scully Ridge Trail – hike, bike, horse
- Old Edison Trail – hike, bike, horse
- East Fence Line Trail – hike, bike, horse
- Bobcat Ridge Trail – hike, bike

Most popular trail heads:

- North Ridge and Telegraph Canyon, east of the Discovery Center parking lot
- Four Corners
- South Ridge and Easy Street Trail
- Rolling M Ranch – access to Telegraph Canyon Trail and Upper Aliso Trail
- Lower Aliso and Santa Ana River Trail
- Lower Aliso and Bane Canyon Road

Trailhead parking outside park boundary

- Carbon Canyon Regional Park, located west of the Discovery Center on Carbon Canyon Road, City of Brea.
- Residential street parking on Sapphire and Elinvar roads near the Bane Canyon Road entrance, City of Chino Hills.
- Parking lot at Quarterhorse entrance, City of Yorba Linda.
- Santa Ana River trail parking on Green River Road, just west of Green River Golf course, City of Corona. Provides access to Coal Canyon via Santa Ana River Trail.
- Rimcrest Drive, located in the City of Yorba Linda, is used by visitors as a trailhead to access the park at South Ridge Trail. This entrance requires trespass on private property to enter the park and is not considered a system entrance. It is noted in this document due to its popularity.

3.3 Adjacent Recreational Opportunities and Connections

CHSP has many adjacent land owners and managers of public and private property. Neighboring lands include utilities, open space, freeways, parks, grazing lands, a landfill, oil fields, and residential development.

Western Area (Cities of Brea and Yorba Linda, Unincorporated County of Orange and County of Los Angeles)

- Carbon Canyon Regional Park is adjacent to CHSP, west of the Discovery Center. It has active recreational facilities and a connecting trail into CHSP.
- Firestone Boy Scout Reservation, now owned by the City of Industry, is located north of Sonome Canyon on Tonner Road, between Brea, and Diamond Bar in unincorporated Los Angeles County, however, there are no existing trail connections and the property is not open to the public.
- Olinda Historic Museum and Trail are located just northwest of the CHSP Discovery Center and can be access via Carbon Canyon Road to Santa Fe Road in the City of Brea.
- Featherly Regional Park is located south of CHSP along the Santa Ana River and is accessed via Gypsum Canyon Road.
- The Quarterhorse Drive Trailhead managed by the City of Yorba Linda is a formal access point into CHSP established for the southern area of Yorba Linda.

Southern Area (Cities of Yorba Linda, Corona, and Anaheim, Counties of Orange, San Bernardino, and Riverside)

- Riverside and Orange counties are currently in the planning stages for further development and improvement of the Santa Ana River Trail, which may proceed partially through the southeastern corner of the park. The final regional trail alignment has not been determined. The Santa Ana River Trail provides commuting and recreational use opportunities for pedestrians, equestrians, and bicyclists. Ultimately, it is proposed that the Santa Ana River Trail will be a multi-use trail that will connect the San Bernardino Mountains to Huntington and Newport beaches.
- The Green River Golf Course is located south of Aliso Canyon, along the Santa Ana River, and is accessed from Green River Road in Corona.
- Cleveland National Forest, California Fish and Wildlife's Coal Canyon Ecological Reserve, and Irvine Ranch Open Space are located south of and adjacent to Coal Canyon. Irvine Ranch Open Space is not open for public access and arrangements to enter must be made in advance.

Eastern Area (Cities of Chino Hills and Chino, Counties of San Bernardino and Riverside)

- Prado Regional Park is located in San Bernardino County east of the State Route 71.

3.4 Natural and Cultural Resources

CHSP contains incredible biological diversity, considering that it is situated in the middle of the eastern Los Angeles Basin, surrounded by dense urban development and nearly half of the state's human population. It is considered "globally significant" in terms of the roll it plays as a vital component of the Puente-Chino Hills Wildlife Corridor. It contains important watersheds and numerous sensitive, threatened, and endangered species, as well as rare habitat types that require careful stewardship. The geology of the park presents challenges for road and trail design and management due to numerous natural landslides, earthquake faults, and fine, unstable, and erosive silt and clay soils.

CHSP is located in the southern inland portion of the traditional territory of the Gabrielino people, who likely used the natural resources of what is today the park. Although the Chino Hills have served primarily as grazing land throughout its recorded history, some late nineteenth and early twentieth century agriculture, horticulture, mining, and oil exploration also took place. Many exploratory oil wells were drilled in the Chino Hills, but most were unsuccessful. Facilities associated with historic ranching activities, including many of the park's roads and trails, the loading chute, cattle scale, barn, and foreman's residence remain a part of the park and are being preserved as the only surviving remnants of the once-important cattle industry in the Chino Hills.

A complete discussion of the natural and cultural history of the park, including topography, meteorology, hydrology, geology, ecology, and Native American and Euro-American sites, is included in the park's 1999 General Plan. In addition, the habitat types and associated sensitive species for each region of the park are discussed in the area-specific recommendations herein.

An environmental review has been prepared for this plan and is included in the appendix of this document. Additional information about the project location and the natural and cultural resources of the area is included in the Project Description and Environmental Checklist sections of the document.

3.5 General Plan

The RTMP is intended to be a sub-component of a park's general plan, addressing the specific transportation management issues of the unit within the goals and objectives of the General Plan. The 1999 CHSP General Plan called for the development of a trail management plan and directed that the plan achieve two goals for roads and trails in the park:

1) Preserve historic roads and trails while providing for visitor, Department, and utility company use.

2) Create appropriate pedestrian access points to meet the needs of both the park and the local jurisdictions that are contiguous to the park boundary.

Pursuant to the General Plan and historic preservation laws, this plan does not call for the removal of any historic roads or trails. In some cases, historic roads are no longer sustainable for use by vehicles and a recommendation has been made to convert the road to a trail. Appropriate conservation measures will be taken to preserve the historic road bed while preventing damage to other cultural as well as natural resources.

No new access points for pedestrians or other user groups are recommended in this plan due to lack of appropriate and available land under the control of the Department. At this time, new access routes into the park would require trespass through surrounding properties. As development in the surrounding community continues, staff will work with local agencies to identify and develop new pedestrian access points as appropriate.

Section 4 DESIGNATIONS AND CLASSIFICATIONS

The following is a summary of guidelines pertaining to the planning, design, layout, and maintenance of roads and trails in the state park system.

4.1 Road and Trail Designations

As part of this planning effort, existing roads and trails and their uses were identified in a geographic information system (GIS) database. Roads and trails were identified using the best available information from topographic and road and trail maps, existing GIS data, global positioning system data, aerial photography, light detection and ranging technology, ground surveys, staff institutional knowledge, and records searches. This information was used to develop a base map that included all system and non-system roads and trails.

All roads and trails were identified as either a "system" or "non-system" route. If the alignment was a system route, then the route was further designated as either a "road" or "trail." System roads and trails are recognized as official routes owned and maintained by the Department and included in the park's facilities inventory. "Non-system" routes (e.g. user-created or volunteer trails) or routes maintained by another agency or landowner are not recognized as owned or maintained by the Department.

"Non-system roads" are located on state park property, but operated or maintained by other agencies or landowners, such as private roads, local roads, and county roads and highways. Management and maintenance of these roads may be determined by an easement and legal agreement with the outside agency. "Non-system trails" occur in most parks and can be (1) routes maintained by another agency under a legal agreement, (2) unsanctioned, user created trails, or (3) remnants from historic uses. Non-system trails are not maintained by the park and are not recognized as part of the park's trails system. Non-system routes at CHSP were identified and recommended for removal.

If the route currently accommodates street-legal vehicles or was initially constructed to allow street-legal vehicle access, then it is designated a "road." From here forward the term "vehicle" refers to street legal vehicles and not vehicles specifically designed for off road use only. Roads include routes that were initially constructed as roads and topographically display a road prism profile, but may no longer accommodate vehicles due to erosion, vegetation growth, physical barriers, or use designation. Roads may have trail uses such as hiking, biking, or horseback riding, in addition to vehicle use. Old roads may be difficult to detect due to vegetation overgrowth, lack of use, or geological movement. At first observation, a route may look like a trail (e.g. single-track, three feet wide), but is actually located in the middle of a twelve-foot-wide road prism profile.

Trails on road beds that are no longer passable by vehicles are considered a road in the sub-category of "Trail on Roadbed." This sub-categorization is useful to track the location and condition of old or abandoned roads. This information can then be used to determine if the route should be maintained as a road, converted to a trail, or removed.

Work to remove or maintain this type of road requires heavy equipment, not hand labor typically associated with the removal or maintenance of trails.

The route is a "trail" if it was not initially constructed to allow street-legal vehicle access and currently does not accommodate street-legal vehicles. Unconstructed, informal routes of travel that accommodate recreational and/or vehicle uses may be designated as "routes." Routes include river and stream gravel bars utilized as roads, paths across beaches or through sand dunes, or peak ascent paths in authorized climbing areas. They are often inherited from past land use practices. In some situations, they are designated by staff as the most appropriate place to put roads and trails in dynamic and/or sensitive environments.

4.2 Designated Uses

All trails in California's state parks allow for pedestrian use, although pedestrian access may not be considered the primary use. Once the route is designated as a road or trail, the type of use is assigned. All roads and trails are assigned one of the following uses:

- Hike Only
- Hike and Bike
- Hike and Horse
- Hike, Bike, and Horse ("multi-use")
- None/Controlled Access (e.g. residence areas, administrative facilities)
- Road with Bike Lane

A trail designated for hiking only has a much different design than roads and trails designated for bikes or horses. For example, sight distances, abrupt grade changes, turning radii, and linear grades are much more flexible with pedestrian trails than for other types of trails and roads.

A "multi-use" trail is one that allows two or more uses in addition to pedestrian. Thus, a bike trail, which by default allows for pedestrian use, is not considered "multi-use," but a bike and horse trail is considered "multi-use." A multi-use trail designation dictates the most sustainable and least resource-damaging design, which is blended from both horse and bike trail standards.

Some trails also serve as fire access roads. The Orange County Fire Authority (OCFA) conducts field visits and uses the park's trails to access different areas throughout the year. During a fire or other emergency, OCFA uses the trails as fire roads. Also, Southern California Gas Company, Southern California Edison, County of Riverside, County of Orange, Santa Ana Watershed Project Authority, and the

Metropolitan Water District of Southern California use the park's trails to access their facilities. Easements are in place to ensure each agency has adequate access.

4.3 Classification of Trails

Once identified, trails are further classified based on intensity of use and location within the park. Classifying trails allows a manager to objectively assign design standards and work priorities that are consistent with the primary function of the trail, environmental sensitivity of the habitat, relationship to developed facilities, and visitor use. Class I trails require the highest trail construction and maintenance standards. The standards for Classes II, III and IV diminish consecutively. The selection of trails to receive maintenance and rehabilitation is also influenced by their classification. Assuming visitor safety, resource protection, and trail investment concerns are equal; those trails with the highest classifications ("Class I" being the highest) will receive the highest maintenance and rehabilitation priority. The Trail Classification Matrices for individual trails in CHSP are located in the appendix.

- **Class I** – Includes ADA accessible, bicycle, equestrian, interpretive, and hiking trails within close proximity to developed facilities. Gravel, turnpikes, puncheons or other drainage structures are required for resource protection and visitor safety in areas of trail trenching, trampling, multiple trails, or saturated trail beds.
- **Class II** - Includes hiking, bicycle, and equestrian trails that lead away from developed facilities. Primarily native materials are used for trail tread.
- **Class III** - Includes lightly used hiking trails. Native materials are used for trail tread.
- **Class IV** - Includes special use and access trails. The minimal trail tread necessary to provide safe footing is used.

Section 5 BEST MANAGEMENT PRACTICES

This section provides a summary of the best management practices used by the Department to plan, design, construct, and maintain sustainable roads and trails within the state park system. Additional and more detailed information can be found in the Department's Project Implementation and Best Management Practices, 2009, and the Department's Trails Handbook, 1991. This section is meant to supplement but not replace avoidance, minimization, and mitigation measures located in the environmental document for this plan.

General road and trail design and layout practices include:

- Establish trail user type(s) and identify appropriate design standards.
- Maintain system connectivity and circulation patterns.
- Provide for long-lasting, low-maintenance, and low-erosion (i.e., "sustainable") roads and trails.
- Minimize disruption or alteration of the natural hydraulic flow of the landform.
- Avoid, minimize, or mitigate significant impacts to natural and cultural resources.
- Use inherent aesthetic resources to enhance new trail alignments.
- Design roads and trails so that they meet the needs of the intended user group(s).
- Use standard Departmental project requirements as described in the plan's environmental document.

5.1 Sustainability

A "sustainable" road or trail has been designed, constructed, or re-constructed such that it:

- does not adversely impact natural and cultural resources;
- can withstand the impacts of the intended user groups;
- meets the needs of the intended user to a degree that the user does not deviate from the established road or trail alignment; and
- survives the natural elements while receiving only routine cyclical maintenance.

To design, construct, and maintain sustainable roads and trails requires a thorough understanding of the landform that the road or trail is or will be traversing. It also requires an understanding of the user groups being served, and the needs and design standards that are specific to each user group. Combining this information with high-quality construction materials, results in a sustainable road or trail. Roads or trails that do not meet the definition of sustainable but are considered integral to park operations may be constructed with specific trail structures added to help address the problems that lead to the lack of sustainability.

5.2 Resource Considerations

Roads and trails can be considered as park facilities similar to restrooms, campsites, and parking lots. They are developed to provide access to the natural and cultural resources of a park and to enhance the visitor's enjoyment of those resources. Thus, the resources of a park should live in harmony with its facilities and decisions regarding design, layout, and construction of roads and trails should be balanced with what is best for the park's resources. No road or trail shall compromise the integrity of park resources.

If a road or trail cannot be constructed without significantly impacting resources, or if it becomes too costly to construct or maintain a road or trail to avoid impacts to resources, an alternative corridor should be considered or the need for the trail should be reassessed.

5.3 Maintenance Activities

A thorough maintenance program will prevent deferred maintenance problems and reconstruction projects. Maintenance activities can be broken into three types:

1. Annual/Cyclical – Includes drainage maintenance, vegetation clearing, tread maintenance, and brushing performed on a re-occurring basis. Typically, annual trail maintenance tasks require minimal supervision and can be conducted by maintenance staff, a conservation corps, or volunteer crews. Typically, cyclical maintenance is planned for the average life span of a facility. However, weather, vandalism, and other unpredictable events can greatly affect the life span and periodic trail inspections are necessary to keep staff abreast of current conditions.
2. Pro-rated/Deferred – Includes construction, re-construction, re-engineering, and restoration activities performed on a periodic basis and necessary to address road and trail infrastructure deterioration due to age and/or improper initial design.
3. Incident-Related/One-time Repair – Includes construction, re-construction, re-engineering, and restoration activities performed on a project basis to address road and trail infrastructure damaged caused by natural or man-made events such a major storm, wildfire, or vandalism.

5.4 Monitoring

A comprehensive monitoring program is suggested for all roads and trails and required for all road and trail projects. The purpose of a monitoring program is to evaluate the effectiveness of the project and to adapt management of a project to improve its success over time. In addition, monitoring provides valuable data that can be used to improve the success of future road and trail projects, as well as further assess problem areas. Monitoring protocols are described in the Department's Field Guide for Road and Trail Assessment and the Official Manual for Road and Trail Assessment.

5.5 Prioritization Matrix

Usually there are more trail project proposals than there are funds and time to complete them and the project selection process can be contentious. Setting maintenance priorities facilitates allocation of limited resources and provides a focus for fund raising efforts and volunteer work. To make the prioritization of trail projects less subjective, trail projects should be categorized based on the trail's deficiencies and opportunities as well as rating.

To determine the priority of trail projects, trail deficiencies, opportunities, and their associated criteria are assigned a point value. A range of points for each criterion enables staff to determine a score that corresponds with the relative necessity of the improvement. A higher score indicates more deficiencies or opportunities for the trail.

For example, a trail with exposed rocks in the trail tread that could cause someone to trip may receive a rating of two, whereas a trail with a rotted safety railing on a bridge suspended 40 feet above a stream channel

may receive a rating of ten due to its significantly higher potential for creating a health and safety problem. A new trail that provides improved access to a view point may receive a rating of two, whereas a new trail that provides improved access to a view point and creates an important link to other trails may receive a rating of three due to the greater opportunity for recreational benefits.

The range of points for each criterion should allow more points to be awarded for those projects that are essential to the mission of the Department. Stakeholder and public input should be considered in the assignment of point values. Thus, projects that ensure visitor safety, resource protection, or protection of the facility itself may take priority over projects that provide a visitor convenience or provide additional recreational opportunities.

Potential projects can be listed and assigned points for each of the project criterion. Those points can then be totaled and projects ranked from high to low with the highest priority projects receiving the most points.

Project Criteria	Point Rating Example	Example
Visitor Safety	1-10 points	Trail conditions that represent a threat to the safety of park visitors, usually severe enough to warrant barricades, warning signs, or temporary to permanent trail closures.
Resource Protection	1-10 points	Trail conditions that represent a threat to the park's natural or cultural resources, usually severe enough that critical resources are being damaged.
Preservation of Investment	1-7 points	Trail structure conditions that, if not repaired, will result in total loss of the structure.
Visitor Convenience	1-5 points	Trail conditions that make it uncomfortable to use the trail such as overgrown brush or desired improvements to an existing trail such as change-in-use
New Trail Construction	1-3 points	The development of an entirely new trail.

The following charts list the priority and frequency of annual trail maintenance and pro-rated and incident related maintenance.

ANNUAL TRAIL MAINTENANCE	PRIORITY	EXAMPLE MAINTENANCE OCCURRENCE
Emergency drainage	1	Major Water Runoff
Structure repair	2	Annual
Drainage repair	3	Annual
Clearing	4	Annual
Tread repair	5	Annual
Brushing	6	Annual

PRO-RATED OR INCIDENT-RELATED TRAIL MAINTENANCE	PRIORITY	EXAMPLE REPLACEMENTS
Structure construction/re-construction - Bridges - Puncheon - Steps - Retaining walls	1	As Needed 8-15 years 8-15 years 10% of total yearly As Needed
Drainage facility construction/re-Construction	2	As Needed
Trio rehabilitation (Brushing, slough and berm removal, and reshaping the trail tread)	3	Every 5 years
Turnpike construction/re-construction	4	Every 10 years
Trail re-route	5	As Needed

5.6 Reconstruction

"Reconstruction" is construction work on an existing road or trail to bring it back to its original design. Reconstruction can be used to re-establish trail sustainability if the original design was sustainable, or to re-establish an "unsustainable but maintainable" trail. Trail reconstruction also may reshape the backslope of the trail, remove the berm, scarify the tread, and restore tread elevations and drainage structures. Typically, work of this scope also involves repair or reconstruction of other trail structures, such as switchbacks, climbing turns, retaining walls, steps, bridges, and puncheons.

5.7 Re-engineering/Redesign

The term “redesign” can be used interchangeably with the term “re-engineer.” Reengineering/ redesign can be used to create a sustainable trail when the existing trail alignment can be sustainable, but improperly designed structures and elements along the trail have created an unsustainable situation. Reengineering/ redesign can also be implemented to create an “unsustainable but maintainable” trail when political, cultural, or environmental issues require retaining a sub-standard alignment. Minor re-routes may occur within the original trail corridor. Curvilinear techniques can reduce the linear grade and improve drainage by lengthening the trail and decoupling it from natural drainage features. Linear grades also can also be reduced by cut-and-fill techniques, where appropriate.

5.8 Road-to-Trail Conversion

Road-to-trail conversion is a re-engineering technique used for transforming an existing road, originally constructed for vehicles or currently used by vehicles, into a recreational trail. Similar to road removal, road-to-trail conversion involves excavating road fill from the embankment and placing it against the cut bank to match the slope above. A four- to six- foot wide portion of the original road bench must be retained to serve as the new trail tread.

5.9 Removal

Road and trail removal and site restoration should correct damage or disturbance to natural and cultural resources created by road and trail construction, maintenance, and/or visitor use. When a trail or section of trail is abandoned, steps should immediately be taken to restore the habitat. Typically, the re-route or replacement trail is constructed before the old trail is removed and the site rehabilitated.

During site restoration, the cut bank and bench are de-compacted and the soil aerated to promote re-vegetation of the trail bench and bonding of imported soil, if necessary. Soil from the fillslope is excavated and placed against the cut bank to restore the natural slope or contour and facilitate natural sheet flow drainage. Once the trail bench is re-contoured and gullies are stabilized, vegetation is re-established through management of existing native seed banks, or active transplanting of native species.

5.10 Re-Route

A trail can be “re-routed” outside of its original corridor when the current corridor is determined to be unsustainable. A re-route can be used to by-pass environmentally or culturally sensitive areas, provide a sustainable grade, expand trail width, or improve system connections.

Section 6 THE PLAN

This RTMP includes system-wide and area-specific recommendations. These recommendations shall be implemented in accordance with the Department's Best Management Practices as outlined in Section 5 above to minimize and avoid impacts to resources as well as ensure road and trail sustainability. Standard Project Requirements as outlined in the RTMP's environmental document will also be required if Best Management Practices are insufficient to minimize and avoid impacts to resources and ensure road and trail sustainability. The intent of the RTMP is not necessarily to build all recommendations presented, but to provide options that have been vetted for design and resource feasibility at a planning level to help guide future park management decisions. Recommendation implementation will be dictated by park priorities and funding availability. Additional mitigation measures may also result from subsequent environmental review during specific project implementation.

6.1 Parkwide Recommendations

- All new trails and alterations to existing trails shall follow the Department's Accessibilities Guidelines and the federal accessibility guidelines for outdoor developed areas.
- Within park boundaries, every non-historic, non-system trail shall be removed and rehabilitated, unless otherwise specified in the RTMP. Non-system roads determined to be necessary for legal access will not be removed.
- Every system road and trail shall be on a park maintenance plan and receive cyclical and pro-rated maintenance. In particular, a plan for the cyclical removal of invasive plant species shall be developed and implemented to ensure eradication of plants prior to the peak growing season annually.
- Service roads shall be a maximum of 12 feet and limited to those needed to ensure public safety, perform required maintenance, or provide access per a utility easement.
- Trail width shall be limited to that required for the type of use and classification of the specific trail. Trail layout, design, and maintenance shall follow the Department's Trails Handbook (2019).
- Provide adequate staffing to properly maintain, plan, budget, design, and construct the unit's roads and trails system.
- Roads and trails shall be designed, constructed, re-engineered, re-constructed, or re-routed to improve sustainability and drainage, prevent erosion, and reduce future maintenance needs.
- Roads and trails shall provide public access to the park's most popular features.
- Roads and trails shall not fragment large areas of open space or viewsheds. The overall aesthetic quality of the park, including human sounds carried from one road or trail to another, should be a primary consideration of road and trail design and management.
- Loops and connections to regional trail systems are preferred, to give users more choices for the length and duration, as well as a greater diversity of terrain and experiences.
- For route connections and directional and interpretive signage, coordinate with regional, state, and national trail systems and organizations recognized under the

California Recreational Trails Plan, such as the Santa Ana River Trail.

- Designate Lower Aliso Canyon Trail to Telegraph Canyon Trail as the route of the Bautista de Anza Trail through the park and execute a National Historic Trails agreement with the National Park Service.
- Connections to parking areas and pedestrian access points shall be provided and/or improved. However, no new pedestrian access points are recommended in this plan due to lack of appropriate and available land under the control of the Department. At this time, new access routes into the park would require trespass through surrounding properties. As development in the surrounding community continues, staff will work with local agencies to identify and develop new pedestrian access points as appropriate.
- Multi-use trails shall be considered in accordance with the Department's 2005-2006 Trails Policy, which states "Multiuse trails and trail connectivity with adjacent public trail systems will be considered in the development of trail plans or individual trails."
- Improve road and trail signage to enhance safety and better facilitate way-finding and interpretive opportunities. At a minimum, trail signage should include trail distances and designated uses (hike, bike, and/or horse).
- On a project basis, re-engineer all drainage crossings identified in the Drainage Structure Condition Index Assessment and associated maps contained in the appendices of this document. Implementation shall address the most significantly affected drainage structures first.
- Consider acquisition of land and/or easements to support local, regional, state, and national trail connections.
- Interpretive roads and trails including guides with numbered stops that highlight unique features, such as specific plants and vegetation assemblages, require special maintenance. Road and trailside brushing work must take into consideration this type of interpretive experience and prevent inadvertent removal of features identified in the interpretive guides.
- Maintenance activities shall be coordinated with the district environmental staff prior to being scheduled, to avoid adversely impacting rare plants and animals such as the least Bell's vireo. Conservation measures may include flagging individual rare plants for avoidance, scheduling work for a time of year when sensitive animals are not present or rare plants have already set seed, and carefully pruning rare shrubs instead of full removal. Some service roads with known rare plant occurrences along them include but are not limited to Bane Canyon Road, Slaughter Canyon Trail, Aliso Canyon Trail, Santa Ana River Trail, Scully Ridge Trail, Water Canyon Trail, Bobcat Ridge Trail, South Ridge Trail, Telegraph Canyon Trail, North Ridge Trail, Coal Canyon Trail, Pipeline Trail, Diemer Trail, Lilac Trail and La Vida Trail.
- Install and/or improve gates to service roads where illegal OHV use occurs.
- Develop simple visitor serving amenities such as shade structures and benches at trail destinations including the McLean Overlook, San Juan Hill, and Easy Street at South Ridge.
- Close trails during wet weather to ensure trail integrity.
- Close trails during extreme wind events to reduce the chance of wildfire.

6.2 Area-Specific Recommendations and Maps

Three areas of the park were identified for area-specific recommendations. Each area has unique recommendations and accompanying maps. Additional maps are also available in the appendix. These maps are described below.

- Discovery Center/Telegraph Canyon
- Bane Canyon/Rolling M Ranch
- Santa Ana River/Coal Canyon

Existing Roads and Trails Maps

These area specific maps of existing road and trail conditions at the time of planning include:

- System paved and non-paved roads and their designated uses. Non-paved roads are divided into segments and identified with a unique segment identification number.
- Non-system roads owned and operated by other agencies.
- System trails and their designated uses. These trails are divided into segments and identified with a unique segment identification number.
- Non-system trails.
- Mileage total per area for each designated use.

Maps of Planning and Maintenance Recommendations

These maps show the recommended maintenance for existing roads and trails. Recommendations are made by road or trail segment. A road or trail is typically segmented where it intersection another road or trail. Recommendations may apply to only a portion of the segment (e.g. a road with a "Remove, Reconstruct/Reengineer, and Reroute" recommendation may include multiple locations within the road segment that require maintenance, or reconstruction/ reengineering, or reroute, or any combination thereof). The road and trail inventory conducted as part of this RTMP can assist in determining the location of specific problems and associated treatments. Recommendation types include the following:

- **Reconstruction:** Rebuild existing roads and trails to return them to the original design. These trails typically can be sustainable if annual or cyclical maintenance occurs.

- **Re-engineering:** Apply new or additional structures, design techniques, or modifications to an existing road or trail corridor to improve sustainability.

- **Rerouting:** New sustainable road or trail sections that originate from and return to an existing road or trail. The abandoned, unsustainable section of trail is removed and the site is rehabilitated.

- **Annual or Cyclical Maintenance:** Routine periodic maintenance of existing roads and trails, including brushing, logging out, slough and berm removal, and drainage maintenance. By default, roads and trails that are not designated for reconstruction, re-engineering, or rerouting fall into this category.

- **Road-to-Trail Conversion:** Re-engineer to transform an existing road into a recreational trail. Similar to road removal, road fill is excavated from the embankment and placed against the cut bank to match the slope above. A four- to six- foot wide portion of the original road bench serves as the new trail tread.

- **Removal:** Removal of existing road or trail that may or may not be associated with a road or trail reroute. Removal is generally

associated with unsustainable trail alignments that are no longer required or that can be rerouted to more sustainable alignments.

In addition to maintenance recommendations, these maps show long-term planning recommendations for roads, trails, and associated infrastructure including:

- New trails or routes that extend or re-route existing trails to a new destination.
- Access for administration or easements along exiting roads and trails.
- Improvements to existing trailheads or new trailhead locations.
- Resource protection related to road and trail use.
- Removal of existing road or trail routes.
- Road and trail safety improvements.
- Public or administrative road and trail access improvements.
- Interpretative improvements along roads and trails.
- Change-in-use designations.

Visitor Management Maps

These maps show the various "management zones" of the park, as identified in the 1999 General Plan. Management zones identify the type of management recommended for each area of the park. They are based primarily on the value and sensitivity of the natural, cultural, and aesthetic resources in a given area. In addition, they are based on recreational, visitor service, and management needs of the area. The zones are described below and further described in the General Plan.

CORE HABITAT ZONE: The area of highest biological resource sensitivity in the park.

NATURAL OPEN SPACE ZONE: Protects natural, cultural, and aesthetic resources, and at the same time allows for recreational opportunities at the park.

HISTORIC ZONE: Protects historic and prehistoric features and cultural landscapes within the park from impacts that may compromise their integrity.

RECREATION AND OPERATIONS ZONE: Area where visitor services and operations facilities exist or could potentially be developed. Such facilities include public vehicle roads, maintenance structures, a visitor center, campgrounds, a campfire area, and employee housing.

Discovery Center/Telegraph Canyon Area (DC)

Significant natural resources: Riparian habitat throughout the Discovery Center/ Telegraph Canyon area contains nesting habitat for endangered least Bell's vireo as well as other declining and sensitive bird species. Many of the roads and trails cross or run parallel to creeks and sediment from runoff during and after storm events is significantly impacting aquatic ecosystems. Slopes above or adjacent to the roads and trails contain a wide variety of habitats including coastal sage scrub, grassland, oak woodland and the threatened southern California walnut woodland. These habitats are occupied by many sensitive and listed species, including but not limited to, the coastal California gnatcatcher, western spadefoot toad, southern California black walnut, coastal cactus wren, yellow breasted chat, pallid bat, and western mastiff bat.

Significant cultural resources: Three archaeological resources have been identified within the Discovery Center/Telegraph Canyon area; all are bisected by trails. Adjacent resources include historic ranching features, such as windmills and feed troughs, and oil test wells.

Significant paleontological resources: There is the potential for paleontological resources to occur within all areas of Chino Hills State Park.

Existing area trail mileage: There are 24.6 miles of system trails, including 0.4 miles of hiking trails, 1.1 miles of hiking and equestrian trails, and 23.1 miles of hiking, biking, and equestrian trails ("multi-use"), as well as about 1.3 miles of non-system trails.

RECOMMENDATIONS:

DC-1, LILAC TRAIL - 2, 3, 4, AND 5
Issue: Damaged asphalt.
Recommendation: Following consultation with easement holder, repair road surface and replace with suitable road base to maintain vehicle access.

DC-2, WEST TOWER TRAIL - 1
Issue: Some improvements made by easement holder, including drainage outlets and asphalt, are unsustainable.
Recommendation: Work with easement holder to identify appropriate re-engineering/re-construction necessary for sustainability.

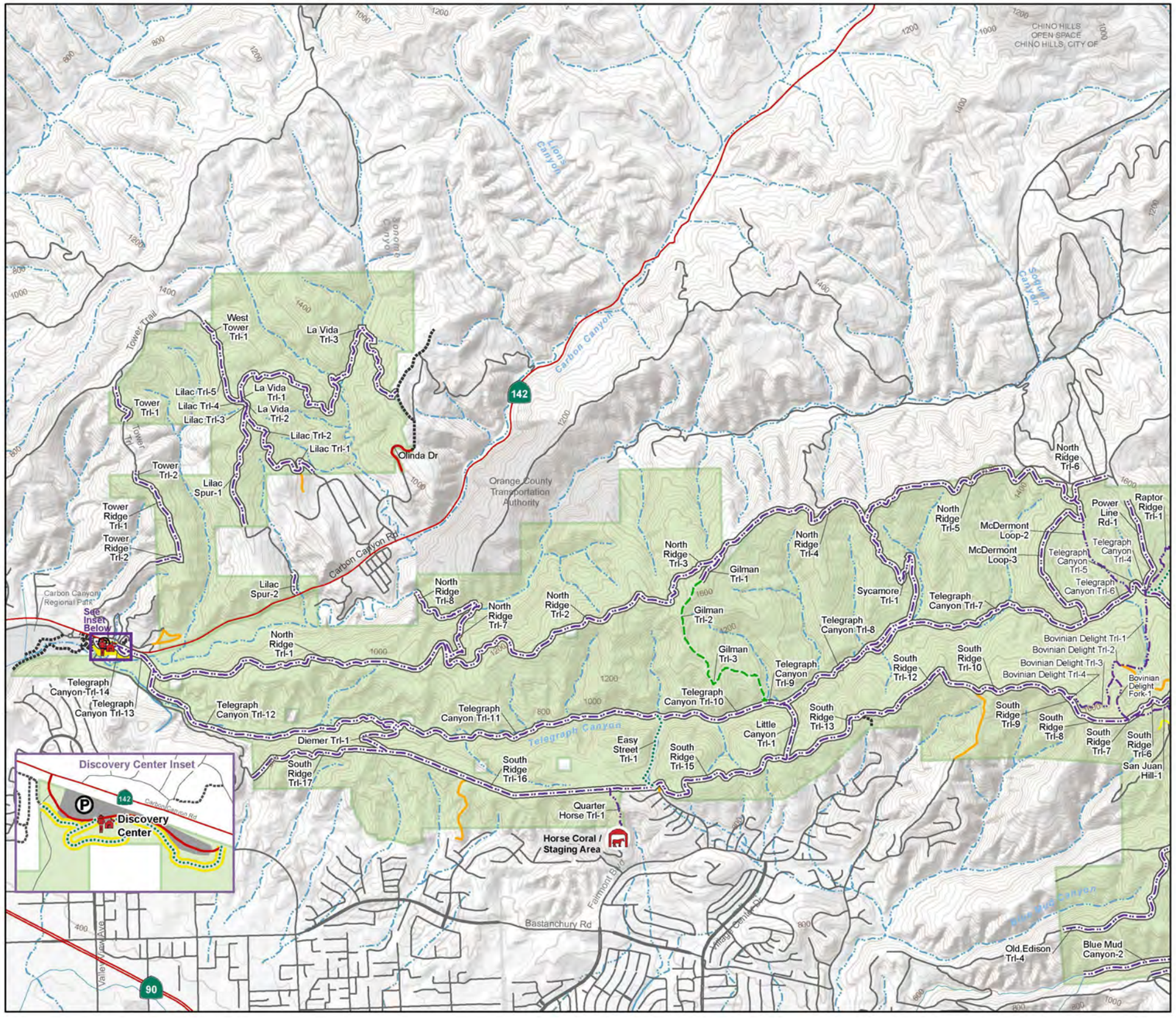
DC-3, NORTH RIDGE TRAIL - 1
Issue: Trail closed due to landslide/slope failure. Road not necessary because vehicle access can be maintained via the Telegraph Canyon Trail.
Recommendation: Convert the road segment to a trail and install appropriate erosion control devises.

DC - 4, TELEGRAPH CANYON TRAIL, CORRIDOR
Issue: Trail parallels Telegraph Creek and is frequently inundated and washed out in places. This trail is a controlled access road that crosses Telegraph Creek in multiple locations. Crossing the creek in a vehicle is often difficult and causes streambank erosion.
Recommendation: Minor reroutes and re-engineer where needed and feasible to improve sustainability and maintain vehicle access.

DC-5, LILAC SPUR - 2
Issue: Trail provides no useful recreational connections and access to the trail is potentially dangerous due to lack of parking and the busy Carbon Canyon Road that is used to access it.
Recommendation: Convert the trail to "Admin Access Only" and closed to public use.

DC-6, So. California Gas Utility Easement
Issue: The City of Yorba Linda has future plans to develop and maintain a trail as part of a future housing development. This trail will connect to an existing road on state park property for which Southern California Gas has a utility easement. This road is not currently recognized as an official (system) trail route by state parks. This road would provide an important link to connect Yorba Linda's new trail to other state park trail opportunities.
Recommendation: Reconstruct/Reengineer road as necessary for sustainability and designate road an official (system) multiuse trail route.

Map: Discovery Center/Telegraph Canyon Area Existing Roads and Trails



Existing Roads and Trails

Discovery Center / Telegraph Canyon

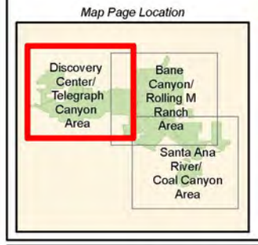
Current Road & Trail Network by Category and Use Designation

- Hike
- Hike and Horse
- Hike, Bike and Horse
- Use Not Determined
- State Park Rd, Hike, Bike and Horse
- Paved Park Road
- Accessible Trail
- Non-system Route
- Highway
- Not Determined
- Local Road
- Other Agency Trail

Reference Features

- Other Public Lands
- Other Stream Type
- Artificial Channel
- Intermittent Stream
- Perennial Stream, River
- Museum/Visitor Center

Map Page Location



Scale
1:30,051
1 inch = 2,504 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

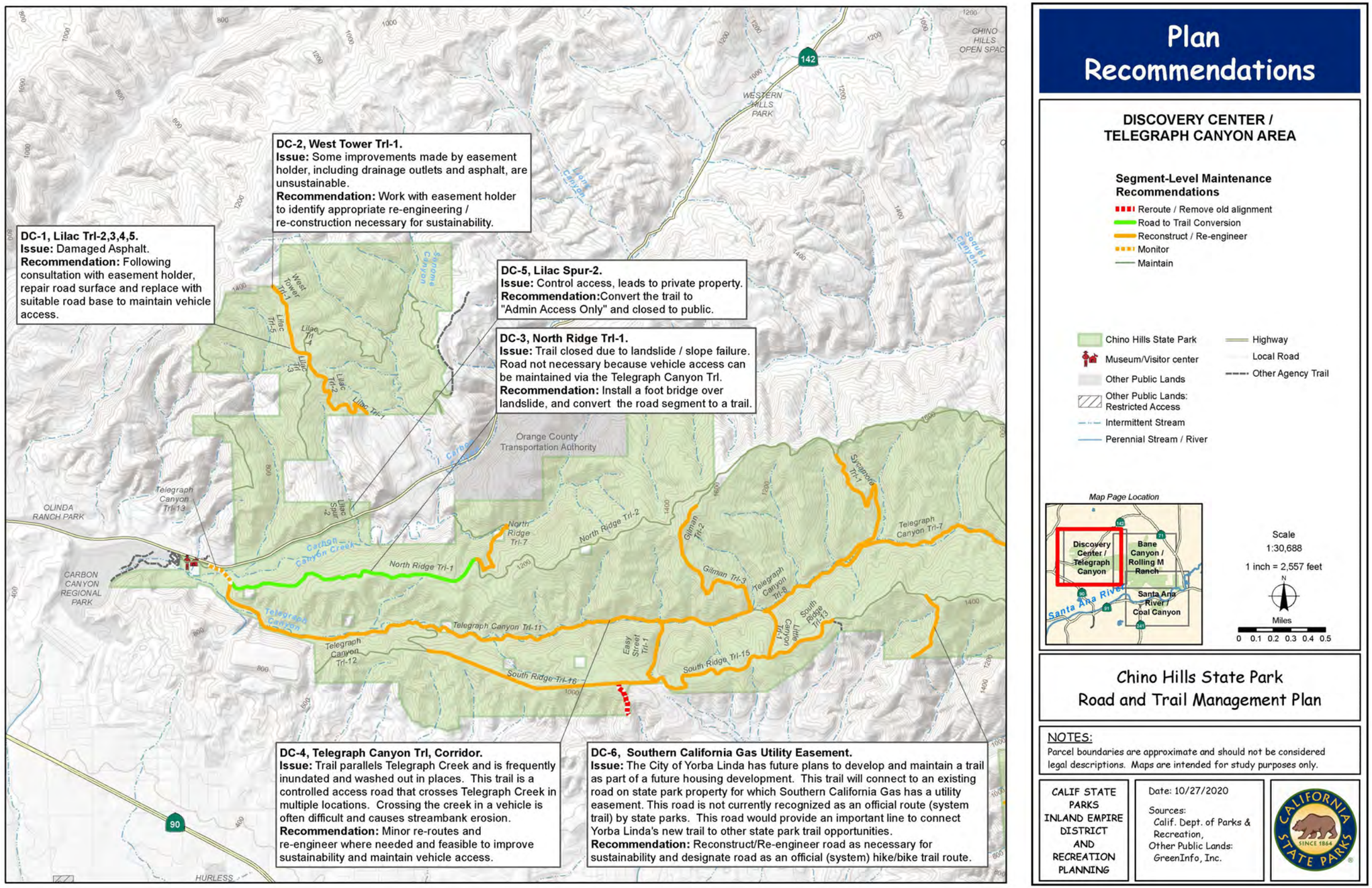
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

INLAND EMPIRE DISTRICT AND FACILITIES MANAGEMENT DIVISION

Date: 7/1/2020

Sources:
Calif. Dept. of Parks & Recreation
Other Public Lands
GreenInfo, Inc.

Map: Discovery Center/Telegraph Canyon Area Planning Recommendation



Plan Recommendations

DISCOVERY CENTER / TELEGRAPH CANYON AREA

Segment-Level Maintenance Recommendations

- Reroute / Remove old alignment
- Road to Trail Conversion
- Reconstruct / Re-engineer
- Monitor
- Maintain

- Chino Hills State Park
- Museum/Visitor center
- Other Public Lands
- Other Public Lands: Restricted Access
- Intermittent Stream
- Perennial Stream / River
- Highway
- Local Road
- Other Agency Trail

Map Page Location

Scale
1:30,688
1 inch = 2,557 feet
N
Miles
0 0.1 0.2 0.3 0.4 0.5

Chino Hills State Park Road and Trail Management Plan

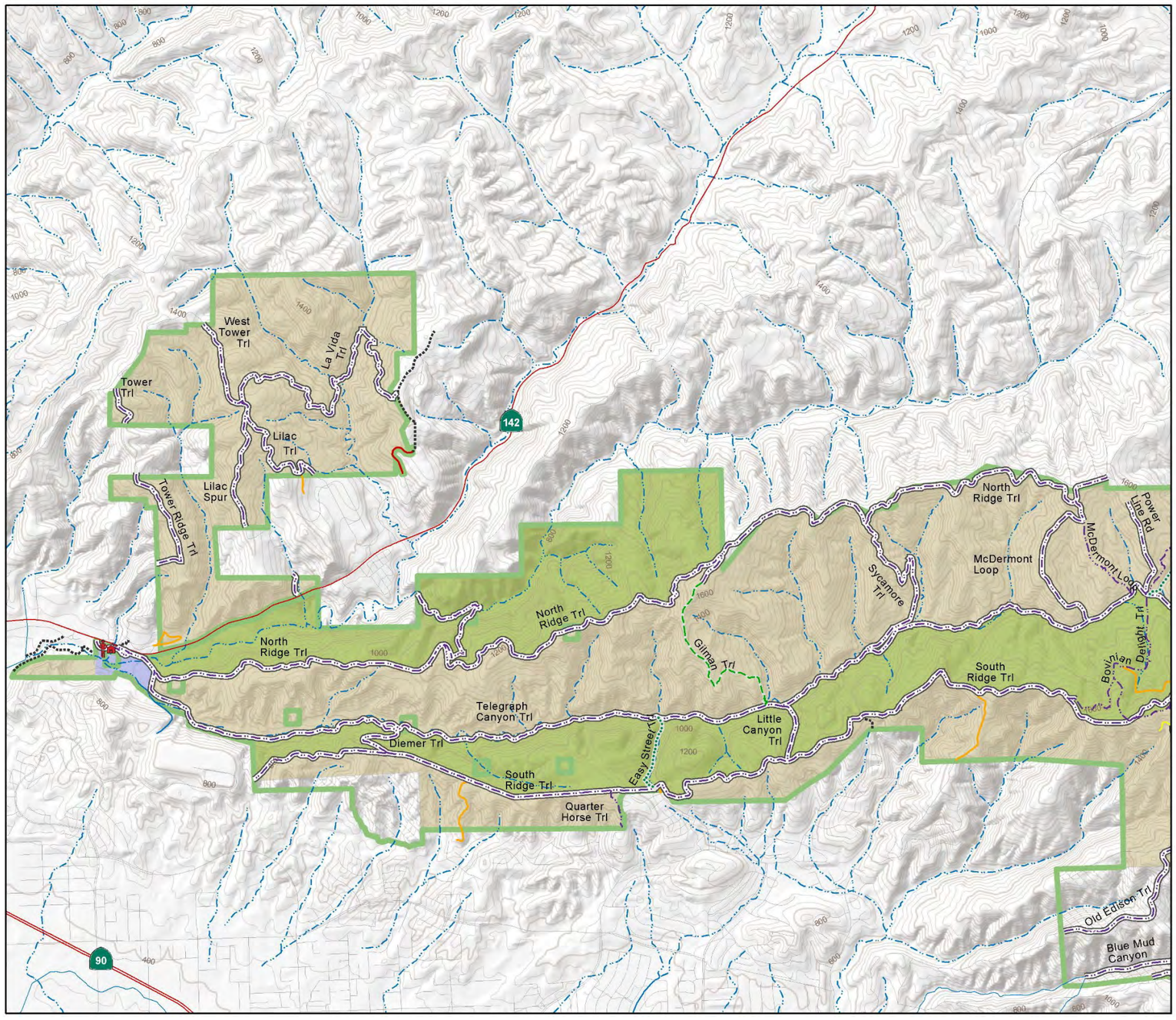
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

CALIF STATE PARKS INLAND EMPIRE DISTRICT AND RECREATION PLANNING

Date: 10/27/2020

Sources:
Calif. Dept. of Parks & Recreation,
Other Public Lands:
GreenInfo, Inc.

Map: Discovery Center/Telegraph Canyon Area Visitor Management Zones



Visitor Management

Discovery Center / Telegraph Canyon

Current Road & Trail Network by Category and Use Designation

- State Park Trail, Hike
- State Park Trail, Hike and Horse
- State Park Trail, Hike, Bike and Horse
- State Park Trail, Use Not Determined
- State Park Rd, Hike, Bike and Horse
- Paved Park Road
- Non-system Route

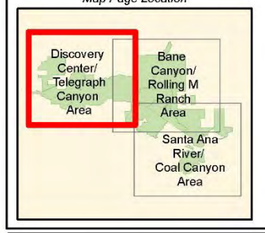
Management Zones, General Plan, 1999

- Core Habitat Zone
- Historic Zone
- Natural Open Space Zone
- Recreation and Operations Zone
- Unclassified new parcel acquired since General Plan

Reference Features

- State Park Boundaries
- Park Property
- Museum/Visitor Center
- Other Hydro Feature
- Artificial Channel
- Intermittent Stream
- Perennial Stream, River
- Highway
- Not Determined
- Local Road
- Other Agency Trail

Map Page Location



Scale
1:30,051
1 inch = 2,504 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

INLAND EMPIRE DISTRICT AND FACILITIES MANAGEMENT DIVISION

Date: 5/28/2019

Sources:
Calif. Dept. of Parks & Recreation
Other Public Lands
GreenInfo, Inc.

Bane Canyon/Rolling M Ranch Area (RMR)

Significant natural resources: Bane, Aliso, and Water Canyons all contain riparian nesting habitat for the endangered least Bell's vireo as well as for other declining and sensitive bird species. Many protected and sensitive raptors live, forage, and/or migrate through this area of the park including but not limited to white tailed kites, golden eagles, northern harriers, and Cooper's hawks. Some of the other sensitive species found in this area include western spadefoot toad, loggerhead shrike, grasshopper sparrow, arroyo chub, California black walnut, Plummer's mariposa lily, pallid bat, and western red bat.

Significant cultural resources: The Bane Canyon/Rolling M Ranch area is the most culturally dense area of the park. Eight pre-contact sites have been recorded in this area, as well as multiple isolated artifacts. Each recorded site is within 20 meters of a trail; one is bisected. The historic Rolling M Ranch, at the heart of this area, includes a barn, house, loading chute, windmills, and feeders, among other ranching features.

Significant paleontological resources: There is the potential for paleontological resources to occur within all areas of Chino Hills State Park.

Existing area trail mileage: There are 50.8 miles of system trails, including 2.9 miles of hiking trails, 1.6 miles of hiking and equestrian trails, and 46.3 miles of hiking, biking, and equestrian trails ("multi-use"), as well as almost 3.7 miles of non-system trails.

RECOMMENDATIONS:

RMR - 1, HILLS FOR EVERYONE TRAIL - 1
Issue: The majority of the trail alignment is non-sustainable and within sensitive habitat. Annual wash-outs have resulted in the loss of several important tree species.
Recommendation: Reroute the trail out of the sensitive habitat and to a sustainable alignment. Rehabilitate the alignment of the old trail.

RMR - 2, SIDEWINDER TRAIL - 6
Issue: Trail along creek can be washed out and is unsustainable.
Recommendation: Reroute trail higher up the hillslope and rehabilitate the habitat of the old alignment.

RMR - 3, SIDEWINDER TRAIL - 3
Issue: Trail decommissioned due to landslide. Alternate route already available.
Recommendation: Remove remaining portions of trail and rehabilitate habitat.

RMR - 4, BANE CANYON ENTRANCE ROAD AREA
Issue: Road has moderate to severe erosion undermining shoulders and guardrails. Facilities along road are also sustaining damage due to erosion. Septic tank is insufficient for the amount of visitor use.
Recommendation: Make improvements to road as feasible to improve sustainability. Replace and/or improve septic system to adequate size.

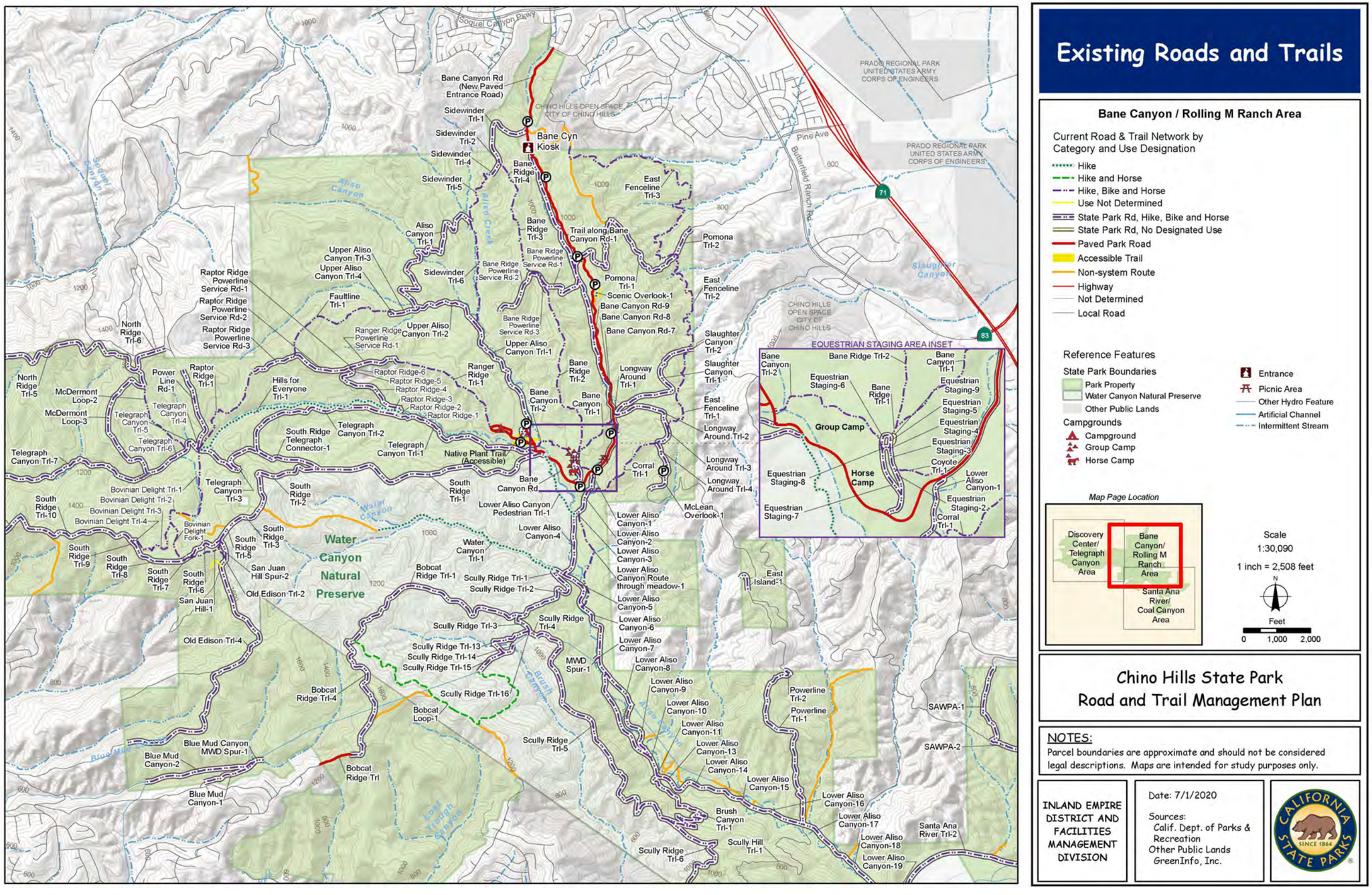
RMR - 5, ROLLING M HORSE AND GROUP CAMP AREA
Issue: Existing visitor facilities at Rolling M Horse and Group Camp have exceeded their useful life and are inadequate for current demand.
Recommendation: Install vault toilets in lieu of porta-potties; install shade ramadas; replace existing camp facilities that have exceeded their useful life. Realign entrance to horse camp to better accommodate trailers. Any new infrastructure will be designed to complement and maintain the Historic Zone (see CHSP General Plan, page 51).

RMR - 6, BOBCAT LOOP CORRIDOR
Issue: This route is unsustainable with severe erosion impacting resources in the park's natural preserve.
Recommendation: Remove the trail and rehabilitate the habitat to a natural condition.

RMR - 7, SCULLY RIDGE TRAIL - 5
Issue: This ridgetop trail is severely damaged from wild fire and subsequent rainfall but is necessary for fire crew access.
Recommendation: Re-engineer and reconstruct as feasible to improve sustainability.

RMR – 8, BLUE MUD CANYON–1, 2, & Spur
Issue: The trails provide no recreational trail connections but are necessary for easement holder access.
Recommendation: Designate trails as "Admin Access Only" and closed to public use.

Map: Bane Canyon/Rolling M Ranch Area Existing Roads and Trails



Existing Roads and Trails

Bane Canyon / Rolling M Ranch Area

Current Road & Trail Network by Category and Use Designation

- Hike
- Hike and Horse
- Hike, Bike and Horse
- Use Not Determined
- State Park Rd, Hike, Bike and Horse
- State Park Rd, No Designated Use
- Paved Park Road
- Accessible Trail
- Non-system Route
- Highway
- Not Determined
- Local Road

Reference Features

State Park Boundaries
- Park Property
- Water Canyon Natural Preserve
- Other Public Lands

Campgrounds
- Campground
- Group Camp
- Horse Camp

- Entrance
- Picnic Area
- Other Hydro Feature
- Artificial Channel
- Intermittent Stream

Map Page Location

Scale
1:30,090
1 inch = 2,508 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

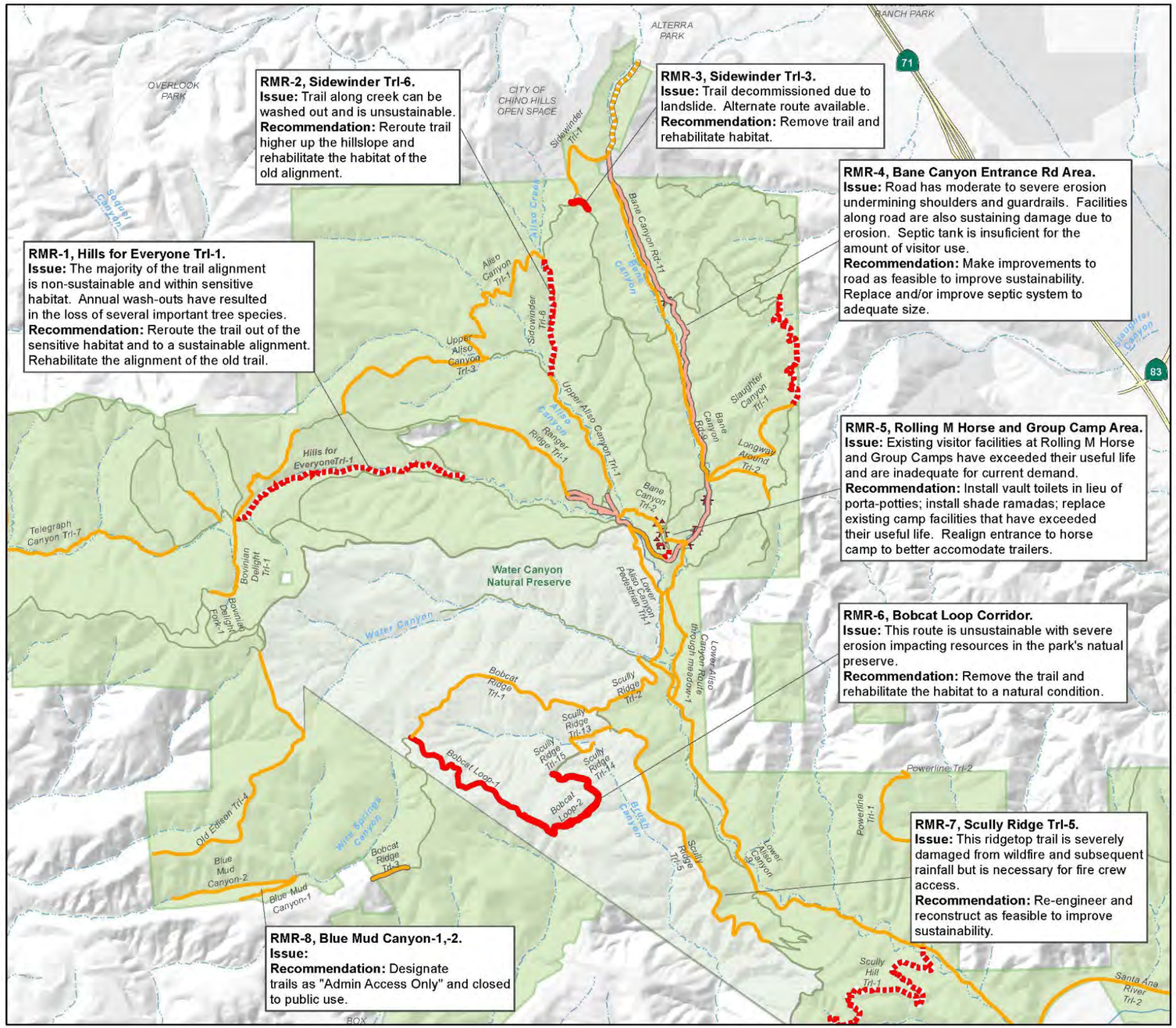
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

INLAND EMPIRE DISTRICT AND FACILITIES MANAGEMENT DIVISION

Date: 7/1/2020

Sources:
Calif. Dept. of Parks & Recreation
Other Public Lands
GreenInfo, Inc.

Map: Bane Canyon/Rolling M Ranch Area Planning Recommendations



Plan Recommendations

BANE CANYON / ROLLING M RANCH AREA

Segment-Level Maintenance Recommendations

- Remove
- Reroute/ Remove old alignment
- Reconstruct/ Re-engineer
- Maintain

- Chino Hills State Park
- Water Canyon Natural Preserve
- Developed Camp Area
- Group Camp Area
- Horse Camp Area
- Other Public Lands
- Intermittent Stream
- Perennial Stream / River
- Highway
- Local Roads
- Unknown

Map Page Location

Scale
1:30,688
1 inch = 2,557 feet
N
Miles
0 0.1 0.2 0.3 0.4 0.5

Chino Hills State Park Road and Trail Management Plan

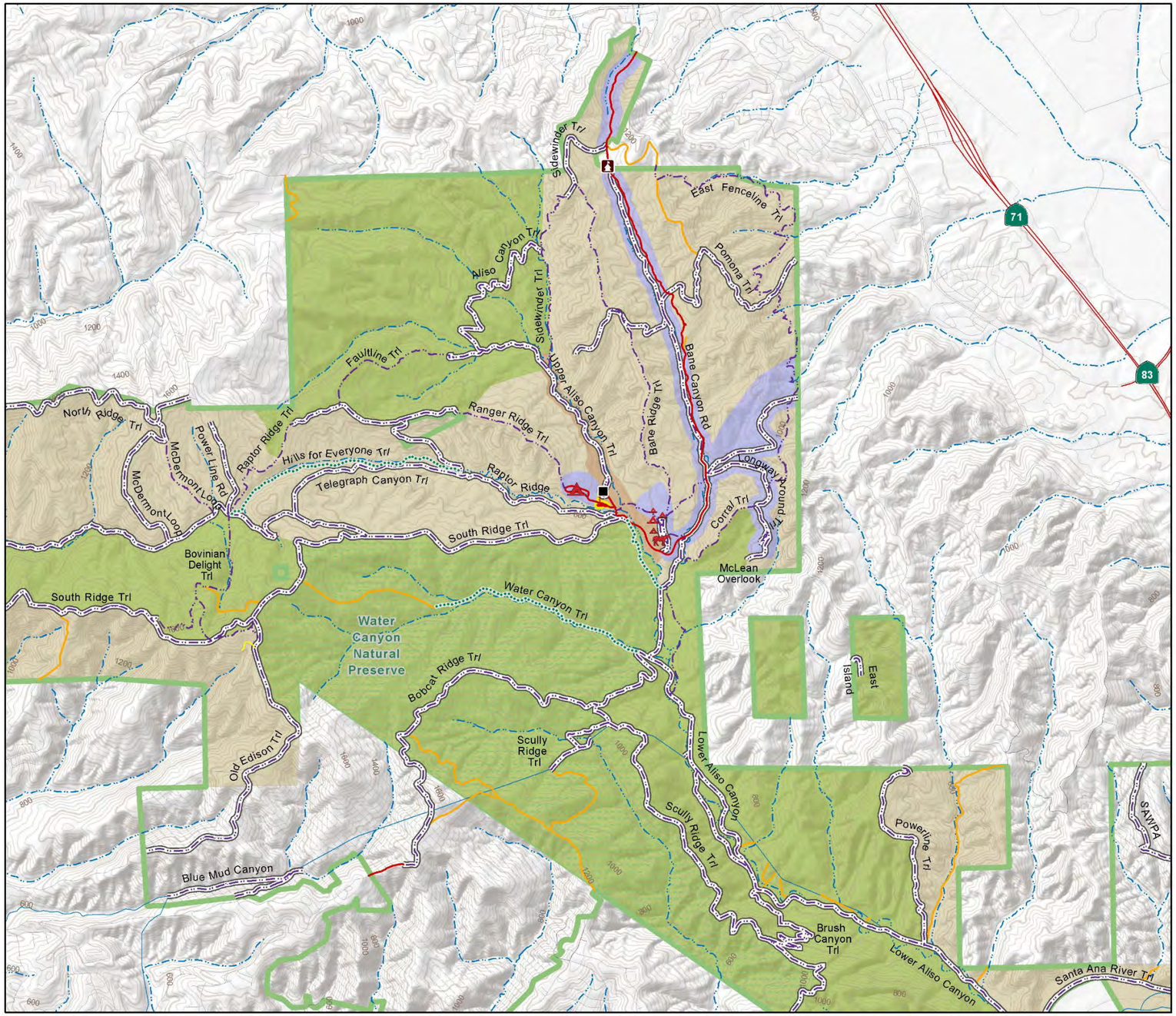
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

CALIF STATE PARKS INLAND EMPIRE DISTRICT & RECREATION PLANNING

Date: 7/1/2020

Sources:
Calif. Dept. of Parks & Recreation,
Other Public Lands:
GreenInfo, Inc.

Map: Bane Canyon/Rolling M Ranch Area Visitor Management Zones



Visitor Management

Bane Canyon / Rolling M Ranch Area

Current Road & Trail Network by Category and Use Designation

- State Park Trail, Hike
- State Park Trail, Hike, Bike and Horse
- State Park Trail, Use Not Determined
- Accessible Trail
- State Park Rd, Hike, Bike and Horse
- State Park Rd, No Designated Use
- Paved Park Road
- Non-system Route

Management Zones, General Plan, 1999

- Core Habitat Zone
- Historic Zone
- Natural Open Space Zone
- Recreation and Operations Zone
- Unclassified new parcel acquired since General Plan
- Water Canyon Natural Preserve

Reference Features

- State Park Boundaries
- Park Property
- Campgrounds
- Horse Camp
- Group Camp
- Campground
- Entrance
- Historic Barn
- Other Hydro Feature
- Artificial Channel
- Intermittent Stream
- Highway
- Not Determined
- Local Road

Map Page Location

Scale
1:30,087
1 inch = 2,507 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

INLAND EMPIRE DISTRICT AND FACILITIES MANAGEMENT DIVISION

Date: 5/28/2019

Sources:
Calif. Dept. of Parks & Recreation
Other Public Lands
GreenInfo, Inc.

Santa Ana River/Coal Canyon Area

Significant natural resources: This region of the park is one of its most ecologically sensitive. It is occupied by many sensitive, threatened, and endangered species. The Santa Ana River boasts some of the last remaining natural riparian woodlands left along the largely channelized river. These woodlands provide nesting habitat for the endangered least Bell's vireo as well as many other sensitive and declining bird species. Certain reaches of the river contain the threatened Santa Ana sucker, one of the only native freshwater fish found in southern California. Coal Canyon contains other sensitive, threatened, or endangered species including the coastal California gnatcatcher, coastal cactus wren, orange-throated whiptail, chaparral nolina, Braunton's milk vetch, and a portion of one of only four populations of Tecate cypress in the United States. The canyon is also an essential part of the Puente-Chino Hills Wildlife Corridor, providing the last viable biological link between the Santa Ana Mountains and the Puente – Chino Hills.

Significant cultural resources: No archaeological resources have been identified in this section of the park.

Significant paleontological resources: There is the potential for paleontological resources such as fossils and rock-embedded sea shell fossils to occur within all areas of CHSP.

Existing area trail mileage: There are 18.3 miles of trails, including 16.44 miles of hiking, biking, and equestrian trails ("multi-use") and almost 1.8 miles of non-system trails.

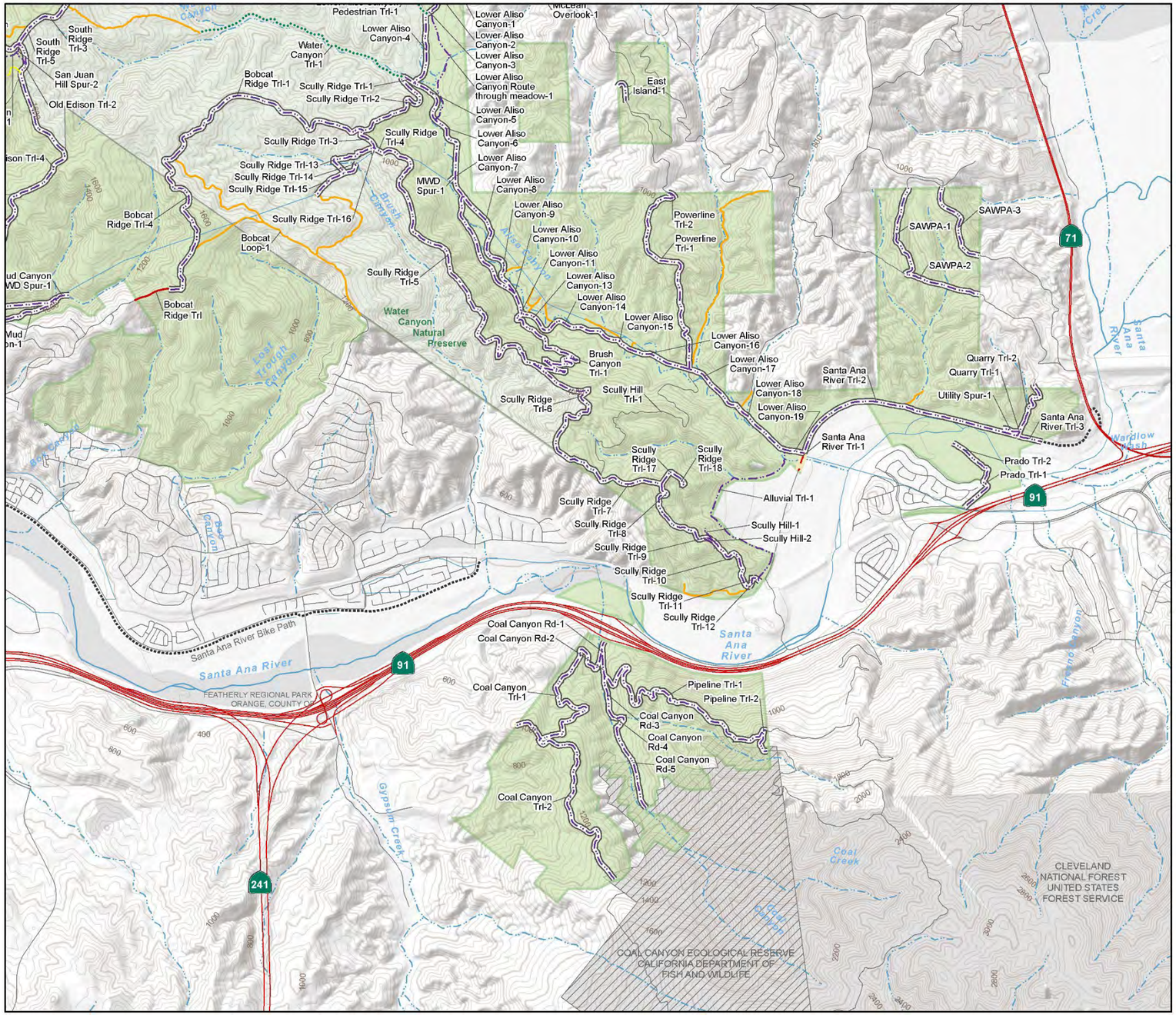
RECOMMENDATIONS:

SAR - 1, COAL CANYON SPUR TO IRVINE RANCH OPEN SPACE - 1
Issue: Road ends at a remote area of Irvine Ranch Open Space, does not enhance recreational opportunities, or provide for management access, but does provide access for illegal OHV use.
Recommendation: Remove road and rehabilitate to natural condition subject to approval and agreement with easement holders.

SAR - 2, SANTA ANA RIVER TRAIL CORRIDOR
Issue: Desire to incorporate the park's existing Santa Ana River Trail with the regional trail managed by the County of Riverside.
Recommendation: Continue partnership with the County of Riverside to develop the Santa Ana River Trail through the park.

SAR - 3, PRADO ROAD STAGING AREA
Issue: Lacks visitor facilities at this entrance.
Recommendation: Need new trailhead parking and interpretive/visitor signage.

Map: Santa Ana River/Coal Canyon Area Existing Conditions



Existing Roads and Trails

Santa Ana River / Coal Canyon Area

Current Road & Trail Network by Category and Use Designation

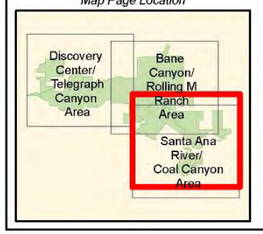
- Hike
- Hike, Bike and Horse
- Use Not Determined
- State Park Rd, Hike, Bike and Horse
- Unpaved trail on roadbed impassable to vehicles
- Paved Park Road
- Non-system Route
- Highway
- Not Determined
- Local Road
- Other Agency Trail

Reference Features

State Park Boundaries
- Park Property
- Water Canyon Natural Preserve
- Other Public Lands
- Other Public Lands: Restricted Access

- Other Hydro Feature
- Artificial Channel
- Intermittent Stream
- Perennial Stream, River

Map Page Location



Scale
1:30,140
1 inch = 2,512 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

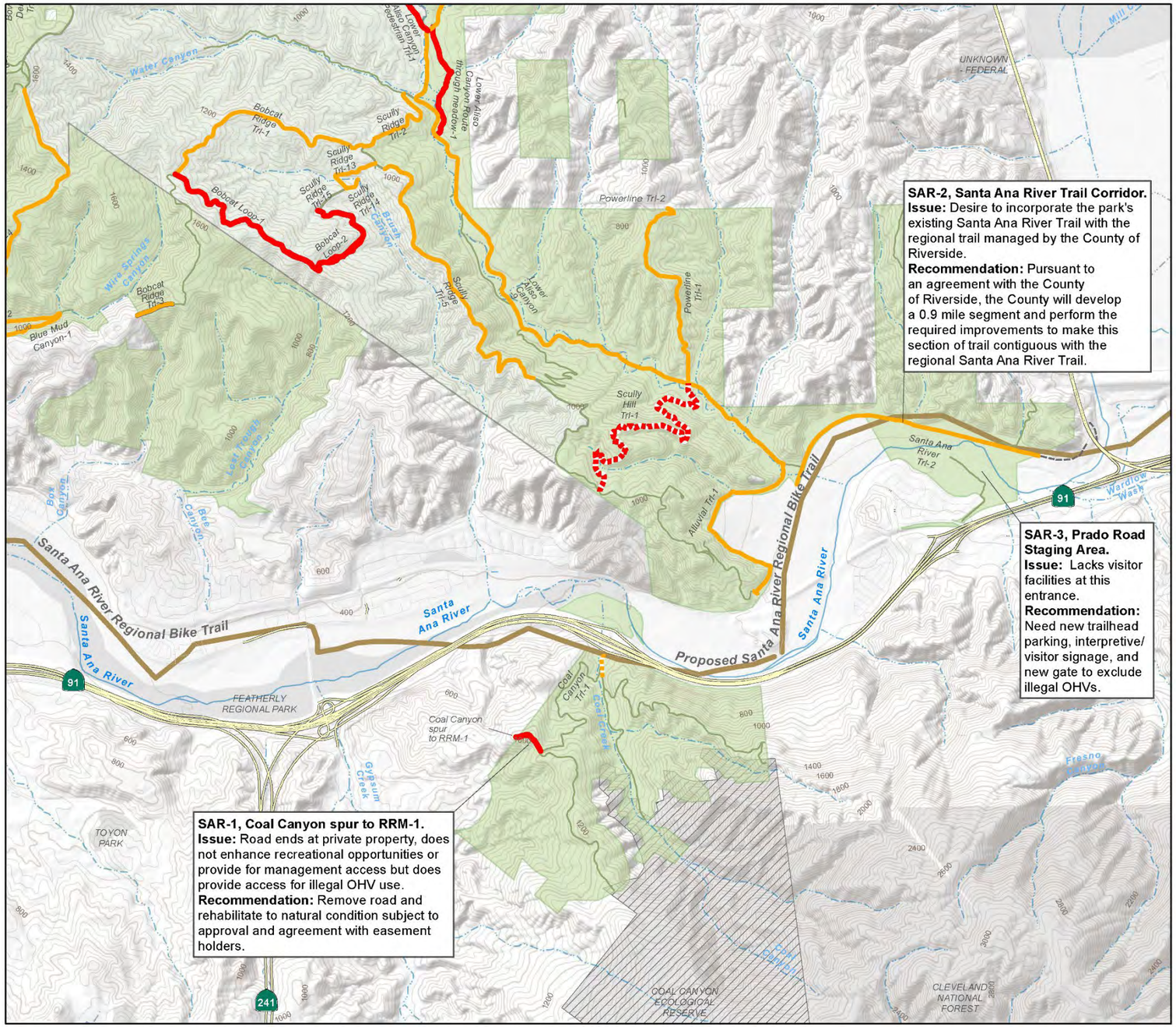
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

INLAND EMPIRE DISTRICT AND FACILITIES MANAGEMENT DIVISION

Date: 5/24/2019

Sources:
Calif. Dept. of Parks & Recreation
Other Public Lands
GreenInfo, Inc.

Map: Santa Ana River/Coal Canyon Area Planning Recommendations



Plan Recommendations

SANTA ANA RIVER / COAL CANYON AREA

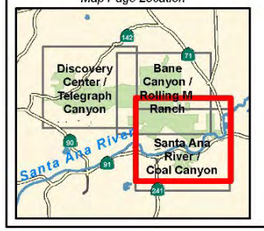
Segment-Level Maintenance Recommendations

- Remove
- Reroute / Remove old alignment
- Reconstruct / Re-engineer
- Monitor

Santa Ana River Regional Bike Trail (Generalized Alignment, Includes existing and proposed trail)

- Chino Hills State Park
- Water Canyon Natural Preserve
- Other Public Lands
- Restricted Access
- Intermittent Stream
- Perennial Stream / River
- Highway
- Local Roads
- Other Agency Trail
- Unknown

Map Page Location



Scale 1:30,688
1 inch = 2,557 feet
Miles
0 0.1 0.2 0.3 0.4 0.5

Chino Hills State Park Road and Trail Management Plan

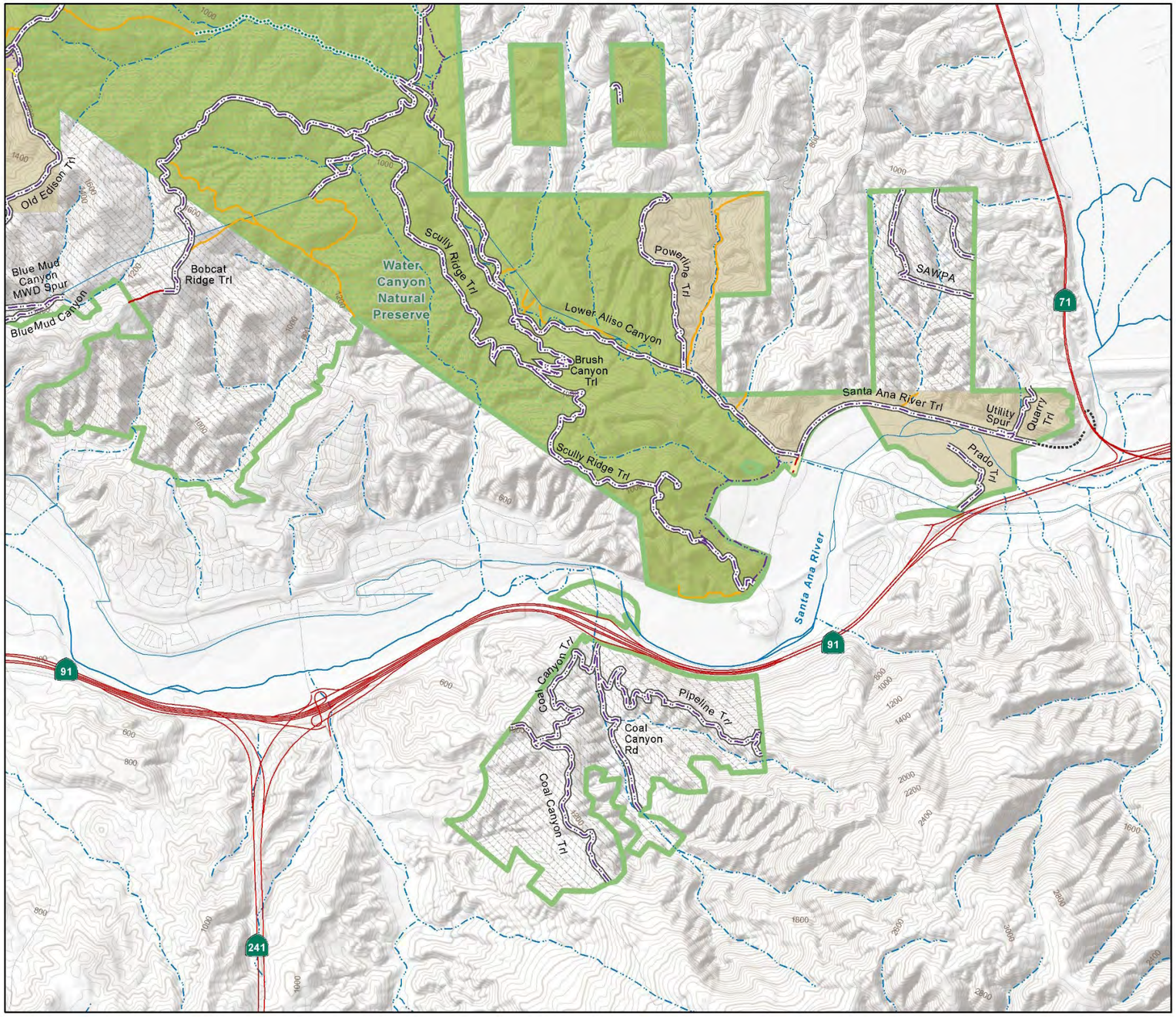
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

CALIF STATE PARKS INLAND DISTRICT & FACILITIES MANAGEMENT DIVISION

Date: 5/24/2019

Sources:
Calif. Dept. of Parks & Recreation,
Other Public Lands:
GreenInfo, Inc.

Map: Santa Ana River/Coal Canyon Area Visitor Management Zone



Visitor Management

Santa Ana River / Coal Canyon

Current Road & Trail Network by Category and Use Designation

- State Park Trail, Hike
- State Park Trail, Hike, Bike and Horse
- State Park Trail, Use Not Determined
- State Park Rd, Hike, Bike and Horse
- Unpaved trail on roadbed impassable to vehicles
- Paved Park Road
- Non-system Route

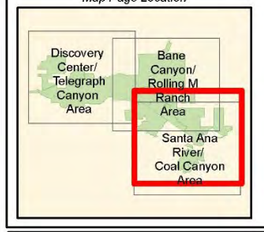
Management Zones, General Plan, 1999

- Core Habitat Zone
- Historic Zone
- Natural Open Space Zone
- Recreation and Operations Zone
- Unclassified new parcel acquired since General Plan
- Water Canyon Natural Preserve

Reference Features

State Park Boundaries
- Park Property
- Other Hydro Feature
- Artificial Channel
- Intermittent Stream
- Perennial Stream, River
- Highway
- Not Determined
- Local Road
- Other Agency Trail

Map Page Location



Scale
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1 inch = 2,512 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

INLAND EMPIRE DISTRICT AND FACILITIES MANAGEMENT DIVISION

Date: 5/28/2019

Sources:
Calif. Dept. of Parks & Recreation
Other Public Lands
GreenInfo, Inc.

Section 7 ENVIRONMENTAL DOCUMENT

DRAFT

PROGRAMMATIC INITIAL STUDY / NEGATIVE DECLARATION

CHINO HILLS STATE PARK
ROAD AND TRAIL MANAGEMENT PLAN

October 2020

State of California
California State Parks

NEGATIVE DECLARATION

PROJECT: **CHINO HILLS STATE PARK ROAD & TRAIL MANAGEMENT PLAN**

LEAD AGENCY: California State Parks

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

www.parks.ca.gov/ChinoHillsRTMP

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study/ Negative Declaration may be addressed to:

California State Parks Planning Division
Attn: Jason Spann
1725 23rd Street, Ste. 200
Sacramento, CA 95816
trails@parks.ca.gov

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

Kelly Elliott
District Superintendent

10/13/20
Date

Enrique Arroyo
Chino Sector Manager

10/13/2020
Date

7.1. Introduction

7.1.1. Introduction and Regulatory Guidance

California Department of Parks and Recreation (Department) has prepared this Initial Study/Negative Declaration (IS/ND) as Programmatic document to evaluate the potential environmental effects resulting from the adoption and implementation of the proposed Road and Trail Management Plan (RTMP) Project at Chino Hills State Park (CHSP), in the East Los Angeles Basin of the Southern California metropolitan complex.

A Programmatic IS/ND is prepared on a series of actions that can be characterized as one large project and are related either geographically, as logical parts in the chain of contemplated actions, in connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program…." (CEQA Guidelines Section 15168). As the proposed project would implement a management plan for roads and trails within the park unit, it meets the intent in that it consists of logical parts in a chain of actions.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section (§) 21000 et seq., and the State CEQA Guidelines, California Code of Regulations (CCR) § 15000 et seq.

An IS 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) or a Mitigated Negative Declaration (MND) must be prepared, in accordance with CEQA Guidelines 15064(a) and 15604(f). However, if the lead agency determines that there is no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, an ND may be prepared. 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 or MND need not be prepared. This IS/ND conforms to the content requirements under CEQA Guidelines § 15071.[1]

7.1.2. 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 the Department. The contact person for the lead agency regarding specific project information is:

[1] California Natural Resources Agency, 2019, CEQA Statute and Guidelines, available online at https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2019_CEQA_Statutes_and_Guidelines.pdf, accessed March 31, 2020.

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Questions or comments regarding this IS/ND should be submitted to:

California Department of Parks and Recreation
Recreation Planning Section
Chino Hills State Park RTMP
1725 23rd Street, Suite 200
Sacramento, CA 95816
trails@parks.ca.gov

Submissions must be in writing and postmarked or received by email no later than November 30, 2020. Email submissions must include full name and address. All comments will be included in the final environmental document for this project and become part of the public record.

7.1.3. Purpose and Document Organization

The purpose of this document is to evaluate the potential environmental effects of the proposed RTMP Project at CHSP, which provides specific guidance and direction for implementing some of the goals and objectives of the park's approved General Plan. No mitigation measures were necessary or incorporated to eliminate 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, project objectives, and the Standard Project Requirements necessary to reduce impacts to less than significant.
- **Chapter 3: Environmental Checklist.** This chapter provides the summary project information and determination of impacts statement, based on Appendix G of the CEQA Guidelines.
- **Chapter 4: Environmental Setting and Impact Analysis.** 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 Checklist (i.e., IS). These issue areas include:
  Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, Wildfire, and Mandatory Findings of Significance.

- **Chapter 5: Mandatory Findings of Significance.** This chapter identifies and summarizes the overall significance to natural and cultural resources of any potential impacts, cumulative impacts, and/or impacts to humans, as identified in the IS.
- **Chapter 6: Organizations and Persons Consulted.** This chapter provides a list of those people involved in the preparation of this document.

7.1.4. Summary of Findings

Chapters 3 and 4 of this document contains the Environmental Checklist component of the IS, including identification of the environmental setting and incorporation of the impact analysis 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 RTMP would result in less-than-significant impacts for the following issues: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.

Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that the proposed project would have a significant effect on the environment. In accordance with § 15063(b)(2) of the CEQA Guidelines, a lead agency shall prepare an ND if there is no substantial evidence that the project or any of its aspects may cause a significant effect on the environment.

7.2. Project Overview

The IS/ND has been prepared by the Department to evaluate the potential environmental effects of the proposed RTMP Project at CHSP, which lies within the densely populated urban communities of the East Los Angeles Basin in the Southern California metropolitan complex. The proposed project would publish a management plan for roads and trails within the park unit.

7.2.1. Project Location

CHSP is situated in the counties of Orange, Riverside, and San Bernardino. Nearby transportation corridors include the Riverside Freeway (State Highway 91), which traverses the southern part of the park, State Highway 71, which passes to the east, and Carbon Canyon Road (State Highway 142), which crosses through the northwestern portion of the park. CHSP is bordered on the northeast by the City of Chino Hills, on the south by the City of Yorba Linda, on the west by the City of Brea, and is close to the communities of Chino, Olinda Village, Sleepy Hollow, Anaheim, Diamond Bar, and Corona. The City of Riverside is approximately 16 miles east of the park along Highway 91.

As of 2018, CHSP encompassed approximately 14,173 acres, most of which are made up of rolling hills separated by steep canyons. CHSP serves as a vital link in the 31-mile-long Puente-Chino Hills Wildlife Corridor, which extends north and west into the Los Angeles Basin from the north end of the Santa Ana Mountains. Nonnative annual grassland is the dominant vegetation type that can be found on site. Other important vegetative components on site include walnut woodlands, coastal sage scrub, coast live oak woodland, sycamore woodland, chaparral, and riparian scrub.

Within the central portion of the park is Water Canyon Natural Preserve, encompassing the entire watershed of Water Canyon Creek. The preserve contains key habitat for many threatened, endangered, and special-status species, making it one of the park's most ecologically sensitive areas. In addition, a one-mile-long section of the Santa Ana River and its associated Fremont cottonwood riparian woodland are within park boundaries. This section of the Santa Ana River is the only remaining natural stretch of the river downstream of Prado Dam in Orange and Riverside Counties.

Cleveland National Forest in the Santa Ana Mountains is just two miles south of Highway 91, adjacent to the park boundary. It is biologically connected to CHSP via the Coal Canyon Biocorridor, which is the only remaining viable biological link between these properties.

The CHSP climate is typically Mediterranean with cool, moist winters and warm, dry summers. Local weather conditions are greatly influenced by wind patterns. Westerly breezes bring in moist marine air, which moderates temperatures and frequently brings in low clouds or fog. Easterly breezes bring in dry desert air, which accentuates temperature extremes (raising maximums and lowering minimums). Occasionally, strong (35 to 50 miles per hour) easterly

winds may blow for several days, sometimes raising temperatures over 100 degrees Fahrenheit. Known as "Santa Anas," these winds produce low humidity and reduce fuel moisture, which, with the high wind speeds, create extreme fire hazard conditions.

Upon entering the park, the transition from the human-made environment to the natural environment is abrupt; housing tracts quickly give way to open hills, and once inside, the sights and sounds of modern intrusions are minimal and one feels many miles away from cities and freeways. The park interior is enveloped by its ridgelines, and one perceives the land as being secluded, protected, and still. Without city noises and visual obtrusions, visitors become aware of the park's subtle movements, natural smells, and variations in microclimate, vegetation, and topography.

Approximately 18 million people live within a one-hour drive of CHSP.[2] The proximity of the park to urban populations and an 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. The park contains 88 miles of system ("official") trail routes. 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 campground offers comfortable and appealing sites suitable for families, small groups, and equestrians. Several family picnic sites are located inside the park.

7.2.2. Background and Need for the Project

California PRC § 5019.53 provides directive on the use and management of trails in a state park, "…to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of ecological regions of California…." In addition, improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Furthermore, improvements may be undertaken to provide for recreational activities, so long as those improvements involve no major modification of lands, forests, or waters.[3]

Roads and trails at CHSP provide park visitors the primary means to access park features and facilities. They also help the Department fulfill its mission by meeting the recreational needs of the public. Properly sited, designed, constructed, maintained, and managed roads and trails can provide quality recreation while also protecting sensitive natural and cultural resources. Frequently in the State Park System, a park's trail system has evolved from trails and unpaved roads that were on the property when it was acquired. They were constructed to meet the

[2] U.S. Economic Development Administration, 2019, StatsAmerica, available online at http://www.statsamerica.org/radius/big.aspx, accessed September 23, 2020.

[3] California Legislative Information, 2017, PRC 5019.53, available online at http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5080.42&lawCode=PRC, accessed August 4, 2020.

needs of the original property owners, and seldom adequately serve the needs of the park unit or meet trail standards currently identified in the Department's Trails Handbook (2019). Prior to the Department's formalized trails training program, trails added during the early years of many state park units were often improperly sited and poorly designed and constructed. Lack of adequate maintenance has often been an issue. Additionally, these older trails may unnecessarily restrict accessibility, not meet the recreational needs of today's park users, and/or impact the park's natural or cultural resources.

General Plan

The 1999 CHSP General Plan provided guidelines for development pertaining to all built and maintained facilities for public and park use, including such facilities as roads, trails, campgrounds, picnic areas, utilities, and buildings. For roads and trails, the General Plan stated that the Department, in summary, would:

- Study the feasibility of realigning existing roads to avoid sensitive habitat when and where possible, with an emphasis on riparian areas.
- Develop and implement road maintenance standards in cooperation with utility companies. These standards will be designed to maintain natural drainage patterns, reduce erosion and stream siltation, and minimize road widths and impacts to aquatic habitats.
- Close roads or trails whose conditions are either unsafe or would result in significant impacts to natural or cultural resources, until appropriate repairs are made or conditions change.
- Seek input and cooperation of local jurisdictions, park neighbors, and significant user groups to develop and implement a trails management plan, which would address pedestrian access points, trailhead parking facilities, the trail system and connections to regional trails, trail maintenance, and appropriate recreational uses of trails.

Additionally, specific goals of the 1999 CHSP General Plan were to "preserve historic roads and trails while providing for visitor, Department, and utility company use" as one of its first priorities. Another priority was to "create appropriate pedestrian access points to meet the needs of both the park and the local jurisdictions that are contiguous to the park boundary."[4]

Road and Trail Management Plan

Developing an RTMP is a dynamic process. It must meet guidelines provided by the unit's general plan, meet specific trail user needs, incorporate and coordinate with regional and State planning documents, adhere to existing laws and regulations, include the public and all potential user groups, use sustainable design to provide user accessibility and protect resources, and provide a mechanism to monitor roads and trails for adaptive management. Developing a comprehensive RTMP ensures that recreational trail opportunities are made available to the fullest potential, while also providing sufficient and often enhanced protection for cultural and natural resources. While maintenance and repairs can be implemented on a trail-by-trail basis, park-wide and regional trail system planning remains the preferred and

[4] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, available online at https://www.parks.ca.gov/pages/21299/files/chino%20hills%20finalgp.pdf, accessed March 30, 2020.

most-effective method for identifying and establishing linked recreational trail corridors. Comprehensive planning also mitigates resource impacts and reduces construction and maintenance costs.

The purpose of the RTMP is to provide a tool to deliver a comprehensive road and trail management program and direct future capital outlay and maintenance funding. While the implementation timeline depends on many factors, such as funding availability and staffing resources, setting priorities within a park unit will facilitate allocation of limited resources and can help place focus for funding and grant raising efforts. See Section 5.5 of the RTMP for more information about how priorities will be established.

The RTMP is consistent with system-wide plans and policies and with the 1999 CHSP General Plan and the 2003 Draft Trail Management Plan and serves as a bridge between the desired conditions stated as goals and guidelines in the General Plan and the measurable implementation actions.

7.2.3. Project Objectives

The RTMP will be used as a long-term guiding document and takes into consideration all the elements of the park's values, goals, and mission. Key components of the RTMP include:

- Maximize visitor use and experiences;
- Reduce potential safety issues;
- Minimize impacts to natural and cultural resources;
- Coordinate with local and regional planning efforts;
- Provide access to surrounding public lands;
- Reduce maintenance and management costs;
- Provide an appropriate range of recreational opportunities and associated infrastructure;
- Limit impacts on the natural environment to a level acceptable under CEQA; and
- Prioritize roads and trails projects.

7.2.4. Project Description

The proposed project will approve the RTMP and actions identified therein. The RTMP conveys goals, actions, and priorities to implement a comprehensive road and trail management program, prioritizes actions, and directs limited funding. It provides management recommendations (for identified roads, trails, and non-system routes) to increase visitor safety and enjoyment, while protecting natural and cultural resources. The final plan includes over-arching recommendations that apply to the park's entire trail system, such as the need to make all new trails and trail alterations accessible to the extent possible, remove all non-system trails, and maintain all trails to the appropriate standard. Refer to Section 6 of the RTMP for a detailed list of parkwide and area-specific recommendations with accompanying maps.

In summary, area-specific recommendations were made for three identified areas of the park: Discovery Center/Telegraph Canyon Area, Bane Canyon/Rolling M Ranch Area, and Santa Ana River/Coal Canyon Area. These recommendations can be found on pages 29 to 49 of the RTMP.

Specific actions covered by this IS/ND are outlined in Section 2.7, along with RTMP actions that may require additional environmental review.

7.2.5. Related Documents

The IS/ND for the proposed project is tiered from the CHSP General Plan (GP) and associated EIRs. "Tiering" refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and NDs on narrower projects; incorporating by reference the general discussions from the broader EIR, and concentrating the later EIR or ND solely on the issues specific to the later project.

Tier 1 Environmental Review

An EIR for the CHSP GP was adopted on February 23, 1999, by the California State Park and Recreation Commission.[5] Additionally, on May 2, 2013, the Department certified a PEIR approving the Road and Trail Change-in-Use Evaluation Process. This process established the method by which designated recreational uses, such as bicycling and horseback riding, can be added or removed to roads and trails in the State Park System.[6]

The GP's EIR and the Change-in-Use Programmatic EIR (PEIR) represent the first-tier environmental review, consistent with PRC Sections 21093 and 21094 and State CEQA Guidelines Sections 15152 (Tiering) and 15168 (PEIR).

Planning Documents

As previously discussed, the current CHSP GP was adopted in 1999. While general plans define an overall framework for a park's future resource stewardship, visitor use and services, and interpretation, more focused planning is required to address the details that a general plan cannot. Management plans are thus used to identify more definitive objectives and methods and/or designs for attaining the goals set in a general plan. The degree of specificity at this second level of planning is shaped by the complexity of the issues being addressed, regulatory and legal requirements, and Department standards.

For example, the CHSP GP called for the preparation of an RTMP to evaluate the park's entire trail system and guide the placement and use of future trails. It established the broad goals of placing emphasis on creating opportunities for visitors to enjoy the diverse topography, biotic communities, and scenic views at the park, as well as possible regional trail connections. The RTMP, on the other hand, defines the specific objectives, methodologies, and designs for how the Department will accomplish these management goals.

[5] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, available online at https://www.parks.ca.gov/pages/21299/files/chino%20hills%20finalgp.pdf, accessed March 30, 2020.

[6] California Department of Parks and Recreation, 2013, Change-In-Use Programmatic EIR, available online at https://www.parks.ca.gov/?page_id=28462, accessed March 30, 2020.

Tier 2 Environmental Review
This IS/ND tiers off the GP's EIR and PEIR with respect to consideration of effects resulting from RTMP recommendations and future changes-in-use on specific trails in CHSP, respectively. Its purpose thus is to evaluate the potential environmental impacts that may result from the adoption and implementation of the RTMP with respect to the analysis in the GP's EIR and Department's PEIR. Additionally, it helps determine what level of additional environmental review, if any, is appropriate, depending on the nature of the action and whether environmental impacts are within the scope of the tiered documents.

7.2.6. Project Actions Covered by and Excluded from the RTMP

Covered Projects – Do Not Require Additional CEQA
The RTMP and this IS/ND cover the following activities that are proposed for specific roads and/or trails within CHSP:

- Closure, decommissioning, and restoration of existing roads and trails to natural conditions; and
- Reconstruction, reengineering, or maintenance within an existing road or trail prism (i.e., encompasses the existing top of the cut bank to the bottom of the fill slope).

For these types of actions, the project manager would develop a project description of the breadth of the work to be performed and it would be evaluated by resource staff. The environmental coordinator would identify appropriate project requirements discussed in Section 2.8 and incorporate these into the project. These would be considered subsequent actions that are within the scope of the analysis in this IS/ND and no additional CEQA document would be required.

Covered Projects – May Require Additional CEQA
Some actions are addressed in the RTMP that may require preparation of additional environmental documentation. These actions include:

- New trails or roads;
- Rerouting trail alignments to correct otherwise unsustainable road and trail conditions where realignment begins and ends at an existing route, though no significant environmental effects are expected;
- Appurtenant facilities (e.g., trailhead, point of access, parking improvements/control, signage) where no additional natural landscape disturbance, substantial increase in capacity, or significant environmental effects would occur; and
- Conversion of existing roads to trails.

Using the RTMP, a project description would be developed describing the breadth of the work in the proposed project and it would be evaluated by resource staff pursuant to CEQA. At a minimum, standard project requirements discussed in Section 2.8 would be identified and incorporated into the project.

Excluded Projects – May Require Additional CEQA
If additional actions are proposed beyond these actions, the Department will further evaluate potential impacts of those measures and prepare any appropriate subsequent environmental documents if such projects do not fit under the tiered approach.

Actions that are outside the scope of the RTMP and IS/ND include:

- Actions that add motorized uses to a road or trail, except as currently allowed for Other Power Driven Mobility Devices (OPDMD) on appropriate routes, consistent with Department policy;
- Actions inconsistent with a project identified within a park unit's general plan, road and trail management plan, or unit classification; and
- Actions which would require mitigation to have less than significant effects on the environment.
- Actions that result in unavoidable significant effects on the environment or potentially mitigatable significant effects that cannot be clearly reduced to less than significant without detailed investigations or mitigation planning.
- Actions which require mitigation to have "less than significant impacts" are also not covered under this IS/ND.

Maintenance and/or reconstruction of existing road and trail facilities are categorically exempt from the provisions of CEQA and do not require the preparation of environmental documents CCR § 15300 et seq.). In accordance with CCR § 15300.4, the Department has not produced a list of activities commonly carried out, which, in most cases, would not be subject to CEQA compliance per CCR § 15060 (c)(2). These activities include road and trail repairs.[7]

7.2.7. Project Requirements

Under CEQA, the Department has the distinction of being considered both a lead and trustee agency. A lead agency is a public agency that has the primary responsibility for carrying out or approving a project and for implementing CEQA. A trustee agency is a State agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California. With this distinction comes the responsibility to ensure that actions that protect both cultural and natural resources are always taken on all projects. Therefore, the Department maintains a list of project requirements (Standard Project Requirements or SPRs) that are included in project design to reduce impacts to resources. SPRs are not mitigation measures. They are *required* elements of the planning and design of any Department project and are intended to eliminate impacts to natural and cultural resources. Mitigation measures are imposed on a designed project to minimize impacts to "less-than-significant levels." SPRs are also distinct from Best Management Practices (BMPs), which are *recommended* policies and procedures for project implementation. Recommended SPRs are listed in Section 2.9.

[7] California Department of Parks and Recreation, 2003, DPR Operations Manual – 0600 Environmental Review, Sacramento: California State Parks.

SPRs are assigned as appropriate to all projects. For example, projects that include ground-disturbing activities, such as constructing trail reroutes, will always include SPRs addressing the inadvertent discovery of archaeological artifacts. However, for a project that entails only brush removal for which ground disturbance would not be necessary, SPRs for ground disturbance would not be applicable and would not be assigned to the project. When evaluating a project, the Department environmental coordinator or others assigned the task of evaluating projects will apply only the relevant SPRs and complete those sections of the project requirements detailing such things as the individual responsible for implementing the requirement and the resource being protected. Not all resource sections have individual SPRs and some of the resource sections are addressed under current SPRs (e.g. tribal consultation is addressed under Cultural). Additionally, some resource sections were not deemed necessary for SPR inclusion.

The Department also makes use of "project-specific requirements." These requirements are developed to address impacts for covered projects that have unique issues. However, these requirements would more typically be generated on projects that are not covered by the SPRs included in this IS/ND, such as may be the case for construction of a new trail.

7.2.8. Applicable Standard Project Requirements

The following SPRs, incorporated as part of the proposed project, are designed to avoid potential impacts associated with construction created by projects identified in the RTMP.

GEN-1: Prior to the start of on-site construction work, a **[insert who]** will consult with the contractor and/or project manager to identify all resources that must be protected.

GEN-2: At the discretion of **[insert who]**, mechanized vehicles on **[insert discipline]** resource sites will be restricted to a short-term use of low-ground pressure vehicles only. All such vehicles must enter and exit the area via the same route of travel (by backing up). Vehicles are strictly prohibited from turning on the surface of site(s).

GEN-3: Prior to the start of on-site construction work, a Department-qualified **[insert discipline]** resources specialist will train construction personnel in **[insert discipline]** resource identification and protection procedures.

GEN-4: Prior to the start of on-site construction activities, the project manager will determine the minimum area required to complete the work and define the boundaries of the work area on the project drawings and/or with flagging or fencing on the ground, as appropriate.

GEN-5: Prior to the start of on-site construction work, and at the discretion of a **[insert who]**, a **[insert who]** will flag and/or fence or otherwise demarcate all **[insert discipline or resource]** with a buffer of **[insert distance]** for avoidance during on-site construction activities. The **[insert who]** will remove the demarcation from around the Environmentally Sensitive Area after project completion.

GEN-6: Prior to any earthmoving activities, a Department-qualified **[insert who]** will approve all subsurface work, including the operation of heavy equipment within **[insert distance]** of the identified Environmentally Sensitive Area.

GEN-7: Prior to the start of **[insert type]** work, **[insert who]** will notify the **[insert office name and who]** or **[insert alternative office name and who]** a minimum of three weeks in advance, unless other arrangements are made, to schedule **[insert discipline or resource]** monitoring.

GEN-8: A Department-qualified **[insert who]** will monitor all ground-disturbing phases of this project at his/her discretion.

GEN-9: The **[insert who]** will post informational signs near project areas with restricted access or closures lasting longer than three months. The signs will include an explanation for and description of the project, and the anticipated completion date.

GEN-10: District staff will employ "Adaptive Use Management" for change-in-use projects as a strategy to avoid significant effects on the environment. It involves a standard procedure of defining: (1) use levels and use and resource conditions as a baseline during the preparation of the Change-in-Use Survey at the start of the process and (2) performance standards for maintaining use at levels that do not result in significant effects on the environment. The performance standards will be tailored to each change-in-use proposal/trail. They will describe desired use and resource conditions necessary to maintain impacts at less-than-significant levels. All performance standards will relate to use conditions or resources that are observable in the field by park staff.

GEN-11: To eliminate an attraction to predators, all food-related trash items, such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers; these containers will be removed at least once every day from the entire project site.

GEN-12: No pets of any kind are permitted on construction sites by contractors or other personnel.

Aesthetics and Views Standard Project Requirements

AES-1: Projects will be designed to incorporate appropriate scenic and aesthetic values of CHSP, including the choices for: specific building sites, scope and scale; building and fencing materials and colors; use of compatible aesthetic treatments on pathways, retaining walls or other ancillary structures; location of and materials used in parking areas, campsites, and picnic areas; and development of appropriate landscaping. The park's scenic and aesthetic values will also consider views into the park from neighboring properties.

AES-2: **[Insert who]** will store all project-related materials outside of the viewshed of **[insert name of street/place/building].**

Air Quality and Greenhouse Gas Emissions Standard Project Requirements
Dust-Control Measures

AQ-1: No more than 1.0 acre of ground disturbance (e.g., earth-moving, grading, excavation, land clearing) will occur in any single day.

AQ-2: Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to minimize fugitive dust emissions if existing ground moisture is insufficient.

AQ-3: Unpaved areas subject to vehicle travel and areas subject to mechanical grading, excavation, land clearing, or other forms of ground disturbance will be stabilized by being kept wet, treated with a chemical dust suppressant, or covered if existing ground moisture is insufficient to minimize fugitive dust emissions. Exposed areas will not be overwatered such that watering results in runoff. Unpaved areas subject to vehicle travel could also be stabilized through the effective application of gravel or through watering.

AQ-4: Suitable vegetative ground cover will be established on exposed, disturbed surfaces through seeding and watering as soon as possible (consistent with Department's Genetic Integrity Policy for revegetation), except for areas intended to be used as roads/trails or for parking or staging. If a vegetated groundcover is not suitable to the area, then this requirement does not apply.

AQ-5: Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.

AQ-6: The speed of construction-related trucks, vehicles, and equipment traveling on unpaved areas will be limited to 15 miles per hour (mph).

AQ-7: All trucks or light equipment hauling soil, sand, or other earthen materials on public roads to or from the site will be covered or required to maintain at least two feet of freeboard.

AQ-8: Off-road construction equipment and on-road haul trucks leaving the park will be cleaned on-site to prevent silt, mud, and dirt from being released or tracked off-site, as dictated by controlling agencies.

AQ-9: All visible dust, silt, or mud tracked-out on to public paved roadways as a result of construction-related activities will be removed at the conclusion of each construction work day, or a minimum of every 24 hours for continuous construction operations.

AQ-10: Excavation, grading, land clearing, other mechanical ground disturbance, and demolition activities will be suspended when sustained winds exceed 15 miles per hour (mph) and/or instantaneous gusts exceed 25 mph or when dust from construction might obscure driver visibility on public roads.

AQ-11: Where a change-in-use results in vehicle travel on unpaved roads and other unpaved services, signs shall be posted limiting vehicle travel to 15 miles per hour.

AQ-12: Construction-related ground-disturbance activities will not be performed in areas identified as "moderately likely to contain naturally occurring asbestos" according to maps and guidance published by the California Geological Survey (CGS), formerly the California Department of Conservation Division of Mines and Geology. This determination would be based on a CGS publication titled *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos* (Churchill and Hill 2000), or whatever more current guidance from CGS exists at the time the change-in-use project is evaluated. Work shall comply with the guidelines of the South Coast Air Quality Management District for conducting work in Naturally Occurring Asbestos (NOA) areas. Any NOA-related guidance provided by the applicable local air district shall also be followed. If a site-specific investigation identifies the presence of NOA, then an Asbestos Dust Control Plan will be developed and implemented in accordance with Section 93105 of the California Health and Safety Code.

AQ-13: New trail or road alignments will not be located in areas identified as "moderately likely to contain naturally occurring asbestos" according to maps and guidance published by the California Geological Survey (CGS), unless a site-specific investigation performed by a Registered Geologist confirms that NOA-containing rock or dirt is not exposed at the surface of the trail. Alternatively, any trail or road alignments that are not located over areas where NOA is exposed at the surface will be covered with an appropriate material, depending on the intended use of the trail that would prevent entrainment of asbestos-containing dust into the air. Possible methods of covering NOA-containing material on the surface include paving and graveling with non-NOA-containing gravel.

Exhaust Emissions Control Measures

AQ-14: Operation of large diesel- or gasoline-powered construction equipment (i.e., greater than 50 horsepower) will not exceed 60 equipment-hours per day, where an equipment-hour is defined as one piece of equipment operating for one hour (daily criteria air pollutants, toxic air contaminants, greenhouse gases).

AQ-15: All diesel- and gasoline-powered equipment will be properly maintained according to manufacturer's specifications, and in compliance with all State and federal emissions requirements. Maintenance records will be available at the construction site for verification.

AQ-16: Whenever possible, removed vegetative material will be either left in place (e.g., for use as mulch) or chipped on site. If approved, an air curtain burner may be used. When pile burning is deemed necessary, a burn permit would be obtained from the local air quality management district and burn piles would be no larger than 10 by 10 by 5 feet and ignited on approved burn days only.

Mobile-Source Emissions-Related Measures

TRAN-3: **[insert who]** will assess parking capacity prior to implementing a proposed change in use. After implementation of the proposed change in use, Department staff will

monitor parking levels as part of the Adaptive Use Management process. If monitoring indicates an exceedance of parking capacity (i.e., increased use of undesignated on-street parking or increased illegal parking due to overflow of parking lot facilities), the **[insert who]** will implement a management response to resolve the parking capacity issue. Measures in the management response may include, but would not be limited to, re-designing parking facilities (including minor parking lot expansions in areas where environmental resources will not be affected), installing parking meters and/or applying time limits, working with local transportation departments to increase nearby off-site parking availability, directing users to other existing lots, and/or working with local transit operators to increase transit to the trail facility. Department personnel will determine which actions are feasible at the park unit.

TRAN-4: Prior to initiating any construction activities with the potential to significantly or permanently disrupt traffic flows, the construction manager will have a Construction Traffic Management Plan (CTMP), prepared by a qualified professional that will provide measures to reduce potential traffic obstruction or service level degradation at affected traffic facilities. The scope of the CTMP will depend on the type, intensity, and duration of the specific construction activities associated with the project. Measures included in the CTMP could include (but are not limited to) construction signage, flaggers for lane closures, construction schedule, and/or delivery schedule restrictions, etc. The CTMP will be submitted to the local agency having jurisdiction over the affected traffic facilities.

General Biological Resource Standard Project Requirements

BIO-1: All construction, improvement, modification, or decommissioning of road/trails, and conversion of roads-to-trails, will be consistent with Department Best Management Practices (BMPs), Departmental Operations Manuals (DOMs), Vegetation Management Guidelines, and Trail Handbook guidelines.

BIO-2: Construction activities that could spread invasive plants/animals, noxious weeds, or pathogens, such as sudden oak death, will be subject to the following actions:

- Construction operators will ensure that clothing, footwear, and equipment used during construction is free of soil, seeds, vegetative matter, or other debris or seed-bearing material before entering the park or from an area with known infestations of invasive plants and noxious weeds.
- All heavy equipment will be pressure washed prior to entering the park or from an area with known infestations of invasive plants, invertebrates, noxious weeds, or pathogens. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect park resources.
- All earth-moving equipment, gravel, fill, or other materials will be inspected to certify that material is weed free, to the extent feasible.

BIO-3: Prior to the start of on-site construction activities, a Department-approved biologist will hold a pre-construction training with on-site construction personnel

on the identification and life history of the pertinent sensitive species, work constraints, and any other pertinent information related to the species.

BIO-4: At the discretion of **[insert who]**, project activities will be monitored to ensure that impacts to sensitive biological resources are avoided or minimized.

BIO-5: No trees, brush, soil, or other material shall be felled, placed, or deposited into an identified Environmentally Sensitive Area without pre-construction approval of a Department-qualified biologist.

BIO-6: All project-related vehicle traffic will be restricted to established roads and other designated areas. Designated areas would be included in pre-construction surveys and, to the maximum extent possible, would be established in locations disturbed by previous activities.

BIO-7: To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches will be covered at the close of each working day with plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wood planks. Before such holes or trenches are filled, the on-site biologist will thoroughly inspect the opening for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape from the opening.

Projects with Potential Impacts to Listed Species

BIO-8: For projects that have potential for impacts to federally listed species and that have a federal nexus, the lead federal permitting or funding agency will be required to consult with the U.S. Fish and Wildlife Service (USFWS), as specified under Section 7 of the federal Endangered Species Act. Authorization for proceeding with the project or activity would then be subject to conditions identified in consultation with the USFWS.

BIO-9: For projects that have potential for impacts to federally listed species and that do not have a federal nexus, a Department-approved biologist will initiate Technical Assistance with the U.S. Fish and Wildlife Service (USFWS), as specified under Section 7 of the federal Endangered Species Act. Authorization for proceeding with the project or activity would then be subject to conditions identified in a letter of Technical Assistance.

BIO-10: For projects that have a potential for impacts to state-listed species, a Department-approved biologist will initiate consultation with the California Department of Fish and Wildlife to obtain a Section 2081 Incidental Take Permit (or equivalent) or a Consistency Determination for state-listed species when all species are state and federally listed.

BIO-11: Construction activities occurring in [species] habitat during the breeding season, March 24 through September 15, and that generate noise above the ambient level, shall not occur without obtaining technical assistance from the U.S. Fish and Wildlife Service and/or consultation with the California Department of Fish and

Wildlife. For activities occurring within a quarter-mile of [species] habitat, buffer areas shall be established around activities that may result in an increase above ambient noise.

Natural Community Standard Project Requirements

BIO-12: During the design and/or review of project activities, a Department-approved biologist will evaluate the project area for sensitive natural communities.

BIO-13: Projects will be designed to avoid direct or indirect effects on all sensitive natural communities to the maximum extent practicable.

BIO-14: Projects will avoid or minimize impacts to both federally and state protected wetlands to the extent practicable.

BIO-15: Natural wetland habitat, such as marsh, riparian, and vernal pools will not be filled by stream-crossing construction projects unless approved by the regulatory agencies. Equipment will remain on existing road or trail alignments to the maximum extent practicable.

BIO-16: Trail or road alignments will be designed to avoid or minimize effects on riparian habitats. Disturbance to riparian areas and habitat for aquatic- or riparian-dependent species will be minimized by aligning crossings perpendicular to and in narrow riparian areas to the extent feasible, and incorporating elevated crossing features, such as boardwalks and bridge crossings in riparian areas and sensitive meadows.

BIO-17: Signage, fencing, planting, or other features will be used to discourage users from leaving trails and roads and entering wetland, riparian, meadow, and other sensitive habitats; any fencing will be designed to avoid interference with hydrology and wildlife movement.

Vegetation Standard Project Requirements

BIO-18: A Department-approved biologist will conduct focused pre-construction surveys for special-status plant species and sensitive natural communities with potential to be affected by a project. Surveys will be conducted in accordance with the California Department of Fish and Wildlife *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009). Species with potential to be affected and requiring pre-construction surveys will be determined based on the species' distribution and known occurrences relative to the project area and the presence of suitable habitat for the species in or near the project area.

BIO-19: If special-status plant species are located within the project area, they will be avoided to the extent feasible with a plant protection buffer delineated with high-visibility flagging. Plant protection buffers will be 25 feet in size unless otherwise agreed upon by regulatory agencies. A Department-approved biologist will periodically inspect the fenced or flagged areas to ensure impacts are being avoided. California Native Plant Society Rank 3 and 4 plants will be avoided when feasible; however, avoidance is not required.

BIO-20: No special-status plant species will be removed, transplanted, damaged in any way, cut, pruned, or pulled back without prior approval from a Department-approved biologist in consultation with U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife. Recommended transplanting and/or seed collection will occur in nearby suitable habitat during the dormant season.

BIO-21: All projects will be designed to minimize the removal of native trees. Specifically, projects will be designed to retain and protect trees 24 inches diameter-at-breast-height (DBH) or greater to the maximum extent practicable. Limbs of these trees will be removed if required for access or safety considerations. Trees smaller than 24 inches DBH will be retained whenever practicable. Equipment operators will be required to avoid striking retained trees to minimize damage to the tree structure or bark.

BIO-22: Within the root health zone (five times diameter-at-breast-height [DBH]) of any native tree with a DBH of 12 inches or greater, no roots with a diameter of 2 inches or greater will be severed by project activities, unless authorized in advance by a Department-approved biologist.

BIO-23: No ground disturbance or staging will be allowed within the root health zone (five times the diameter-at-breast-height) of retention trees, unless approved in advance by a Department-approved biologist, forester, or certified arborist. Staging areas within existing compacted road or trail surfaces are exempted as they are already well compacted from use.

BIO-24: A **[insert who]** will be present during all ground-disturbing activities within the root health zone (five times the diameter-at-breast-height) of retained trees when requested by a Department-approved biologist.

BIO-25: To maintain genetic integrity, only plant stock collected consistent with the Department's Genetic Integrity Policy will be used for re-vegetation in the project area.

BIO-26: The design of road and trail improvements will consider desired snag retention needs for wildlife. All snags will be retained unless they are determined to be a safety hazard through consultation with a Department-approved biologist. Where this occurs, a minor re-route of the road and/or trail alignment will be considered.

BIO-27: Signage at key trailheads and other locations will be installed, as applicable and relevant, that informs the public about protecting natural resources by staying on trail (e.g., protecting sensitive vegetation, identification of noxious weeds, how invasive plant species are spread, reducing erosion and sediment delivery).

Terrestrial Wildlife Standard Project Requirements

BIO-28: All projects will be designed to avoid take of wildlife species listed or proposed for listing under the federal Endangered Species Act (FESA), candidates for possible future listing under the FESA, wildlife species listed or candidates for listing under the California Endangered Species Act (CESA), and species designated as Fully Protected under the California Fish and Game Code. If take of listed species cannot

be avoided, an Incidental Take Permit (ITP), or equivalent, will be obtained. For other special-status wildlife species (e.g., species of special concern), project impacts will be avoided to the maximum extent practicable.

BIO-29: Project activities that could affect a special-status wildlife species, bats, migratory birds, or raptors will be scheduled to avoid the breeding season and/or other sensitive life-history periods of the species (e.g., breeding, hibernation, denning, etc.) to the extent feasible as determined by a Department-approved biologist.

BIO-30: If work is required during the breeding or other sensitive life-history period of a special-status species that could be affected, impacts will be avoided or minimized by establishing non-disturbance buffers around the nests, dens, roosts, or other activity centers (depending on the species). The appropriate size and shape of the buffer zone will be determined by a Department-approved biologist, based on potential effects of project-related habitat disturbance, noise, dust, visual disturbance, and other factors. No project activity will commence within the buffer area until a Department-approved biologist confirms that the nest, den, or other activity center is no longer active/occupied during the critical life-history period.

BIO-31: Trees with nests or cavities that may provide nesting or denning opportunities will not be felled without the pre-construction review and approval of a Department-approved biologist. If such trees are located during operations, then operations within 50 feet of the tree will cease until reviewed by a Department-approved biologist.

BIO-32: Minor re-routes will be established away from basal hollows or so that basal hollows cannot be seen from trail.

BIO-33: If special-status species are known to occur in the project area, immediately prior to the start of work each day, a Department-approved biologist will conduct a visual inspection of the construction zone and adjacent areas, as appropriate.

BIO-34: If a special-status species is found on the project site, work in the vicinity of the animal will be delayed until the species moves out of the site on its own, or is temporarily relocated by a Department-approved biologist. A Department-approved biologist, or other staff trained by a Department-approved biologist, will inspect the work area for special-status species at the beginning of each workday. If a trapped animal is discovered, they will be released in suitable habitat at least **[insert distance]** from the project area.

BIO-35: Project activities will not remove any trees equal to or greater than 24 inches diameter-at-breast-height (DBH) unless first inspected by a Department-approved biologist and determined to be non-essential breeding habitat for special-status birds or other species.

Aquatic Biological Resources Standard Project Requirements

BIO-36: Construction activities in close proximity to potential special-status aquatic species' habitat will be limited to the dry season to the extent feasible to avoid specific periods of animal activity (e.g., breeding, larval/juvenile development).

BIO-37: For project activities that could affect special-status aquatic species, a Department-approved biologist will conduct a survey to determine if the special-status species occurs within **[insert distance**] of the project area.

BIO-38: If special-status aquatic species are known to occur in the vicinity of the project area, a Department-approved biologist will conduct surveys for those aquatic species within the project area and surrounding area, as deemed appropriate, immediately prior to the start of project-related activities each day.

BIO-39: If a special-status aquatic species is found on the project site, work in the vicinity of the animal will be delayed until the species moves out of the site on its own accord or is temporarily relocated by a Department-approved biologist.

BIO-40: To prevent trapping of special-status aquatic species that spend a portion of their lives in terrestrial habitats (e.g., salamanders, frogs, snakes, turtles), all holes and trenches will be covered with plywood or similar materials at the close of each working day, or escape ramps will be constructed of earth fill or wooden planks and all pipes will be capped. A Department-approved biologist, or other staff trained by a Department-approved biologist, will inspect trenches and pipes for special-status species at the beginning of each workday. If a trapped animal is discovered, they will be released (by a Department-approved biologist) in suitable habitat at an appropriate distance from the project area as determined by a Department-approved biologist.

BIO-41: All new stream crossings will be designed to convey the flow and associated debris of a 100-year, 24-hour storm event. All stream crossings that are part of the project will be designed to maintain both upstream and downstream fish passage when located on fish-bearing streams. Pedestrian bridges across stream habitats will be designed in a manner that does not impede stream flow and ensures year-round passage of anadromous and other aquatic species through the area.

BIO-42: If water drafting becomes a necessary component of the proposed project, drafting sites will be planned to avoid adverse effects to special-status aquatic species and associated habitat, in-stream flows, and depletion of pool habitat. Screening devices that create low-entry velocity will be used for water drafting pumps to minimize removal of aquatic species, including juvenile fish, amphibian egg masses, and tadpoles from aquatic habitats.

BIO-43: Vegetation removal that could reduce shaded areas and increase stream temperatures will be avoided. Minor reroutes, where needed, will not be designed to travel adjacent to streams to the maximum extent practicable.

BIO-44: For any project requiring a permit from U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Fish and Wildlife Service, or other agency for

potential impacts to aquatic and wetland resources restrictions, construction timing, BMPs, and other protective measures will be developed and specified in consultation with the agencies during the permitting process.

BIO-45: Staging areas will be located outside of sensitive habitats at an appropriate distance as determined by a Department-approved biologist, from vernal pools, seasonal wetlands, ponds, streams, riparian habitat, and other aquatic habitats.

BIO-46: When determined necessary by a Department-approved biologist, exclusionary fencing, flagging, staking, or signage will be installed around all Environmentally Sensitive Areas as an initial construction task. The Environmentally Sensitive Areas will be delineated to limit encroachment by construction personnel and equipment into sensitive aquatic habitats without affecting public access routes.

BIO-47: To avoid indirect construction-related impacts to aquatic habitats, BMPs will be implemented to minimize soil disturbance. Where soil disturbance is necessary, stabilization techniques (including the use of silt fences, fiber rolls or blankets, gravel bag berms, geotextiles, plastic covers, erosion control blankets/mats, covering of exposed areas with mulch, and temporary vegetation or permanent seeding) will be implemented.

BIO-48: Construction activities near water courses and riparian areas will be monitored daily. Monitoring will include checking silt fences, erosion and sediment control BMPs, and Environmentally Sensitive Area fencing to make sure they are functioning properly to avoid project impacts.

General Project Requirements For The Treatment Of Cultural Resources

CUL-1: Prior to the start of on-site construction work, the **[insert who]** will notify the Supervisor of the District Cultural Resources Program, unless other arrangements are made in advance, a minimum of three weeks to schedule a Cultural Resources Specialist to monitor work, as necessary, to ensure that pre-approved removal and reconstruction of historic fabric will occur in a manner consistent with the Secretary of the Interior's Standards for Treatment of Historic Properties.

CUL-2: Before, during, and after construction, a **[insert who]** will photo-document all aspects of the project and will add the photos to the historical records (archives) for the park if the Department-qualified historian or archaeologist deems necessary.

CUL-3: Prior to the start of on-site construction work, and to the extent not already completed, a **[insert who]** will map and record all cultural features (archaeological and built environment) within the proposed Area of Potential Effects (APE) to a level appropriate to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

CUL-4: If anyone discovers potential paleontological resources during project construction or ground-disturbing activities, work within 100 feet of the find will be temporarily halted, the Department Representative will be notified immediately, and work will remain halted until a qualified paleontologist or

geologist evaluates the significance of the find and recommends appropriate salvage or further mitigation procedures.

CUL-5: Increase public awareness of local history and archaeology, and the need to protect cultural resources. Ways to accomplish this awareness include highlighting certain cultural resources along the road or trail with interpretive signs and information kiosks, and/or by placement of a historical marker along a segment of a road or trail, which provides information to the user about the importance of the site and/or the event.

Historian's Specific Project Requirements

CUL-6: When there is potential to impact historic resources, a Department-qualified historian will survey roads and/or trails prior to the start of any proposed improvements or changes in use to identify potentially significant historic resources. To determine the historic significance of road and trail alignments, a Department-qualified historian will conduct comparisons of current road and trail alignments with historic documentation of historic alignments.

CUL-7: A Department-qualified historian shall use flags, protective fencing, or other methods to identify and provide a buffer zone for any resources discovered during trail survey. The historian shall establish a specific buffer zone around the features based on the type of resources and the proposed scope of work.

Historian's Standard Requirements

CUL-8: All historic work on built environment resources will comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

CUL-9: Historic character will be retained and preserved; where safe, original materials that still maintain structural integrity will be retained; and where replacement is required, materials and features will be replaced "in kind."

CUL-10: A qualified historian familiar with the project site's cultural/historic resources will monitor all construction activities at his/her discretion. All historic resources uncovered during the project will be recorded in place with a photograph and/or drawing showing any new or recovered material and archived, at the discretion of the monitor.

Archaeologist's Specific Project Requirements

CUL-11: To prevent disturbance to high-value archaeological resource areas, redirect visitors away from the resources employing appropriate placement of trails, creating barriers, or other suitable methods to discourage access.

CUL-12: Decommission and/or reroute roads and trails away from high-value archaeological resources whenever possible and/or feasible.

CUL-13: Prior to implementing any project that would involve ground disturbance, cultural resource staff will determine if the project area is located in an of area of high archaeological value. If the area is determined sensitive, the area will require field

survey by a Department-qualified archaeologist who will make recommendations and develop proposals for procedures deemed appropriate to further investigate and/or avoid adverse impacts to those resources.

CUL-14: Prior to implementing any project that would involve ground disturbance, cultural resource staff will consult Department cultural resource data files, and if deemed necessary, contact the appropriate Information Center of the California Historical Resources Information System to request a record search of known cultural resources located within and adjacent to the proposed project area.

CUL-15: The Department will conduct the tribal consultations prior to any new ground disturbances related to road and trail construction, in previously disturbed soil where archaeological sensitivity is high and trail work is proposed, or for projects that require CEQA review. The consultation protocol will follow the steps identified in the Department Operations Manual 0400 Cultural Resources.

CUL-16: Where road and trail activities cannot avoid sensitive archaeological resources, the project actions will require modifications to incorporate the resources into the RTMP and provide a resource protection plan for its maintenance and future protection.

Archaeological Resources – Standard Project Requirements

CUL-17: Prior to the start of any ground-disturbing activities, a qualified archaeologist will complete preconstruction investigations to determine specific avoidance areas within the proposed Area of Potential Effect that contains known significant or potentially significant archaeological resources. If necessary, a qualified Cultural Resources Specialist will prepare a research design, including appropriate trenching and/or preconstruction excavations.

CUL-18: Based on preconstruction testing, project design and/or implementation will be altered, as necessary, to avoid impacts to significant archaeological resources or reduce the impacts to a less-than-significant level, as determined in consultation with a Department-qualified archaeologist.

CUL-19: In an archaeologically sensitive area, **[insert who]** will manually remove or flush cut vegetation to avoid ground-disturbing activities; removal of roots will not be allowed.

CUL–20: In an Area of Potential Effect considered highly sensitive for the discovery of buried archaeological features or deposits, including human remains, **[insert who]** will review and approve monitoring by a Department-qualified Cultural Resources Specialist of any subsurface disturbance, including, but not limited to, grading, excavation, or trenching.

CUL-21: **[Insert who]** will review and approve monitoring of subsurface disturbance by a Native American monitor.

CUL-22: If anyone discovers previously undocumented cultural resources during project construction or ground-disturbing activities, work within 50 to 100 feet of the find will be temporarily halted. The Department representative will be notified

immediately, and work will remain halted until a qualified Cultural Resources Specialist or archaeologist evaluates the significance of the find and determines and implements the appropriate treatment and disposition in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

If ground-disturbing activities uncover cultural artifacts or features (including, but not limited to, dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic ash), when a qualified Cultural Resources Specialist is not on-site, **[insert who]** will contact the Supervisor of the District Cultural Resources Program immediately and **[insert who]** will temporarily halt or divert work within the immediate vicinity of the find until a qualified Cultural Resources Specialist evaluates the find and determines and implements the appropriate treatment and disposition of the find.

If feasible, **[insert who]** will modify the project to ensure that construction or ground-disturbing activities will avoid the unanticipated discovery of a significant cultural resources (historic resources) upon review and approval of a **[insert who]**.

CUL-23: In the event anyone discovers human remains or suspected human remains, work will cease immediately within 100 feet of the find and the project manager/site supervisor will notify the appropriate Department personnel. The human remains and/or funerary objects will not be disturbed and will be protected by covering with soil or other appropriate methods. The Department representative will notify the County Coroner, in accordance with Section 7050.5 of the California Health and Safety Code, and the Native American Heritage Commission; the Department representative will also notify the local Tribal Representative. If a Native American monitor is on-site at the time of the discovery, the monitor will notify his/her affiliated tribe or group. The local County Coroner will make the determination of whether the human bone is of Native American origin. If the Coroner determines the remains represent Native American interment, the Native American Heritage Commission will be consulted to identify the most likely descendant and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is complete (Public Resources Code Section 5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the place of discovery prior to determination.

If it is determined the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Officer and review by the Native American Heritage Commission, as well as appropriate Tribal Representatives, will occur as necessary to define additional site mitigation or future restrictions.

Geology, Soils, and Minerals Standard Project Requirements

Construction General Permit and SWPPP Measures

GEO-1: Prior to the start of construction involving ground-disturbing activities totaling one acre or more, the Department will direct the preparation of a Stormwater

Pollution Prevention Plan (SWPPP) by a Qualified Stormwater Pollution Plan Developer (QSD) for Department approval that identifies temporary Best Management Practices (BMPs) (e.g., tarping of any stockpiled materials or soil; use of silt fences, straw bale barriers, fiber rolls, etc.) and permanent BMPs (e.g., structural containment, preserving or planting of vegetation, etc.) for use in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, repaving, or other ground-disturbing activities.

Construction-Related Measures

GEO-2: All construction, improvement, modification, or decommissioning of road/trails, and conversion of roads-to-trails, will be consistent with Department BMPs, Departmental Operations Manuals (DOMs), Vegetation Management Guidelines, and Trail Handbook guidelines.

GEO-3: A qualified or California-licensed geologist will review road decommissioning, new routes, road-to-trail conversion sites, and landslide repairs during project planning to determine if any geologic or soil conditions exist that require additional assessment or alteration of prescriptions. If unique features do exist or conditions so require, a California-licensed geologist or their designee will conduct a geologic assessment/investigation and make appropriate design recommendations, and, if needed, define the boundaries of the work area on project drawings.

GEO-4: Heavy equipment operators will be cautioned to minimize their exposure to unstable slopes that may occur naturally or result from the earth-moving process. Qualified inspectors will continually evaluate slope geometry and earth materials and caution operators if unstable conditions are indicated.

GEO-5: No high ground-pressure vehicles will be driven through project areas during the rainy season or when soils are wet and saturated to avoid compaction and/or damage to soil structure. Undisturbed areas will be avoided by vehicles to the extent practicable during all seasons. If vehicles must be driven through previously undisturbed areas during moist conditions, then the path of travel will be distributed and/or the travel way will be decompacted upon project completion. Existing compacted road or trail surfaces are exempted as they are already well compacted from use.

GEO-6: Topsoil excavated during initial construction will be segregated and used as a finishing surface over other fill to help conserve topsoil and promote revegetation.

GEO-7: Excavated spoil from project work will be placed in a stable location where it will not cause or contribute to slope failure or erode and enter a stream channel or wetland. Spoil areas will be compacted in lifts and blended into the surrounding landscape to promote uniform sheet drainage. Stream or concentrated overland flow will not be allowed to discharge onto spoil areas, regardless of discharge rate.

GEO-8: Bare ground will be mulched with native vegetation removed during the work, or with other non-exotic plant-bearing mulch materials, to the maximum extent

practicable to minimize surface erosion. Sufficient openings will be left in the mulch to allow revegetation.

GEO-9: Immediately following reconstruction, roads and trails will be closed for a period following construction that allows for one wet-dry cycle (e.g., one winter's duration) to allow the soil and materials to settle and compact before the route opens to the public. Routine maintenance will also be performed on the road or trail as necessary to reduce erosion to the extent possible and to repair weather-related damage that could contribute to erosion.

Project Design-Related Measures

GEO-10: Road and trail stream crossings will have any new drainage structures designed for the 100-year storm flow event or be capable of passing the 100-year peak flow, debris, and sediment loads without significant damage.

GEO-11: Road and trail stream crossings will be designed and constructed without the potential for stream diversion.

GEO-12: Department staff will install appropriate energy dissipaters and employ other erosion-control measures at water discharge points, as appropriate.

GEO-13: Install armored rock crossings at ephemeral drainages, micro-drainages, and swales to harden the trail tread in areas of potential interface between trail users and natural topographic drainage features.

GEO-14: All drainages (including micro-drainages) will not be captured, diverted, or coupled with other drainages by the road or trail.

GEO-15: Water will not be accumulated on a road or trail and drained off onto landforms where natural drainages do not exist.

GEO-16: Road and trail fillslopes will be designed with stable slope gradients as defined in Department trail construction manuals, guidelines, and handbooks, or as recommended by a qualified professional reviewing site-specific conditions. Unstable fillslopes will be stabilized or removed.

GEO-17: Road and trail surfaces and ditches will be hydrologically disconnected from wetlands, streams, and stream crossings to the extent feasible.

GEO-18: Provide outslope to the roadbed or trail tread and remove any outer edge berm to facilitate sheet flow off the road or trail where the dispersed flow can be filtered by vegetation and organic litter.

GEO-19: When outsloping road or trail surfaces is not feasible, such as steep linear grades, construct rolling dips to direct runoff safely off the route to prevent buildup of surface runoff and subsequent erosion. Water bars will be used as a last resort if outsloping and rolling dips, or minor rerouting are not feasible, or on routes receiving minimal use. Water bars will be constructed to divert water to controlled points along the route and with rock armor at the downslope end for energy dissipation.

GEO-20: If soils and parent material geologic capability are not sustainable, overly steep grades will be mitigated with surface hardening techniques. Hardening techniques

(such as compacted aggregate or trail structures, such as steps or retaining walls) will keep the surface sustainable, firm, and stable.

GEO-21: Department staff will develop a rehabilitation plan for decommissioned routes that includes using brush and trees removed from the new or existing route alignment for bio-mechanical erosion control (bundling slash and keying it in to fall line of the route, filling damaged sections with soil and duff removed from the new or existing alignment, constructing water bars if necessary, and replanting native trees and shrubs).

GEO-22: Both ends of a decommissioned road or trail, road-to-trail conversion, or abandoned trail segment will be clearly blocked, and scatter its length with vegetative debris from new route construction to discourage continued use and degradation of the decommissioned portion of the road or trail.

GEO-23: Seasonally close roads and trails to all users when soils are saturated and softened.

GEO-24: Install "pinch points" to reduce downhill bicycle speed and increase the line of sight at curves.

GEO-25: Construct or repair barriers at switchbacks to discourage shortcuts and user-created trails.

Event-Related Measures

GEO-26: After a large earthquake event in the region (i.e., magnitude 5.0 or greater centered within 75 miles of the project site or Cascadia subduction zone event in excess of magnitude 7.5 that ruptures south from Brookings, Oregon), Department staff will inspect all project structures and features for damage, as soon as is possible after the event. Any damaged structures or features, including landslides, will be closed to park visitors, volunteers, residents, contractors, and staff until such features or structures have been evaluated by a qualified or licensed professional and/or repaired. Seismically generated ground cracks along ridgecrests or other landforms removed from, but potentially affecting, the infrastructure will be evaluated as part of the investigation.

GEO-27: After or during a large storm or rainfall event, Department staff will inspect all project structures and features for damage, as soon as is safely possible after or during the event. Any damaged structures or features will be closed to park visitors, volunteers, residents, contractors, and staff until such features or structures have been evaluated by a qualified or licensed professional and/or repaired.

Greenhouse Gas/Climate Change/Sea-Level Rise Standard Project Requirements

Construction-Related Emission Control Measures

AQ-1: No more than one acre of ground disturbance (e.g., earth-moving, grading, excavating, land clearing) will occur in any single day.

AQ-10: Operation of large diesel- or gasoline-powered construction equipment (i.e., greater than 50 horsepower [hp]) will not exceed 60 equipment-hours per day,

where an equipment-hour is defined as one piece of equipment operating for one hour.

AQ-11: All diesel- and gasoline-powered equipment will be properly maintained according to manufacturer's specifications, and in compliance with all State and federal emissions requirements.

AQ-12: Whenever possible, removed vegetative material will be either left in place (e.g., for use as mulch) or chipped on site. If approved, an air curtain burner may be used. When pile burning is deemed necessary, a burn permit would be obtained from the local air quality management district. Burn piles would be no larger than 10 by 10 by 5 feet and ignited on approved burn days only.

AQ-13: Haul truck trips to and from the site will be limited to 40 one-way trips per day. These trips include hauling gravel, materials, and equipment to and from the site.

AQ-14: The maximum number of construction worker-related commute trips for any project at a park will not exceed 60 one-way worker commute trips per day.

AQ-15: All motorized construction equipment will be shut down when not in use. Idling of equipment and haul trucks will be limited to five minutes.

Measures Pertinent to Carbon Sequestration

BIO-16: Natural wetland habitat, such as marsh, riparian, and vernal pools will not be filled by stream-crossing construction projects unless approved by the regulatory agencies. Equipment will remain on existing road or trail alignments to the maximum extent practicable.

BIO-22: All projects will be designed to minimize the removal of native trees. Specifically, projects will be designed to retain and protect trees 24 inches diameter-at-breast-height (DBH) or greater to the maximum extent practicable. Limbs of these trees will be removed if required for access or safety considerations. Trees smaller than 24 inches DBH will be retained whenever practicable. Equipment operators will be required to avoid striking retained trees to minimize damage to the tree structure or bark.

BIO-23: Within the root health zone (five times diameter-at-breast-height [DBH]) of any native tree with a DBH of 12 inches or greater, no roots with a diameter of 2 inches or greater will be severed by project activities, unless authorized in advance by a Department-approved biologist.

BIO-24: No ground disturbance or staging will be allowed within the root health zone (five times the diameter-at-breast-height) of retention trees, unless approved in advance by a Department-approved biologist, forester, or certified arborist. Staging areas within existing compacted road or trail surfaces are exempted as they are already well compacted from use.

BIO-25: A **[insert who]** will be present during all ground-disturbing activities within the root health zone (five times the diameter-at-breast-height) of retained trees when requested by a Department-approved biologist.

Measures Pertinent to Resiliency to Climate Change

HAZ-10: Prior to the start of construction, **[insert who]** will develop a Fire Safety Plan for **[insert name]** approval. The plan will include the emergency calling procedures for both the California Department of Forestry and Fire Protection (CalFire) and local fire department(s).

HAZ-11: All heavy equipment will be required to include spark arrestors or turbo chargers that eliminate sparks in exhaust and have fire extinguishers on-site.

HAZ-12: Construction crews will park vehicles **[insert distance]** from flammable material, such as dry grass or brush. At the end of each workday, construction crews will park heavy equipment over a non-combustible surface to reduce the chance of fire.

HAZ-13: Department personnel will have a Department radio at the park unit, that allows direct contact with CalFire and a centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire.

HAZ-14: Under dry conditions, a filled water truck and/or fire engine crew will be on-site during activities with the potential to start a fire.

GEO-27: After or during a large storm or rainfall event, Department staff will inspect all project structures and features for damage, as soon as is safely possible after or during the event. Any damaged structures or features will be closed to park visitors, volunteers, residents, contractors, and staff until such features or structures have been evaluated by a qualified or licensed professional and/or repaired.

HYDRO-4: All construction activities will be suspended during heavy precipitation events (i.e., more than one inch of precipitation in a 24-hour period) or when heavy precipitation events are forecast. If the construction manager must suspend work, the construction manager will install drainage and erosion controls appropriate to site conditions, such as covering (e.g., tarping) stockpiled soils, mulching bare soil areas, and by constructing silt fences, straw bale barriers, fiber rolls, or other control structures around stockpiles and graded areas, to minimize runoff effects.

Hazards and Hazardous Materials Standard Project Requirements

HAZ-1: Avoid locating route modifications in areas that could have been used previously for industrial/manufacturing uses, or other uses that could have involved use, handling, transport, or storage of hazardous materials (including, but not limited to, auto maintenance, gas station, equipment yard, dry cleaner, railroad, agriculture, mining, etc.). If such areas cannot be avoided, prior to any construction within such areas, **[insert implementing party]** shall hire a qualified professional to conduct a Phase 1 Environmental Site Assessment (ESA), limited to the area of proposed ground disturbance, that will identify the presence of any soil contamination at concentrations that could pose a health risk to construction workers. If such levels of soil contamination are identified, the **[insert implementing party]** shall follow the recommendations in the Phase 1 ESA, which may include removal of contaminated soil in compliance with all U.S.

Environmental Protection Agency, Occupational Safety and Health Administration, and Department of Toxic Substances Control requirements.

HAZ-2: If any construction will occur directly below overhead power poles with transformers, prior to construction, the soil directly beneath the transformers will be inspected for staining. If staining is present, the **[insert implementing party]** will avoid the stained soil, coordinate with the utility company for clean-up, or hire a qualified professional to provide recommendations that will be implemented.

HAZ-3: Prior to any excavation in the vicinity of underground utility easements, **[insert implementing party]** shall coordinate with the utility company to ensure avoidance of the utility line.

HAZ-4: Prior to the start of on-site construction activities, **[insert who]** will inspect all equipment for leaks and regularly inspect thereafter until equipment is removed from the project site. All contaminated water, sludge, spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.

HAZ-5: Prior to the start of on-site construction activities, **[insert who]** will prepare a Spill Prevention and Response Plan (SPRP) as part of the Stormwater Pollution Prevention Plan (SWPPP) for **[insert who]** approval to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan will include (but not be limited to):

- A map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment will occur;
- A list of items required in a spill kit on-site that will be maintained throughout the life of the project;
- Procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the construction process; and
- Identification of lawfully permitted or authorized disposal destinations outside of the project site.

HAZ-6: **[Insert who]** will develop a Materials Management Plan to include protocols and procedures that will protect human health and the environment during remediation and/or construction activities that cause disturbances to the native soil and/or mine and mill materials causing potential exposure to metals and dust resulting from materials disturbances. All work will be performed in accordance with a Site Health and Safety Plan. The Materials Management Plan will include the following (where applicable):

- Requirement that staff will have appropriate training in compliance with Title 29 of the Code of Federal Regulations, Section 1910.120;
- Methods to assess risks prior to starting on-site work;
- Procedures for the management and disposal of waste soils generated during construction activities or other activities that might disturb contaminated soil;

- Monitoring requirements;
- Stormwater controls;
- Record-keeping; and
- Emergency response plan.

HAZ-7: **[Insert who]** will set up decontamination areas for vehicles and equipment at park unit entry/exit points. The decontamination areas will be designed to completely contain all wash water generated from washing vehicles and equipment. Best Management Practices (BMPs) will be installed, as necessary, to prevent the dispersal of wash water beyond the boundaries of the decontamination area, including over-spray.

HAZ-8: Prior to the start of on-site construction activities, **[insert who]** will clean and repair (other than emergency repairs) all equipment outside the project site boundaries.

HAZ-9: **[Insert who]** will designate and/or locate staging and stockpile areas within the existing maintenance yard area or existing roads and campsites to prevent leakage of oil, hydraulic fluids, etc. into **[insert where i.e., native vegetation, sensitive wildlife areas, creek, river, stream, etc.]**.

HAZ-10: Prior to the start of construction, **[insert who]** will develop a Fire Safety Plan for **[insert name]** approval. The plan will include the emergency calling procedures for both the California Department of Forestry and Fire Protection (CalFire) and local fire department(s).

HAZ-11: All heavy equipment will be required to include spark arrestors or turbo chargers that eliminate sparks in exhaust and have fire extinguishers on-site.

HAZ-12: Construction crews will park vehicles **[insert distance]** from flammable material, such as dry grass or brush. At the end of each workday, construction crews will park heavy equipment over a non-combustible surface to reduce the chance of fire.

HAZ-13: Department personnel will have a Department radio at the park unit that allows direct contact with CalFire and a centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire.

HAZ-14: Under dry conditions, a filled water truck and/or fire engine will be on-site during activities with the potential to start a fire.

Hydrology, Water Quality, and Sedimentation Standard Project Requirements
Construction General Permit and SWPPP Measures

HYDRO-1: Prior to the start of construction involving ground-disturbing activities totaling one acre or more, **[insert who]** will prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) for Department approval that identifies temporary Best Management Practices (BMPs; e.g., tarping of any stockpiled materials or soil; use of silt fences, straw bale barriers, fiber rolls) and permanent BMPs (e.g., structural containment, preserving or planting of vegetation) for use in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants

during all excavation, grading, trenching, or other ground-disturbing activities. The SWPPP will include BMPs for hazardous waste and contaminated soils management and a Spill Prevention and Control Plan (SPCP), as appropriate.

Basin Plan Requirement Measures

HYDRO-2: The project will comply with all applicable water quality standards, as specified in the Santa Ana River Regional Water Quality Control Board (Region 8) Basin Plan.

Construction-Related Measures

HYDRO-3: All construction, improvement, modification, or decommissioning of road/trails, and conversion of roads-to-trails, will be consistent with Department BMPs, Departmental Operations Manuals (DOMs), Vegetation Management Guidelines, and Trail Handbook guidelines.

HYDRO-4: All construction activities will be suspended during heavy precipitation events (i.e., more than one inch of precipitation in a 24-hour period) or when heavy precipitation events are forecast. If the construction manager must suspend work, the construction manager will install drainage and erosion controls appropriate to site conditions, such as covering (e.g., tarping) stockpiled soils, mulching bare soil areas, and by constructing silt fences, straw bale barriers, fiber rolls, or other control structures around stockpiles and graded areas, to minimize runoff effects.

HYDRO-5: For construction activities extending into or occurring during the rainy season, or if an un-seasonal storm is anticipated, Department staff will properly winterize the site by covering (e.g., tarping) any stockpiled materials or soils, mulching bare soil areas, and by constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and graded areas.

HYDRO-6: Treat rehabilitated, reengineered, or rerouted road or trail segments that have less than a 50-foot natural buffer to stream channels with mulch applied to provide 50 percent to 70 percent surface coverage. Filter windrows (structures made of slash, forest debris, and logs to protect forest streams from sediment) shall be added to the toe of fill slopes for any treated alignment where the vegetated or mulched buffer is located closer to a watercourse than is recommended for the steepness of the hillslope, as described in the table below:

Recommended minimum distance between the vegetated or mulched buffer of wildland roads/trails and streams	
Slope of land between road/ trail and stream (%)	Minimum distance of vegetated/ mulched buffer (feet)
0	50
10	90
20	130
30	170
40	210
50	250

60	290
70	330

These setbacks or windrow designs may be modified based on concurrence from a qualified geologist after reviewing vegetation and soil conditions on the slope between the alignment and the watercourse. The windrows shall not provide structural support to the fills.

HYDRO-7: Salvage trees and brush removed prior to excavation for mulching bare soil areas after construction.

HYDRO-8: During dry, dusty conditions, all unpaved active construction areas will be wetted using water trucks, treated with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material), or covered. Any dust suppressant product used must be environmentally benign (i.e., non-toxic to plants and shall not negatively impact water quality) and its use shall not be prohibited by the California Air Resources Board, U.S. Environmental Protection Agency, or the State Water Resources Control Board. Exposed areas will not be over-watered such that watering results in runoff. Unpaved areas subject to vehicle travel could also be stabilized through the effective application of wood chips, gravel, or mulch. The type of dust suppression method shall be selected by the contractor from the SWPPP options, if applicable, or based on soil, traffic, and other site-specific conditions.

HYDRO-9: Excavation and grading activities will be suspended when sustained winds exceed 25 miles per hour (mph), instantaneous gusts exceed 35 mph, or when dust occurs from remediation-related activities where visible emissions (dust) cannot be controlled by watering or conventional dust abatement controls.

HYDRO-10: Prior to the start of on-site construction activities, all equipment will be inspected for leaks and regularly inspected thereafter until equipment is removed from the project site. All contaminated water, sludge, spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.

HYDRO-11: Staging and stockpile areas will be designated and/or located, and suitable barriers installed, within the existing maintenance yard area or existing roads and campsites to prevent leakage of oil, hydraulic fluids, or other chemicals into lakes, streams, or other water bodies.

HYDRO-12: Decontamination of heavy equipment shall occur prior to delivery onto state park lands. Heavy equipment shall be thoroughly power washed prior to delivery to the job site. Equipment shall be free of woody and organic debris, soil, grease, and other foreign matter. The engine compartment, cab, and other enclosed spaces shall also be free of the aforementioned debris. Equipment shall be thoroughly inspected by the Department's representative upon delivery and may be rejected if in the opinion of the Department representative the equipment does not meet decontamination standards. If a piece of equipment is removed from the park for

unrelated work or work not identified as part of the project, it will be re-inspected upon re-entry to the park. Upon demobilization, decontamination shall take place off-site.

HYDRO-13: All heavy equipment parking, refueling, and service will be conducted within designated areas with suitable barriers outside of the 100-year floodplain to avoid watercourse contamination.

Project Design-Related Measures

HYDRO-14: Project planning will identify public water supply and park water systems that could be affected. Persons responsible for the maintenance of these water systems will be consulted and if negative effects are anticipated, mutually agreeable modifications will be developed.

HYDRO-15: Department staff will install appropriate energy dissipaters and employ other erosion-control measures at water discharge points, as appropriate.

HYDRO-16: Routes will be designed and constructed so that they do not significantly disrupt or alter the natural hydraulic flow patterns of the landform.

HYDRO-17: Routes located within 100-year flood hazard zones will be designed and constructed so that they do not significantly disrupt or alter natural flood flows.

HYDRO-18: For decommissioning and restoration projects, existing (altered) drainage patterns will be restored to pre-disturbance patterns. In some cases where pre-disturbance patterns cannot be restored, conversion work may require the realignment of a stream segment. To ensure that channel stability will be maintained, project planners will establish new drainage segments only after thorough review by a qualified geologist, geomorphologist, or hydrologist.

HYDRO-19: Install armored rock crossings at ephemeral drainages, micro-drainages and swales to harden the tread in areas of potential interface between trail users and natural topographic drainage features.

HYDRO-20: Provide outslope to the roadbed or trail tread and remove any outer edge berm to facilitate sheet flow off the road or trail where the dispersed flow can be filtered by vegetation and organic litter.

HYDRO-21: When outsloping road or trail surfaces is not feasible, such as steep linear grades, construct rolling dips to direct runoff safely off the route to prevent buildup of surface runoff and subsequent erosion. Water bars will be used as a last resort, if outsloping and rolling dips or rerouting are not feasible or on routes receiving no use. Water bars will be constructed to divert water to controlled points along the route and with rock armor at the downslope end for energy dissipation, where needed.

HYDRO-22: Install gravel surfacing on routes in areas with saturated or unstable soils, and on bridge or ford approaches to provide a stable tread surface.

HYDRO-23: Seasonally close multi-use trails to all users when soils are saturated and softened.

HYDRO-24: Install “pinch points” on multi-use trails where necessary to reduce downhill bicycle speed and increase the line of sight at curves.

HYDRO-25: Construct or repair barriers at switchbacks on multi-use trails to discourage shortcuts and the creation of user-created trails.

Land Use and Planning Standard Project Requirements

The SPRs do not include a category of provisions specifically related to land use and planning.

Mineral Resources Standard Project Requirements

The SPRs do not include a category of provisions specifically related to mineral resources use.

Noise Standard Project Requirements

N-1: Operation of noise-generating construction activity (equipment and power tools and haul truck delivery of equipment and materials) will abide by the time-of-day restrictions established by local jurisdictions (i.e., city and/or county) if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship) located in Orange, Riverside, or San Bernardino Counties or surrounding communities. Cities and counties in California typically restrict construction noise to particular daytime hours. If the local, applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating construction activity can occur, then noise-generating construction activity will be limited to the hours of 7:00 AM to 5:00 PM Monday through Friday.

N-2: All powered construction equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered construction equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.

N-3: Equipment engine shrouds will be closed during equipment operation.

N-4: All construction equipment and equipment staging areas will be located as far as possible from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship) located outside the park.

N-5: All motorized construction equipment will be shut down when not in use. Idling of equipment and haul trucks will be limited to five minutes.

N-6: No pile driving, blasting, or drilling will occur in areas that may adversely affect sensitive receptors outside the park unit.

N-7: Written notification of construction activities will be provided to any and all off-site noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of locations where powered construction equipment and/or power tools will be operated. Notification will include anticipated dates and hours during which construction activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification.

N-8: Construction activities involving heavy equipment (i.e., 50 horsepower [hp] or greater) will not operate within 50 feet of land uses that are potentially sensitive to ground vibration, including residential buildings, schools, hospitals, and places of worship. Heavy construction equipment will also not be operated within 30 feet of historically significant structures that could be vulnerable to structural damage from ground vibration, and known archaeological sites, that could be vulnerable to vibration-induced changes to the stratigraphic relations of the soil layers that are important to archaeological study.

Population and Housing Standard Project Requirements

AQ-14: The maximum number of construction worker-related commute trips for any project at a park will not exceed 60 one-way worker commute trips per day.

Public Services and Utilities Standard Project Requirements

The SPRs do not include a category of provisions specifically related to public services and utilities management.

Recreation Standard Project Requirements

The SPRs do not include a category of provisions specifically related to recreation use management.

Transportation and Traffic Standard Project Requirements

TRAN-1: For proposed addition of bicycle use, stop signs for cyclists will be installed at all locations where the trail crosses a roadway (including maintenance roads). Appropriate warning signs will be installed along the roadways and on pavement (as necessary) at the approach of bicycle crossings to warn drivers of potential crossing bicyclists.

TRAN-2: For proposed addition of equestrian use, **[insert who]** will ensure driveways/access points to parking facilities have adequate line-of-sight for horse trailers and that parking facilities are either designed to be "pull through" or include a designated "turn-around" for horse trailers (where vehicle parking is restricted). Parking and access for parking facilities accommodating vehicles with horse trailers will be designed per American Association of State Highway and Transportation Officials standards.

TRAN-3: **[insert who]** will assess parking capacity prior to implementing a proposed change in use. After implementation of the proposed change in use, Department staff will monitor parking levels as part of the Adaptive Use Management process. If monitoring indicates an exceedance of parking capacity (i.e., increased use of undesignated on-street parking or increased illegal parking due to overflow of parking lot facilities), the **[insert who]** will implement a management response to resolve the parking capacity issue. Measures in the management response may include, but would not be limited to, re-designing parking facilities (including minor parking lot expansions in areas where environmental resources will not be affected), installing parking meters and/or applying time limits, working with local

transportation departments to increase nearby off-site parking availability, directing users to other existing lots, and/or working with local transit operators to increase transit to the trail facility. Department personnel will determine which actions are feasible at the park unit.

TRAN-4: Prior to initiating any construction activities with the potential to significantly or permanently disrupt traffic flows, the construction manager will have a Construction Traffic Management Plan (CTMP) prepared by a qualified professional that will provide measures to reduce potential traffic obstruction or service level degradation at affected traffic facilities. The scope of the CTMP will depend on the type, intensity, and duration of the specific construction activities associated with the project. Measures included in the CTMP could include (but are not limited to) construction signage, flaggers for lane closures, construction schedule and/or delivery schedule restrictions, etc. The CTMP will be submitted to the local agency having jurisdiction over the affected traffic facilities.

7.2.9. Project Implementation

As noted previously, the RTMP will provide focus for management of paved and nonpaved roads and trails. Subsequent work undertaken pursuant to the RTMP would generally occur Monday through Friday, during daylight hours. Weekend or holiday work could be implemented to accelerate the construction schedule or address emergencies or unforeseen circumstances.

7.2.10. Visitation to Chino Hills State Park

Visitation to CHSP has steadily increased. The heaviest recreational use occurs from March through September annually. Additionally, planned communities are slated for development on all sides surrounding the park, which will likely increase the public demand for trails and trail connections adjacent to such developments.

7.2.11. Consistency with Local Plans and Policies

The RTMP is consistent with the CHSP GP and serves as a bridge between the desired conditions stated as goals and guidelines in the general plan and measurable implementation actions. The RTMP defines the objectives, methodologies, and/or designs on how management goals will be accomplished. This document is focused on specific management topics, goals, or issues applying to all roads and trails within CHSP.

7.2.12. Discretionary Approvals

The Department has approval authority for subsequent projects under the RTMP within the boundaries of CHSP. The following permits and/or consultations may be required to allow implementation of components of the RTMP:

- A Section 404 Clean Water Act permit from the U.S. Corps of Engineers (Corps or USACE) Regulatory Branch, if the project is determined to be within USACE jurisdiction.
- A Section 401 Water Quality Certification from the Regional Water Quality Control Board.

- A Section 402 NPDES Construction General Permit from the Regional Water Quality Control Board.
- A Streambed Alteration Agreement (Section 1602) from the California Department of Fish and Wildlife (CDFW).
- Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) for the [species] will be conducted, in compliance with the federal Endangered Species Act.
- A Section 2081 take permit or Consistency Determination for state-listed species, in compliance with the California Endangered Species Act.

7.2.13. Related Projects

The Department often has other smaller maintenance programs and rehabilitation projects planned for a park unit. For the areas adjacent to road system repairs, these include:

- Three habitat restoration projects north of South Ridge Trail and west of Easy Street Trail;
- One habitat restoration project adjacent to the Santa Ana River Trail near Lower Aliso Creek and the same project adjacent to Lower Aliso Creek Trail north of the Santa Ana River Trail.

7.3. Environmental Checklist

7.3.1. Initial Study Checklist

1.	**Project Title:**	Chino Hills State Park Road and Trail Management Plan
2.	**Lead Agency Name and Address:**	California Department of Parks and Recreation
3.	**Contact Person and Phone Number:**	Enrique Arroyo, (951) 453-6848
4.	**Project Location:**	Chino Hills State Park. See page 2-1 of Chapter 2.2, Project Location.
5.	**Project Applicant's Name and Address:**	Enrique Arroyo, Chino Sector Manager, Department of Parks and Recreation, Chino Hills State Park, 1879 Jackson Street Riverside, CA 92504
6.	**General Plan Land Use Designation:**	Natural Preserve, and State Park – Chino Hills State Park General Plan
7.	**Zoning:**	Public Lands/Public Resource
8.	**Description of Project:**	Refer to Section 7, Chapter 2
9.	**Surrounding Land Uses and Setting:**	Refer to Chapter 4 of this document (Section IX, Land Use
10.	**Other Public Agencies whose Approval is Required:**	Refer to Chapter 2, Section 2.13

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The Department has received requests from Tribes in the geographic area with which they are traditionally and culturally affiliated with and the documented consultation is included in Section XVIII, Tribal Cultural Resources of this IS.

7.3.2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the proposed project, involving at least one impact that is a potentially significant impact without mitigation, as indicated by the checklist.

- ☐ Aesthetics
- ☐ Agriculture & Forestry Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Energy
- ☐ Geology & Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards & Hazardous Materials
- ☐ Hydrology & Water Quality
- ☐ Land Use & Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Parks & Recreation
- ☐ Population & Housing
- ☐ Public Services
- ☐ Transportation
- ☐ Tribal Cultural Resources
- ☐ Utilities & Service Systems
- ☐ Wildfire
- ☐ Mandatory Findings of Significance
- ☒ None

7.3.3. Determination:

On the basis of this initial evaluation:

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

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

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

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

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

Approved by: 

Enrique Arroyo
Chino Sector Manager

10/27/2020
Date

7.4. Environmental Setting and Impact Analysis

I. Aesthetics

Environmental Setting

Chino Hills State Park (CHSP) contains significant scenic and irreplaceable resources, including natural, cultural, and scenic resources of the rolling hills, wooded canyons, and riparian forests that are representative of the early California landscape. As of 2018, CHSP encompassed approximately 14,173 acres, most of which are made up of rolling hills. The entire park is a vital link in the 31-mile-long Puente-Chino Hills Wildlife Corridor, which extends north and west into the Los Angeles Basin from the north end of the Santa Ana Mountains. The dominant vegetation type in the park is nonnative annual grassland. However, walnut woodlands, coastal sage scrub, coast live oak woodland, sycamore woodland, chaparral, and riparian scrub are also important components.

Within the central portion of the park is Water Canyon Natural Preserve, which encompasses the entire watershed of Water Canyon Creek. The preserve contains key habitat for many threatened, endangered, and sensitive species, making it one of the park's most ecologically sensitive areas. In addition, a one-mile-long section of the Santa Ana River and its associated Fremont cottonwood riparian woodland are within park boundaries. This section of the Santa Ana River is the only remaining natural stretch of the river downstream of Prado Dam in Orange and Riverside Counties.

Cleveland National Forest in the Santa Ana Mountains is just two miles south of Highway 91, adjacent to the park boundary. It is biologically connected to CHSP via the Coal Canyon biocorridor, which is the only remaining viable biological link between these properties.

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

II. Discussion

a) Impacts could occur if a road or trail alignment was altered to the degree that the existing views are no longer accessible. Impacts to scenic vistas would also occur if a conspicuous structure were to be placed in a visually prominent location that is currently part of a scenic view, or if the landscape were to be substantially altered (e.g., removal of large sections of vegetation or geologic features) such that the scenic view would be substantially degraded. None of these potential outcomes will occur as a result of the RTMP.

The RTMP will provide a management tool that will be used to assess change-in-use requests and manage the roads and trails to minimize impacts to the natural and cultural resources. Minor trail modifications could be associated with a subsequent project (e.g., addition of design features, minor widening, minor realignment); however, projects that propose buildings or other conspicuous structures would not occur as a result of the RTMP. Furthermore, incorporation of SPR AES-1 (see Section 2.9) would ensure that design and materials of road and trail modifications are consistent with the surrounding visual setting, including scenic views, and that equipment and materials storage during construction occur outside existing scenic viewsheds. Therefore, no impacts would occur.

b, c) The visual character of CHSP varies greatly and generally exhibits highly scenic, and in many cases, substantial visual features (large trees, wide open prairies, riparian areas, water bodies, etc.) that enhance the visual character of the roads and trails. The RTMP will provide a management tool that will be used to assess change-in-use requests and manage the roads and trails to minimize impacts to the natural and cultural resources. Route modifications, including reengineering, minor realignments, and/or decommissioning (restoration to natural conditions) could be necessary for subsequent projects pursuant to the RTMP. These road and trail improvements would be designed to minimize effects to the physical environment. For example, SPR BIO-21 requires minimizing removal of native trees and avoiding trees over 24 inches DBH. Also, qualifying projects would be designed to avoid substantial alteration to existing geological features and water bodies (see HYDRO and GEO SPRs). Therefore, subsequent projects would not substantially affect the existing visual character or features of the scenic landscape. Furthermore, SPR AES-1 and SPR AES-2 would ensure that design and materials used for road and/or trail modifications would be consistent with the surrounding visual character and that equipment and materials storage during construction would occur outside prominent viewsheds. Therefore, there will be no impact.

> Projects qualifying for conditional approval for a change-in-use could include minor physical alterations to existing roads and trails. Under the process, physical changes would be limited to decommissioning, minor trail widening or realignment, installation of best management practices, and other minor design improvements. Design improvements would avoid tree removal to the extent feasible, especially trees over 24 inches DBH (according to SPR BIO-35). Furthermore, qualifying projects would not require removal or major alteration of existing landscapes or geologic features, and the addition or removal of a user type from an existing road or trail would not substantially change visual character. Therefore, no impact would occur.

d) No additional permanent light source will be installed (e.g., lighting for a new emergency call box or trail head-area path lighting). Construction would occur only during daytime hours. Therefore, no temporary impacts from construction lighting would occur. Overall, lighting and glare generated by qualifying projects approved under the proposed RTMP will not change substantially from existing conditions, and no impact would occur.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

III. Agriculture and Forestry Resources

Environmental Setting

The park is situated within the heavily populated urban communities of the East Los Angeles Basin in the Southern California metropolitan complex, and is situated in the counties of Orange, Riverside, and San Bernardino.

Over the centuries, many people have made use of the open spaces and plentiful water, plant, and animal resources of the Chino Hills. Before European contact, the Tongva (Gabrielino) Indians, who lived along the Santa Ana River basin, set up temporary camps here for gathering food. After the Spanish founded Mission San Gabriel in 1771, the Chino Hills were used extensively for grazing by mission cattle. During the Mexican Republic era, the hills were used as spillover pasture for such surrounding Mexican ranchos as Santa Ana del Chino and La Sierra Yorba. After Mexico ceded California to the United States in 1848, the land continued to be used for cattle.

Private land acquisition here began in the 1870s and continued into the 1890s. Some late nineteenth- and early twentieth-century oil exploration and mining activity also took place in areas now within the park. In 1948 the 1,720-acre Rolling M Ranch was established, and the land was leased to nearby landowners for cattle grazing. A ranch house, historic barn, and several windmills and watering troughs serve as reminders of the cattle-ranching days.

In 1977 the California Legislature passed a resolution directing the Department to conduct a study on acquiring Chino Hills land for park purposes. A local citizen group, Hills for Everyone, worked closely with the Department and the legislature to create the park with an initial acquisition of 2,237 acres. The California State Park and Recreation Commission officially declared the area a unit of the State Park System in 1984. Since then, numerous land acquisitions from various private landowners have expanded the park to its present acreage.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	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) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	❒	❒	❒	■
d) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	❒	❒	❒	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	❒	❒	❒	■

Discussion

a) None of the land within CHSP, the area immediately surrounding the park, or area impacted by the proposed project is included in any of the Important Farmland categories, as delineated by the California Department of Conservation under the Farmland Mapping and Monitoring Program (FMMP).[8] Therefore, there will be no impact.

[8] California Department of Conservation, California Important Farmland Mapper, 2016, available online at https://maps.conservation.ca.gov/DLRP/CIFF/, accessed May 30, 2020.

b) The project is located wholly on California State Park land and is not in conflict with any Williamson Act land contracts. CHSP is part of the California State Park System and does not support any agricultural operations or farmland. Therefore, there will be no impact.

c) Commercial extraction of timber is not allowed in units of the State Park System per California Public Resource Code (PRC § 5001.65). The project would have no impact on any timber zoning or cause rezoning of any land. Therefore, there will be no impact.

d, e) No conversion of adjacent agricultural or forest lands to nonagricultural/timber production uses would occur as a result of the project. The project encompasses only California State Park land and involves a management plan for roads and trails solely within the park (although it does examine external trail links to trails within non-California State Park open space). The project would have no influence on, or involve changes to, the surrounding environment that would cause the conversion of any lands from agricultural or timber production use. The project will have no effect on farmland/timberland conversion. Therefore, there will be no impact.

Mitigation Measures
None required.

IV. Air Quality

Environmental Setting

Regulatory Framework

Pollutants emitted into the ambient air by stationary and mobile sources are regulated by the Federal Clean Air Act (Federal CAA). The Federal CAA was passed in 1963 by the United States Congress and has been amended several times. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Federal CAA requires the United States Environmental Protection Agency (USEPA) to define national ambient air quality standards (national AAQS) and allows states to adopt more stringent standards or to include other pollutants.

The California Clean Air Act (California CAA), signed into law in 1988, is administered by the California Air Resources Board (CARB) at the state level under the California Environmental Protection Agency (CalEPA). CARB is responsible for meeting the state requirements of the Federal CAA, administering the California CAA, and establishing the California AAQS. The California CAA requires all air districts in the state to achieve and maintain the California AAQS. CARB also regulates mobile air pollution sources such as motor vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB has established passenger vehicle fuel specifications and oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional level. CARB also conducts or supports research into the effects of air pollution on the public and develops approaches to reduce air pollutant emissions.

Air Pollutants of Concern

The pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law under the Federal CAA and the California CAA, respectively.[9,10] The Federal CAA requires the USEPA to define national AAQS and allows states to adopt more stringent standards or to include other pollutants.[11] At the state level, CARB is responsible for meeting state requirements of the Federal CAA, administering the California CAA, and establishing the California AAQS, which all air districts in the state are required to achieve and maintain. CARB also regulates mobile air pollution sources such as emission standards and fuel specifications for vehicles sold in California, consumer products, and certain off-road equipment. CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional level. CARB

[9] United States Environmental Protection Agency, 2019, Summary of the Clean Air Act, available online at https://www.epa.gov/laws-regulations/summary-clean-air-act, accessed March 27, 2020.

[10] United States Environmental Protection Agency, 2019, Clean Air Act Permitting in California, available online at https://www.epa.gov/caa-permitting/clean-air-act-permitting-california, accessed March 26, 2020.

[11] United States Environmental Protection Agency, 2017, Reviewing National Ambient Air Quality Standards (NAAQS): Scientific and Technical Information, available online at https://www.epa.gov/naaqs, accessed March 27, 2020.

also conducts or supports research into the effects of air pollution on the public and develops approaches to reduce air pollutant emissions.

The federal pollutants under the national AAQS are categorized as primary and/or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG) (also referred to as volatile organic compounds [VOC]), nitrogen oxides (NO_x), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particular matter ($PM_{2.5}$), and lead (Pb) are considered primary air pollutants. All of these, except for ROGs, are "criteria air pollutants," which means that AAQS have been established for them.[12] The national and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

In addition to criteria air pollutants, both the State and federal government regulate the release of toxic air contaminants (TACs). Common sources of TACs include mobile sources (e.g., cars, trucks, and buses) and stationary sources (e.g., factories, refineries, and power plants). The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the Federal Clean Air Act (42 United States Code § 7412[b]) is a TAC.

Under State law, the CalEPA, acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.[13]

Regional Air Quality

California is divided geographically into air basins for the purpose of managing the air resources of the state on a local and regional basis. An air basin generally has similar meteorological and geographic conditions throughout that area. CHSP is part of the South Coast Air Basin. The

[12] United States Environmental Protection Agency, 2018, Criteria Air Pollutants, available online at https://www.epa.gov/criteria-air-pollutants, accessed March 26, 2020.

[13] California Air Resources Board, 1993, CARB Identified Toxic Air Contaminants, available online at https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants, accessed March 26, 2020.

Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and USEPA Region IX.[14,15]

The SCAQMD is responsible for monitoring air pollutant levels to ensure that the State and federal CAA standards are being met. When the standards are met, the Basin is considered in "attainment"; when standards are exceeded, the Basin is in "nonattainment." The Basin is designated nonattainment for the federal and State one-hour and eight-hour ozone standards, the State PM_{10} standards, and the federal and State $PM_{2.5}$ standard. The Basin is considered in attainment for carbon monoxide (CO) under both State and federal ambient air quality standards. Therefore, the Basin is currently in exceedance of several State and federal ambient air quality standards and is required to implement strategies to reduce pollutant levels to within the AAQS.[16]

[14] South Coast Air Quality Management District, 2020, About, available online at http://www.aqmd.gov/nav/about, accessed June 22, 2020.

[15] United States Environmental Protection Agency, 2020, EPA Region 9 (Pacific Southwest), available online at https://www.epa.gov/aboutepa/epa-region-9-pacific-southwest, accessed June 22, 2020.

[16] Air Quality Management District, 2016, NAAQS and CAAQS Attainment Status for South Coast Air Basin, available online at http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf, accessed June 22, 2020.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	❒	❒	❒	■
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or State ambient air quality standard?	❒	❒	■	❒
c) Expose sensitive receptors to substantial pollutant concentrations?	❒	❒	❒	■
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	❒	❒	❒	■

Discussion

a) The project would not conflict with or obstruct implementation of the 2016 Air Quality Management Plan (AQMP) for the SCAQMD. The main objective of the 2016 AQMP is to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases, criteria pollutant, and toxic risk, as well as efficiencies in energy use, goods movement, and transportation. The AQMP identifies reducing mobile source emissions, which are the principal contributors to the Basin's air quality challenges, as the most effective method to reduce air pollution impacts on the health of the population in the Basin. The 2016 AQMP integrates strategies and measures that would enable the SCAQMD to meet the national AAQS for which the region is in nonattainment. These standards include the 1-hr and 8-hr ozone national AAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards.[17]

The project would not conflict with the 1999 Amendments to the 1997 AQMP's Ozone State Implementation Plan (SIP) for the Basin, prepared by the SCAQMD. The main objective of the 1997 Ozone SIP is to provide updated technical information relative to baseline emission inventories and control measures to achieve the federal ozone and particulate matter (PM_{10}) air quality standards. Additionally, the 1999 Amendments to the 1997 AQMP includes a revised attainment demonstration for PM_{10}, ozone, and carbon monoxide, and a maintenance plan for

[17] South Coast Air Quality Management District, 2016, Final 2016 AQMP-CARB/EPA/SIP Submittal, available online at http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp, accessed June 22, 2020.

nitrogen oxides. The 1999 Amendment to the 1997 AQMP revised the implementation of the stationary source control element strategy and provided greater emission reductions in the near-term. The 1999 Amendment is limited to the ozone portion of the 1997 AQMP.[18]

The project would not conflict with SCAQMD's 2010 Clean Communities Plan (CCP), which has an objective to reduce the exposure to air toxics and air-related nuisances throughout the SCAQMD, with an emphasis on cumulative impacts. The elements of the CCP are community participation, community exposure reduction, communication and outreach, agency coordination, nuisance, and source-specific programs.[19]

Therefore, because the project would not conflict with or obstruct implementation of any applicable air quality plan, there would be no impact.

b) As described previously, the project region is designated nonattainment for the federal and State one-hour and eight-hour ozone standards, the State PM_{10} standards, and the federal and State $PM_{2.5}$ standards. The CHSP RTMP project is a management tool that will be used to assess change-in-use requests and manage the roads and trails to minimize impacts to cultural and natural resources. Maintenance and construction activities associated with the project would include rebuilding existing roads and trails, reengineering or modifying existing road or trail corridors to improve sustainability, rerouting trail sections for rehabilitation, annual drainage and brush clearing maintenance of existing roads and trails, and converting existing roads into recreational trails. Because these maintenance and construction activities would require construction equipment for material transport, clearing of vegetation, or excavation for new trails, emissions of ozone precursors and generation of fugitive dust is anticipated. However, due to the temporary nature of the construction project and compliance with applicable Air Quality SPRs, the CHSP RTMP would not result in a new source of emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable federal or State AAQS. Therefore, this impact would be less than significant.

c) The project consists of a guiding document for park managers, staff, and volunteers who construct trail improvements, maintain or repair existing trails, or are otherwise involved with trail issues. The plan establishes goals for the overall trail system as well as guidelines for appropriate trail uses, trail closures and reroutes, trail maintenance and repair activities, trail aesthetics, and a trail monitoring system. The plan also defines trail-specific actions for individual trails and recommended future planning efforts. There are no sensitive receptors, such as schools, hospitals, or hospice care facilities, within the park boundaries. Furthermore, nearby sensitive receptors in communities and cities that surround CHSP are all separated from the park by roadways, freeways, or urban development. Therefore, the proposed project would

[18] South Coast Air Quality Management District, 1999, 1999 Amendment to the 1997 Ozone SIP Revision for the South Coast Air Basin, available online at http://www.aqmd.gov/docs/default-source/clean-air-plans/ozone-plans/ozone-plan-final-1999-amendment.pdf?sfvrsn=2, accessed June 22, 2020.

[19] South Coast Air Quality Management District, 2010, Clean Communities Plan, available online at http://www.aqmd.gov/home/air-quality/clean-air-plans/clean-communities-plan, accessed June 22, 2020.

not expose sensitive receptors to substantial pollutant concentrations, and no impact would result.

d) As noted above, the project consists only of a guiding document for road and trail planning, management, and maintenance. Subsequent trail construction that may result from approval of this document will not create objectionable odors for any individuals. Therefore, there would be no impact.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

V. Biological Resources

This section provides an evaluation of the potential biological effects of implementing the proposed RTMP. Road and trail closure during construction, reconstruction, maintenance, change-in-use, and other activities allowed by the RTMP may result in adverse effects to biological resources.

The following environmental assessment includes a review of biological resources potentially affected by the implementation of the RTMP, including existing and potential biological resources within CHSP. Biological resources include common vegetation and wildlife, sensitive plant communities, and special status plant and animal species.

This analysis includes a review of applicable regulations, requirements, plans, and policies from the following sources that were incorporated into the policies and applicable SPRs of the RTMP. These sources provide the legal protection for plant and animal species of concern and their habitat:

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (FESA)
- California Endangered Species Act (CESA)
- Clean Water Act (CWA)
- Migratory Bird Treaty Act (MBTA)
- CHSP Inventory, Monitoring, and Assessment Project
- CHSP Resource Inventory

Methodology

All special status species and their habitats were evaluated for potential impacts as a result of the CHSP RTMP. To address the potential impacts to biological resources within the project area, the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database and the California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Plants of California were queried. The assessment area was defined as the Yorba Linda, Black Star, and Prado Dam US Geological Survey 7.5' quadrangles in which the park is located. Results from the query are presented below under the corresponding sections and in Appendix A.

Additional information on special status species and communities was obtained from Department databases on file at the Inland Empire District office and through discussions with Department biologists, literature review, and on-site reconnaissance-level surveys. Multiple visits by Department biologists were conducted to survey and map for special status plants and to assess potential habitat for special status wildlife species.

Special Status Species

Sensitive biological resources that occur or potentially occur in or near the proposed project site are discussed in this section. Special status species are defined as plants and animals that are legally protected or that are considered sensitive by federal, state, or local resource conservation agencies and organizations. Specifically, this includes species listed as State or federally threatened or endangered, those considered as candidates for listing as threatened or endangered, species identified by the United States Fish and Wildlife Service (USFWS) and/or CDFW as Species of Special Concern (SSC), animals identified by CDFW as Fully Protected (FP) or Protected (P), bat species identified by the Western Bat Working Group, and plants considered by the California Native Plant Society to be rare, threatened, or endangered. Also included are habitats that are considered critical for the survival of a listed species or have special value for wildlife species and plant communities that are unique or of limited distribution.

Special status plant and wildlife species are afforded legal protection through various state and federal laws and regulations.

Federal laws and regulations pertaining to plants and wildlife:

- Federal Endangered Species Act
- National Environmental Policy Act
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act

State laws and regulations pertaining to plants and wildlife:

- California Environmental Quality Act
- California Endangered Species Act
- Native Plant Protection Act
- California Fish and Game Code

Federal Endangered Species Act

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA) (16 US Code § 1531 et seq. and Code of Federal Regulations Title 50, Part 402). The FESA and its amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. The USFWS has regulatory authority over projects that may result in take of a federally listed species. Section 3 of the FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or any attempt at such conduct.” Under federal regulation, “take” is further defined to include habitat modification or degradation where it results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. If incidental take is a possibility, then a Biological Opinion is prepared for take of listed species under Section 7 of the FESA. An Incidental Take Permit can be authorized by the USFWS.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) establishes a Federal prohibition to pursue, capture, kill, possess, sell or purchase, transport, or export any migratory bird or any part, nest, or egg of any such bird (16 U.S. Code § 703). The Migratory Bird Treaty Act reads in part: "…it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, offer to purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or eggs of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof…" This Act was established in 1918 to try to end the commercial trade in birds and their feathers that were severely impacting populations of many native bird species. A list of migratory birds protected under this Act is provided in Title 50 of the Code of Federal Regulations, Section 10.13.[20]

Clean Water Act

The Clean Water Act (CWA) regulates restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Areas meeting the regulatory definition of "waters of the United States" are subject to the jurisdiction of the United States Army Corps of Engineers (USACE) Section 404 of the 1972 CWA (Federal Water Pollution Control Act) and Section 10 of the 1899 Rivers and Harbors Act.[21,22]

On January 23, 2020, the Department of the Army and the USEPA finalized the Navigable Waters Protection Rule to redefine "waters of the United States" under the CWA in fulfillment of Executive Order 13788. The rule was made in an effort to streamline the definition into four simple categories of jurisdictional waters, provide exclusions for water features that traditionally have been outside of regulation, and define previously undefined terms in the regulatory text. The four categories of federally regulated waters are:[23]

- Territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries to those waters;
- Certain lakes, ponds, and impoundments;
- Wetlands adjacent to jurisdictional waters.

[20] Code of Federal Regulations Title 50 Section 21.11.

[21] United States Environmental Protection Agency, 2019, Summary of the Clean Water Act, available online at https://www.epa.gov/laws-regulations/summary-clean-water-act, accessed July 2, 2020.

[22] United States Environmental Protection Agency, 2019, Section 10 of the Rivers and Harbors Appropriation Act of 1899, available online at https://www.epa.gov/cwa-404/section-10-rivers-and-harbors-appropriation-act-1899, accessed July 2, 2020.

[23] Federal Register, 2019, Revised Definition of "Waters of the United States", available online at https://www.federalregister.gov/documents/2019/02/14/2019-00791/revised-definition-of-waters-of-the-united-states, accessed July 2, 2020.

The Navigable Waters Protection Rule also describes 12 categories of exclusions, which are features that are not "waters of the U.S.," namely: features only containing water in direct response to rainfall, such as ephemeral features; groundwater; prior converted cropland; many ditches; and waste treatment systems. Furthermore, the Navigable Waters Protection Rule provides clarification to several key elements of the jurisdictional scope of federal CWA jurisdiction, including:[24]

- Removal of the separate categories for jurisdictional ditches and impoundments;
- Refining the definition of "typical year" to provide regional and temporal flexibility and ensure jurisdiction is determined accurately during more wet and more dry periods;
- Defining "adjacent wetlands" as wetlands that are connected meaningfully to other jurisdictional waters through direct abutment or regular surface water communication with jurisdictional waters.

Wetlands on nonagricultural lands are identified using the USACE Wetlands Delineation Manual.[25] Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. To issue a permit under Section 404, USACE must also obtain a water quality certification from one of the State's Regional Water Quality Control Boards (RWQCBs) pursuant to Section 401 of the CWA. The State Water Resources Control Board (SWRCB) is the State agency that, together with the RWQCB, is charged with implementing water quality certification in California.[26]

Any work within areas defined as waters of the U.S. (i.e., wetlands and other waters) may require a Section 404 Fill Discharge Permit from the USACE and Section 401 Water Quality Certification from the RWQCB.

Federal Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) (16 US Code § 668 et seq.) makes it unlawful to import, export, take, sell, purchase, or barter any bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*) or their parts, products, nests, or eggs. A "take" under BGEPA has been interpreted to include altering or disturbing nesting habitat. Exceptions may be granted by the USFWS for scientific or exhibition use or for traditional and cultural use by Native Americans. However, no permits may be issued for the import, export, or commercial activities involving bald or golden eagles.[27]

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[24] United States Environmental Protection Agency, 2020, The Navigable Waters Protection Rule (Step Two), available online at https://www.epa.gov/nwpr/navigable-waters-protection-rule-step-two-revise, accessed July 2, 2020.

[25] Environmental Laboratory, 1987, Corps of Engineers Wetlands Delineation Manual. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

[26] California State Water Resources Control Board, 2020, 401 Water Quality Certification and Wetlands Program, available online at https://www.waterboards.ca.gov/water_issues/programs/cwa401/, accessed July 2, 2020.

[27] United States Fish and Wildlife Service, 2020, Federal Laws that Protect Bald and Golden Eagles, available online at https://www.fws.gov/midwest/eagle/history/protections.html, accessed July 1, 2020.

California Endangered Species Act and the California Fish and Game Code

The California Endangered Species Act (CESA) emphasized early consultation to avoid potential impacts to rare, threatened, and endangered species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats (California Fish and Game Code § 2050 et seq.). The CDFW is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits take of any species determined to be an endangered or threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." It does not include "harm" or "harass" as provided under the FESA. CESA allows for take incidental to otherwise lawful activities; for these actions an incidental take permit is issued by CDFW. For projects that would affect a species that is on the federal and State lists, compliance with the FESA satisfies the CESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in the taking of a species that is only State listed, the project proponent must apply for a take permit under Section 2081(b).

Under the California Fish and Game Code, the CDFW provides protection from take for a variety of species. California Fish and Game Code Section 3503.5 prohibits take, possession, or destruction of any raptor (bird of prey species in the orders Falconiformes and Strigiformes), including their nests or eggs. Violations of this law include destruction of active raptor nests as a result of tree removal and disturbance to nesting pairs by nearby human activity that causes nest abandonment and reproductive failure.

Native Plant Protection Act

The NPPA was enacted in 1977 and allows the California Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (See Fish and Game Code § 1900 et seq. for more information.)

Special status plant and animal species are described below along with their potential to occur in the project area. Potential impacts to biological resources (including special status species) from implementation of the RMTP are addressed in this section.

The tables in the following subsections use designations to track the status of sensitive plant and animal species and sensitive natural communities in California. Table 7-1 includes all status codes used by the CDFW California Natural Diversity Database as of July 2017. These designations are used to track the status of sensitive plant and animal species and sensitive natural communities in California.

Table 7-1 Special Status Key

Designations are used for species listed as threatened or endangered per the Federal Endangered Species Act and the California Endangered Species Act

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: TH
Bureau of Land Management – Sensitive	BLM: S
California Department of Forestry and Fire Protection – Sensitive	CDF: S
California Department of Fish and Wildlife – Fully Protected	CDFW: FP
California Department of Fish and Wildlife – Species of Special Concern	CDFW: SSC
California Department of Fish and 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
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 Services – 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 Native Plant Society – California Rare Plant Ranks (CRPR)	
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: 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
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 (two G, S, or T ranks together indicate a rank value that is between the two). Rank designation by NatureServe in coordination with CDFW.[28]	
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

[28] California Department of Fish and Wildlife, 2020, Metadata Description of CNDDB Fields, available online at https://map.dfg.ca.gov/rarefind/view/RF_FieldDescriptions.htm, accessed September 23, 2020.

Key to Potential Occurrence Designations	
DEFINITION/EXPLANATION	**DESIGNATION**
Species or Natural Community has been observed recently within CHSP (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	?

Environmental Setting

The Southwest Ecoregion, of which CHSP is a part, is recognized worldwide as a significant area of biodiversity. It extends roughly from San Diego to Santa Barbara, as far east as the crest of the Transverse Ranges, and west to the coast. This area contains a greater number of biological resources than any other area of comparable size in the United States.[29] As land in Southern California becomes more developed and open space dwindles, the importance of CHSP to the preservation of biodiversity in the Southwest Ecoregion will greatly increase.

Even with continued protection, the biodiversity of CHSP is at risk. The Puente-Chino Hills, including the park, have become increasingly isolated by the conversion of the surrounding landscape to urban uses. Scientific studies have shown that the isolation of habitat can lead to ecosystem collapse. Small, isolated areas of habitat simply cannot support as many species as larger areas. In order for the biodiversity of the park to be maintained at or near current levels, it must remain connected to other protected open space in the region.

Without the ability to protect the entire landscape, biocorridors are the best-known way to counteract the effects of the isolation of habitat. Biocorridors, like hallways between rooms, are extensions of habitat that connect one core habitat area to another. A core habitat is an

[29] E. O. Wilson, *Biodiversity*, National Academy Press, Washington D.C., 1988.

area of high resource importance because it supports habitat that is crucial for species in the park. Biocorridors provide for plant and animal movement between core habitats. The exchange of plants and animals between habitats is critical to the maintenance of a healthy ecosystem for several reasons. These reasons include the maintenance of genetic variation, the ability of species to shift their ranges over time in response to environmental changes, and as a source of repopulating after a natural catastrophe. Without plant and animal exchange between areas, many species within CHSP will eventually die off.

The habitat linkages important to the biological survival of CHSP include: 1) Coal Canyon, which links the park to the Cleveland National Forest and the Santa Ana Mountains; 2) the Sonome Canyon Area, which links CHSP to Tonner Canyon and the Whittier-Puente Hills to the northwest; and 3) the Prado Basin area, which links the park to the Prado Basin and thereby to the Dairy Preserve, the Santa Ana River watershed, and open space east of State Route 71. Roads with heavy traffic bisect these linkages and are barriers to wildlife. When future improvements to these roads are undertaken, including capacity increases planned for the regional transportation system, the construction or enhancement of suitable bridges, culverts, or other structures are necessary to maintain corridor function and biological viability.[30]

Some of the threats to the biological integrity of CHSP include the edge effects due to nearby urban land uses and development; isolation and fragmentation from regional wildlands; impacts to perennial creek systems, with a focus on Aliso Creek; and air pollution intrusion from the Los Angeles Basin and Inland Empire.[31]

Biocorridor Areas

Coal Canyon: The most critical biological linkage between CHSP and any adjacent protected open space is the Coal Canyon Biocorridor connecting the park and surrounding Puente-Chino Hills to the Cleveland National Forest on the north and the Santa Ana Mountains to the south. This biocorridor allows the movement of animals and the dispersal of plants between the two areas. The diversity of the Puente-Chino Hills is supported by the larger Santa Ana Mountains by allowing wildlife to disperse into the area, which increases the population, provides new genetic material, and helps to prevent local extinctions. This biocorridor extends within park boundaries through Brush and Water Canyons to the interior of the park. These canyons support California walnut woodland, oak woodland, and riparian habitats, which provide dispersal habitat for special status species such as the mountain lion, along with habitat crucial to the California gnatcatcher and for a successful nesting pair of resident golden eagles. Water Canyon and a significant portion of upper Brush Canyon are inside the park's boundary. Development threatens the connectivity of the Coal Canyon Biocorridor, which could cause the biological isolation of Puente-Chino Hills and CHSP. This isolation could result in large scale local

[30] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, available online at https://www.parks.ca.gov/pages/21299/files/chino%20hills%20finalgp.pdf, accessed March 30, 2020.

[31] California Department of Parks and Recreation, 2001, Chino Hills State Park Inventory, Monitoring, and Assessment Project Agreement, available online at https://www.parks.ca.gov/pages/734/files/sec%204a-chino%20projagree02.pdf, accessed June 23, 2020.

species extinction, which would result in the biological decline of Puente-Chino Hills and CHSP because these areas are too small to support the existing animal and plant populations.

Sonome and Tonner Canyons: The Sonome Canyon Biocorridor is in the Sonome Canyon area and links CHSP with the Puente and Whitter Hills via the Tonner Canyon Biocorridor to the north and west. These biocorridors link the three significant core habitat areas, allowing dispersal of species between them.

Prado Basin: The Prado Basin Biocorridor links CHSP with high-quality habitat in the Prado Basin and with Santa Ana River's upper reaches to the east. The western yellow-billed cuckoo (State Endangered) and the least Bell's vireo (State and Federally Endangered) have been documented within the Prado Basin. This corridor allows species exchange between CHSP's Fremont Cottonwood habitat along the Santa Ana River and that of the Prado Basin.[32]

Vegetation Communities

CHSP is located within the South Coast Bioregion, which extends along the Pacific Coast to Mexico, and inland to the San Gorgonio Pass approximately 50 miles east of the park. This bioregion is dominated by coastal scrub and chaparral vegetation before urbanizing in developed areas.[33] The dominant vegetation type within CHSP is nonnative annual grassland. However, walnut woodlands, coast live oak woodland, sycamore woodland, chaparral, riparian scrub, and coastal sage scrub make up important components of the park.

Additionally, diverse plant and vegetation communities exist within the park depending on the habitat type. Within the creek zones there are willow and sycamore woodlands, and understories of stinging nettle (*Urtica dioica*), wild rose (*Rosa acicularis*), and mule fat (*Baccharis salicifolia*). The riparian areas provide food and cover for local and migratory birds and animals. The woodlands above the creeks include species such as the Southern California black walnut tree and coast live oaks. The walnut woodlands in particular are especially important because there are only a few thousand acres of this habitat in existence throughout California, with several hundred protected within CHSP.

Various scrub and chaparral communities occupy the hills and slopes above the canyon floors. These communities include coastal sage scrub, California buckwheat, purple sage, and California sagebrush, as well as mixed chaparral communities dominated by laurel sumac (*Malosma laurina*) and toyon (*Heteromeles arbutifolia*). Many of the park's wildlife species depend on these communities for survival; however, many of these communities are threatened by urban development and are therefore considered an increasingly vital component of the biological resources protected within CHSP.

[32] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, available online at https://www.parks.ca.gov/pages/21299/files/chino%20hills%20finalgp.pdf, accessed March 30, 2020.

[33] UC Berkeley, 2020, The Jepson Herbarium, available online at https://ucjeps.berkeley.edu/eflora/geography.html, accessed June 24, 2020.

Thirty-four vegetation communities have been identified as occurring within CHSP according to field surveys conducted by Department staff (Table 7-2). At least 24 of these vegetation types are recognized by the CDFW as special status sensitive natural communities because they are considered highly imperiled due to rarity and threats.[34] These communities are listed in Table 7-2, shown on Figure 7-1, and described in this section.

[34] California Department of Fish and Wildlife, 2020, California Natural Community List, available online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline, accessed October 20, 2020.

Figure 7-1. Chino Hills State Park Vegetation Alliances

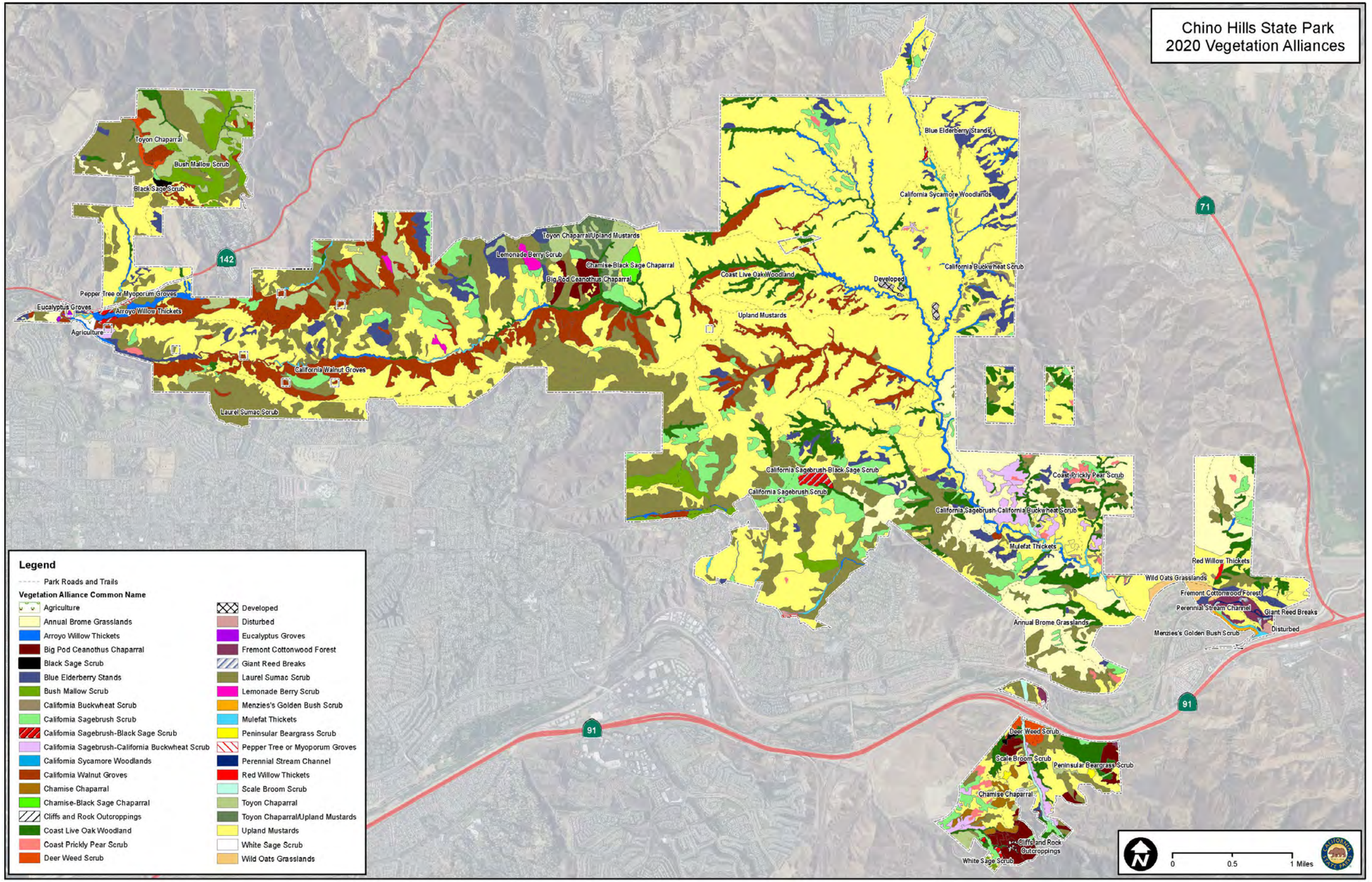

Table 7-2 Natural Vegetation Communities

ALLIANCE NAME	COMMON ALLIANCE NAME	GLOBAL RARITY RANK	STATE RARITY RANK	SENSITIVE ALLIANCE (YES/NO)	POTENTIAL OCCURRENCES
Adenostoma fasciculatum - Salvia mellifera Shrubland Alliance	Chamise-Black Sage Chaparral	G3	S3	Y	Present
Adenostoma fasciculatum Shrubland Alliance	Chamise Chaparral	G4	S4	N	Present
Artemisia californica – Eriogonum fasciculatum Shrubland Alliance	California sagebrush – California Buckwheat Scrub	G3	S3	Y	Present
Artemisia californica - Salvia mellifera Shrubland Alliance	California Sagebrush-Black Sage Scrub	G3	S3	Y	Present
Artemisia californica Shrubland Alliance	California Sagebrush Scrub	G5	S5	Y	Present
Arundo donax Semi-Natural Herbaceous Stands	Giant Reed Breaks	G5	S5	N	Present
Avena (*barbata, fatua*) Semi-Natural Herbaceous Stands	Wild Oats Grasslands	NA	NA	N	Present
Baccharis salicifolia Shrubland Alliance	Mulefat Thickets	G4	S4	Y	Present
Brassica (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands	Upland Mustards	NA	NA	N	Present
Bromus (*diandrus, hordeaceus*) - *Brachypodium distachyon* Semi-	Annual Brome Grasslands	NA	NA	N	Present

ALLIANCE NAME	COMMON ALLIANCE NAME	GLOBAL RARITY RANK	STATE RARITY RANK	SENSITIVE ALLIANCE (YES/NO)	POTENTIAL OCCURRENCES
Natural Herbaceous Stands					
*Ceanothus megacarpu*s Shrubland Alliance	Big Pod Ceanothus Chaparral	G4	S4	Y	Present
Eriogonum fasciculatum Shrubland Alliance	California Buckwheat Scrub	G5	S5	Y	Present
Eucalyptus (*globulus, camaldulensis*) Semi-Natural Woodland Stands	Eucalyptus Groves	G5	S5	N	Present
Heteromeles arbutifolia Shrubland Alliance	Toyon Chaparral	G3	S3	Y	Present
Heteromeles arbutifolia Shrubland Alliance/*Brassica* (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands	Toyon Chaparral/Upland Mustards	G3	S3	Y	Present
Isocoma mensiesii Shrubland Alliance	Menzies's Golden Bush Scrub	G3	S3	Y	Present
Juglans californica Woodland Alliance	California Walnut Groves	G3	S3	Y	Present
Lepidospartum squamatum Shrubland Alliance	Scale Broom Scrub	G3	S3	Y	Present
Lotus scoparius Shrubland Alliance	Deer Weed Scrub	G5	S5	N	Present
Malacothamnus fasciculatus Shrubland Alliance	Bush Mallow Scrub	G4	S4	N	Present

ALLIANCE NAME	COMMON ALLIANCE NAME	GLOBAL RARITY RANK	STATE RARITY RANK	SENSITIVE ALLIANCE (YES/NO)	POTENTIAL OCCURRENCES
Malosma laurina Shrubland Alliance	Laurel Sumac Scrub	G3	S3	Y	Present
Nolina cismontana Provisional Shrubland Alliance	Peninsular Beargrass Scrub	G3	S3	Y	Present
Opuntia littoralis Shrubland Alliance	Coast Prickly Pear Scrub	G4	S3	Y	Present
Platanus racemosa Alliance	California Sycamore Woodlands	G3	S3	Y	Present
Populus fremontii Forest Alliance	Fremont Cottonwood Forest	G4	S3	Y	Present
Quercus agrifolia Woodland Alliance	Coast Live Oak Woodland	G3	S3	Y	Present
Rhus integrifolia Shrubland Alliance	Lemonade Berry Scrub	G3	S3	Y	Present
Salix laevigata Woodland Alliance	Red Willow Thickets	G4	S3	Y	Present
Salix lasiolepis Shrubland Alliance	Arroyo Willow Thickets	G4	S4	Y	Present
Salvia apiana Shrubland Alliance	White Sage Scrub	G4	S4	Y	Present
Salvia mellifera Shrubland Alliance	Black Sage Scrub	G4	S4	N	Present
Sambucus nigra Shrubland Alliance	Blue Elderberry Stands	G4	S3	Y	Present
Sambucus nigra Shrubland Alliance/*Brassica* (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands	Blue Elderberry Stands/Upland Mustards	G4	S3	Y	Present
Schinus (*molle, terebinthifolius*)-	Pepper Tree or Myoporum Groves	G5	S5	N	Present

ALLIANCE NAME	COMMON ALLIANCE NAME	GLOBAL RARITY RANK	STATE RARITY RANK	SENSITIVE ALLIANCE (YES/NO)	POTENTIAL OCCURRENCES
Myoporum laetum Semi-Natural Woodland Stands					
Other Categories					
Disturbed Habitat					
Developed					
Cliffs and Rock Outcroppings					
Agriculture					
Perennial Stream Channel					

Notes: Natural Communities with G or S Ranks 1,2,3 or 4 are included in this list. (Rank 5 is not considered imperiled.)

***Adenostoma fasciculatum* – (*Salvia mellifera*) Shrubland Alliance - Chamise-Black Sage Chaparral:** This shrubland association is widespread in the southern and central coastal regions of California. It consists of intermixed chaparral and coastal sage scrub in the California Mediterranean climate. *Adenostoma fasciculatum* and *Salvia mellifera* codominate the shrub layer, with a sparse herbaceous layer. An emergent tree layer is nonexistent. It occurs at low elevations between 374 to 2,523 feet on gentle to steep slopes. Its geologic parent material is typically granite and less often sedimentary, gabbro, diorite, metamorphic, or metavolcanic. Suitable soil texture consists of clay, sand, silt, silty clay loam, and various loams.[*]

***Adenostoma fasciculatum* Shrubland Alliance - Chamise Chaparral:**
This vegetation alliance is dominated by *Adenostoma fasciculatum* that manifests in densely interwoven thickets when mature. Other species include *Adenostoma sparsifolium, Arctostaphylos glandulosa, Arctostaphylos manzanita, Arctostaphylos viscida, Diplacus aurantiacus, Eriogonum fasciculatum, Heteromeles arbutifolia, Quercus berberidifolia, Quercus wislizeni, Salvia apiana, Salvia mellifera, Toxicodendron diversilobum, Hesperoyucca whipplei,* and various *Ceanothus* spp, although these species contribute little to overall cover. *Quercus wislizeni* may be present as emergent trees, while there is very little understory or herbaceous litter. Typically occurring at ow elevation, this chaparral alliance occurs on dry slopes and ridges of interior California on xeric sites. This alliance occurs on varied topography with shallow, mafic-derived soils on many kinds of bedrock.[†]

[*] United States Geological Survey, 2007, CEGL003524 Adenostoma fasciculatum - Salvia mellifera Shrubland, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=789852, accessed October 2, 2020.
[†] United States Geological Survey, 2014, A3868 Adenostoma fasciculatum Chaparral Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899919, accessed October 2, 2020.

***Artemisia californica – Eriogonum fasciculatum* Shrubland Alliance California sagebrush – California Buckwheat Scrub:** This shrubland alliance can be found on gentle to steep slopes at low elevations and is characterized by a codominance of *Artemisia californica*, *Eriogonum fasciculatum*, and *Salvia mellifera* within the shrub layer. There is also a minor herbaceous layer, while the emergent tree layer is absent but may include *Quercus agrifolia*.[*]

***Artemisia californica* - *Salvia mellifera* Shrubland Alliance California Sagebrush-Black Sage Scrub and *Artemisia californica* Shrubland Alliance - California Sagebrush Scrub:** These dry to mesic coastal scrub vegetation alliances include *Artemisia californica, Salvia mellifera, and/or Salvia leucophylla*. Additional characteristic species include *Baccharis pilularis, Baccharis sarothroides, Keckiella antirrhinoides, Leymus condensatus*, and *Malosma laurina* which are indicative of mesic conditions. These communities are mostly found on California's southern coast at low elevations on steep slopes along streams. Adequate soil conditions are alluvial or colluvial-derived and shallow, although fine sandy clay loam to clay and relatively deep soils are also adequate.[†]

***Arundo donax* Semi-Natural Herbaceous Stands - Giant Reed Breaks:** This reed-dominated marsh alliance can be found across the temperate western United States. This alliance is strongly dominated by *Phragmites australis ssp. australis*, *Arundo donax*, or *Typha angustifolia*. These stands occur within semi-permanently flooded marshes, ditches, and impoundments that have previously been disturbed by human activity.[‡]

Avena (*barbata, fatua*) Semi-Natural Herbaceous Stands - Wild Oats Grasslands, *Brassica* (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands - Upland Mustards, and *Bromus* (*diandrus, hordeaceus*) - *Brachypodium distachyon* Semi-Natural Herbaceous Stands - Annual Brome Grasslands: These vegetation alliances consist of non-native annual grasslands and forblands composed of cool-season annual grasses, mostly introduced from Europe and are therefore invasive in disturbed areas throughout California. Many non-native species may be present, including *Aegilops triuncialis, Aira caryophyllea, Avena barbata, Avena fatua, Brachypodium distachyon, Brassica spp., Bromus diandrus, Bromus hordeaceus, Bromus madritensis, Centaurea melitensis, Centaurea solstitialis,* and *Cynosurus echinatus*. These

[*] NatureServe Explorer, 2020, Association Search, available online at https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.789900/Artemisia_californica_-_Eriogonum_fasciculatum_-_Salvia_mellifera_Shrubland, accessed October 20, 2020.
[†] United States Geological Survey, 2014, A3883 Artemisia californica - Salvia leucophylla Mesic Scrub Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899934, accessed October 2, 2020.
[‡] United States Geological Survey, 2017, A3847 Phragmites australis ssp. australis - Arundo donax - Typha angustifolia Ruderal Marsh Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899899, accessed October 20, 2020.

species are well adapted to the Mediterranean climate of California as many of these species evolved under similar conditions in southern Europe and northern Africa.[*]

***Baccharis salicifolia* Shrubland Alliance - Mulefat Thickets:** This vegetation alliance consists of riparian shrublands dominated by *Baccharis salicifolia*. Other species associated with this alliance includes shrubs such as *Artemisia californica, Baccharis emoryi, Baccharis neglecta, Baccharis pilularis, Malosma laurina, Nicotiana glauca, Pluchea sericea, Prosopis glandulosa var. glandulosa, Rubus spp., Salix exigua, Salix lasiolepis,* and *Sambucus nigra ssp. canadensis*. At low cover *Salix gooddingii* may be an emergent tree in some stands. This alliance is found at lower elevations along sandy watercourses, dry arroyos, and wetlands in sand dunes.[†]

***Ceanothus megacarpus* Shrubland Alliance - Big Pod Ceanothus Chaparral: This shrubland chaparral is dominated by *Ceanothus megacarpus* or *Ceanothus crassifolius*. The shrub canopy is shared with** *Adenostoma fasciculatum*, *Adenostoma sparsifolium*, *Arctostaphylos glauca*, *Ceanothus leucodermis*, *Ceanothus spinosus*, *Cercocarpus montanus*, *Diplacus aurantiacus*, *Eriogonum cinereum*, *Eriogonum fasciculatum*, *Heteromeles arbutifolia*, *Malosma laurina*, *Quercus berberidifolia*, *Quercus dumosa*, *Rhamnus ilicifolia*, *Rhus ovata*, *Salvia mellifera*, and/or *Hesperoyucca whipplei*. Additionally, emergent *Juglans californica*, *Quercus agrifolia*, and *Umbellularia californica* trees may be present. This alliance typically occurs within varied soil depth that are usually coarse-textured, shallow, rocky, and poorly differentiated.[‡]

***Eriogonum fasciculatum* Shrubland Alliance - California Buckwheat Scrub:** This shrubland alliance is dominated by *Artemisia californica*, *Eriogonum fasciculatum*, *Salvia apiana*, and/or *Salvia mellifera*. Other more subordinate species include *Encelia farinosa*, *Ericameria* spp., *Isocoma menziesii*, *Malacothamnus fasciculatus*, *Malosma laurina*, *Rhus* spp., and/or *Hesperoyucca whipplei*. This alliance is found in the relatively hot, drought conditions on California's inner southern coast. Its habitat is characterized by slopes that are steep and south-facing, as well as boulders and intermittently flooded arroyos, washes, and channels. Soils are typically coarse or fine-textured, well-drained, colluvial-derived, alluvial, and moderately acidic to slightly saline. Its typical climate is characterized by hot dry summer conditions and is most abundant away from the immediate cost.[§]

[*] United States Geological Survey, 2014, A3870 Avena fatua - Bromus spp. Ruderal Annual Grassland Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899921, accessed October 2, 2020.
[†] United States Geological Survey, 2014, A0933 Baccharis salicifolia Wet Shrubland Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899044, accessed October 2, 2020.
[‡] United States Geological Survey, 2014, A3864 *Ceanothus crassifolius - Ceanothus megacarpus* Chaparral Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899915, accessed October 21, 2020.
[§] United States Geological Survey, 2013, A3884 *Eriogonum fasciculatum - Salvia apiana* Xeric Scrub Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899935, accessed October 21, 2020.

***Eucalyptus* (*globulus*, *camaldulensis*) Semi-Natural Woodland Stands - Eucalyptus Groves:** This woodland alliance consists of naturalized or planted stands of Eucalyptus species with at least nine occurring in California. These species include *Eucalyptus camaldulensis*, *Eucalyptus cladocalyx*, *Eucalyptus globulus*, *Eucalyptus polyanthemos*, *Eucalyptus pulverulenta*, *Eucalyptus sideroxylon*, *Eucalyptus tereticornis*, *Eucalyptus viminalis*, and *Corymbia citriodora*. Understories in these groves of these long lived and fast-growing trees are typically devoid of growth due to a buildup of allelopathic chemicals in the soil and high volumes of eucalyptus leaf debris. This alliance is found throughout coastal mountains and the central valley of California.[*]

***Heteromeles arbutifolia* Shrubland Alliance - Toyon Chaparral and *Heteromeles arbutifolia* Shrubland Alliance/*Brassica* (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands - Toyon Chaparral/Upland Mustards:** These vegetation alliances are mesic chaparral shrubland communities that occur in central and southern coastal California on moderate to steep slopes at low elevations. Stands are dominated or codominated by *Prunus ilicifolia* and *Heteromeles arbutifolia* in the shrub layer as well as *Adenostoma fasciculatum, Arctostaphylos pringlei, Brickellia californica, Cercocarpus montanus var. glaber, Ceanothus cuneatus var. cuneatus, Ceanothus oliganthus, Eriogonum fasciculatum, Keckiella antirrhinoides, Diplacus aurantiacus, Rhamnus ilicifolia, Salvia apiana, Salvia mellifera,* and *Toxicodendron diversilobum*. The herbaceous layer may be composed of native grasses such as *Leymus condensatus* and *Melica imperfecta* under low cover, as well as *Brassica nigra* and other mustards. Within the tree layer, *Umbellularia californica* and *Quercus agrifolia* may be present at low cover.[†]

***Isocoma mensiesii* Shrubland Alliance - Menzies's Golden Bush Scrub:** This scrub alliance consists of low broad-leaved evergreen shrubs. Species common in this alliance include *Artemisia californica, Artemisia pycnocephala, Ephedra californica, Ericameria ericoides, Isocoma menziesii, Lupinus chamissonis,* and the *stem succulent (cactus) Opuntia littoralis.* The canopy of this alliance can be dense and continuous or intermittent to open and taller, broad-leaved deciduous shrub *Rhus integrifolia* may be present as an emergent which may be abundant or sparse. This alliance is found in areas of coastal sand accumulation on sand bars, flats, ridges, river mouths, and spits along the coastline.[‡]

***Juglans californica* Woodland Alliance - California Walnut Groves:** Walnut woodlands/groves are dominated by Southern California black walnuts (*Juglans californica*) and interspersed with other tree species, such as coast live oak (*Quercus agrifolia*) and toyon (*Heteromeles arbutifolia*), and shrubs. The understory of walnut woodlands is dominated by grasses,

[*] United States Geological Survey, 2014, A0084 *Eucalyptus* spp. Ruderal Forest Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=898960, accessed October 21, 2020.
[†] Nature Serve Explorer, 2020, *Prunus ilicifolia - Heteromeles arbutifolia* Shrubland, available online at https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.790201/Prunus_ilicifolia_-_Heteromeles_arbutifolia_Shrubland, accessed October 2, 2020.
[‡] United States Geological Survey, 2014, A0822 *Isocoma menziesii - Lupinus chamissonis - Ericameria ericoides* Shrubland Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899028, accessed October 2, 2020.

especially in valleys and on south-facing slopes. Although Southern California black walnut trees are not endangered, walnut woodlands are one of the rarest and most endangered plant communities in Southern California.[*] Some of the largest remaining woodlands in Southern California can be found in CHSP. Within the park, these woodlands are mostly found throughout Water Canyon, on the south side of Telegraph Canyon, and in the Sonome Canyon area.[†]

***Lepidospartum squamatum* Shrubland Alliance - Scale Broom Scrub:** This alliance is native to the valleys, mountains, and deserts of southern California, where it grows in gravelly, sandy soils in various habitat types, especially dry alluvial habitat such as arroyos. *Lepidospartum squamatum* is the dominant species in this alliance and it is an indicator species for the alluvial scrub alliance type. *Lepidospartum squamatum* often exceeds two meters in height and has branches coated in woolly fibers with flower clusters at the ends of the branches.[‡]

***Lotus scoparius* Shrubland Alliance - Deer Weed Scrub:** This vegetation alliance is dominated by *Lotus scoparius* and/or *Lupinus albifrons*. Other important shrubs may include *Adenostoma fasciculatum, Artemisia californica, Ephedra californica, Ericameria linearifolia, Eriodictyon californicum, Eriogonum fasciculatum, Hazardia squarrosa, Malacothamnus densiflorus, Prunus fremontii, Rhus ovata, Ribes quercetorum,* and *Salvia apiana*. The herbaceous layer may also include non-native species. Stands generally colonize disturbed, steep, and unstable rocky slopes with little soil development characterized by active alluvium and burned patches of chaparral and coastal scrub. Surface soil substrates include alluvium, limestone, and sand.[§]

***Malacothamnus fasciculatus* Shrubland Alliance - Bush Mallow Scrub:** This shrubland alliance consists of *Malacothamnus aboriginum, Malacothamnus densiflorus, Malacothamnus fasciculatus,* and/or *Malacothamnus fremontii* within post-fire settings. This alliance occurs in central to southern California at elevations below 2,300 feet on gentle to steep hillslopes. Typical soils include rocky gravels to loams and mineral clays. After recent fires, stands of these shrubs develop from many types of chaparral and coastal sage scrub. The shrubs form a seedbank in soil and duff during the first year of germination and die-off within 10 – 15 years after a fire.[**]

[*] Cal Poly Pomona, 2020, Walnut Woodland, available online at https://www.cpp.edu/~biodiversity/communities/walnut-woodland.shtml, accessed August 12, 2020.
[†] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, available online at https://www.parks.ca.gov/pages/21299/files/chino%20hills%20finalgp.pdf, accessed March 30, 2020.
[‡] California Native Plant Society, 2020, Scale Broom, available online at https://calscape.org/Lepidospartum-squamatum-(), accessed October 21, 2020.
[§] United States Geological Survey, 2014, A3886 *Lotus scoparius - Lupinus albifrons* Scrub Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899937, accessed October 2, 2020.
[**] United States Geological Survey, 2014, A2671 *Malacothamnus fasciculatus - Malacothamnus* spp. Scrub Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=907407, accessed October 2, 2020.

Malosma laurina* Shrubland Alliance - Laurel Sumac Scrub:** This shrubland alliance includes *Malosma laurina* or *Rhus integrifolia* as the dominant canopy shrubs. Other shrubs may include *Artemisia californica, Ceanothus megacarpus, Diplacus aurantiacus, Encelia californica, Eriogonum cinereum, Eriogonum fasciculatum, Heteromeles arbutifolia, Keckiella antirrhinoides, Rhamnus ilicifolia, Rhus ovata, Salvia leucophylla, Salvia mellifera, Tetracoccus dioicus, Toxicodendron diversilobum,* and/or *Hesperoyucca whipplei.** Emergent tree species include *Juglans californica, Quercus agrifolia, Platanus racemosa,* or *Sambucus nigra*. The herbaceous layer is grassy or sparse. This alliance is found in southern California where the summers are dry and warm, and winters are mild. This alliance occurs on steep slopes at low elevation. Characteristic soils are shallow and can be coarse or fine-textured.[*]

***Nolina cismontana* Provisional Shrubland Alliance - Peninsular Beargrass Scrub:** This alliance includes the *Nolina cismontana* species which is a rare flowering plant endemic to Los Angeles, Orange, San Diego, and Ventura counties. The alliance occurs in coastal mountain ranges in coastal sage scrub and coastal mountain range habitats on rocky sandstone and gabbro substrates. This alliance is in decline throughout most of its range and is threatened by habitat fragmentation from development, road construction, agriculture, changes in fire regime, recreational activities, and non-native species. This alliance occurs after a wildfire, after which it reproduces and blooms prolifically.[†]

***Opuntia littoralis* Shrubland Alliance - Coast Prickly Pear Scrub:** This coastal shrub alliance consists of stands of *Opuntia* and *Cylindropuntia* species, largely consisting of *Cylindropuntia californica* var. *parkeri*, *Opuntia littoralis*, *Opuntia oricola*, and *Cylindropuntia prolifera*. *Artemisia californica*, *Cleome isomeris*, *Cneoridium dumosum*, *Encelia californica*, *Eriogonum fasciculatum*, *Euphorbia misera*, *Lycium* spp., *Mirabilis laevis*, *Cylindropuntia californica*, *Opuntia oricola*, *Opuntia phaeacantha*, *Cylindropuntia prolifera*, *Opuntia hybrids*, S*alvia mellifera*, and *Hesperoyucca whipplei* may also be present with limited cover. The shrub canopy is less than two meters high and the herbaceous layer is continuous and diverse. This alliance is typically found on steep slopes with shallow soils with low water retention. Long and dry summers expose this alliance to drought stress.[‡]

***Platanus racemosa* Alliance - California Sycamore Woodlands:** This woodland riparian alliance is dominated by *Platanus racemosa* and/or *Quercus agrifolia*. Other typical, yet subordinate species include *Alnus rhombifolia*, *Juglans californica*, *Populus fremontii*, *Salix exigua*, *Salix gooddingii*, *Salix laevigata*, *Salix lasiolepis*, *Salix lutea*, and *Umbellularia californica*. Typical

[*] United States Geological Survey, 2014, A3856 *Malosma laurina - Rhus integrifolia* Chaparral Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899907, accessed October 2, 2020.

[†] California Native Plant Society, 2020, Calscape, available online at https://calscape.org/Nolina-cismontana-(), accessed October 2, 2020.

[‡] United States Geological Service, 2013, A3885 Opuntia littoralis - Opuntia oricola - Cylindropuntia prolifera Succulent Scrub Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899936, accessed October 21, 2020.

shrubs include *Baccharis salicifolia* and *Toxicodendron diversilobum*. The understory layer is typically composed of grass with *Avena barbata* and/or *Bromus hordeaceus.* This alliance requires a wetland understory and it is typically found within intermittent streams, springs, seeps, streambanks, and terraces near floodplains or flooded areas that undergo seasonal saturation.[*]

Riparian habitats include Arroyo Willow Thickets and Fremont Cottonwood Forest: Southern California is an uncommon host for riparian habitat. Furthermore, the riparian habitat that exists has decreased dramatically and is declining due to habitat degradation and development. Nevertheless, its presence provides important habitat for wildlife species that use it for foraging, nesting, perching, and cover from hot sun. Several riparian habitats within CHSP include:

- **Arroyo Willow Thickets:** This vegetation community is a type of riparian habitat that is present in several canyons in the park and is characterized by thickets dominated by arroyo willow (*Salix lasiolepis*). Additionally, this habitat is found in Lower and Upper Aliso Canyon and Telegraph Canyon. This series provides excellent habitat for wildlife such as birds, reptiles and amphibians, and mammals. Within CHSP, this habitat supports the State Endangered willow flycatcher (*Empidonax traillii*) and least Bell's vireo (*Vireo bellii pusillus*).
- **Fremont Cottonwood Forest:** This riparian habitat is found only within a small area along the Santa Ana River inside CHSP. This habitat is extremely limited in Southern California and is of particular importance for two bird species; the State Endangered western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), documented in adjacent habitat within the Prado Basin, and the State and Federal Endangered least Bell's vireo (*Vireo bellii pusillus*), documented within this habitat at CHSP, among others.

***Quercus agrifolia* Woodland Alliance - Coast Live Oak Woodland:** This woodland alliance is dominated by *Quercus agrifolia, Acer macrophyllum, Arbutus menziesii, Juglans californica, Quercus douglasii, Quercus engelmannii, Quercus kelloggii, Quercus lobata*, and *Umbellularia californica*. Trees are typically up to 30 meters tall with a continuous canopy. The shrub layer is sparse to intermittent and the herbaceous understory is sparse or grassy. This alliance is typically found within canyon bottoms, flats, and slopes. The soils are deep and loamy or sandy with high organic matter.[†]

***Rhus integrifolia* Shrubland Alliance - Lemonade Berry Scrub**: This shrubland alliance is dominated by *Rhus integrifolia, Adenostoma fasciculatum, Artemisia californica, Diplacus aurantiacus, Encelia californica, Eriogonum cinereum, Eriogonum fasciculatum, Heteromeles arbutifolia, Malacothamnus fasciculatus, Malosma laurina, Opuntia* spp., *Rhamnus crocea*,

[*] United States Geological, 2014, A3750 *Platanus racemosa - Quercus agrifolia - Juglans californica* Riparian Woodland Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899802, accessed October 21, 2020.
[†] California Native Plant Society, 2020, *Quercus agrifolia* Forest & Woodland Alliance, available online at https://vegetation.cnps.org/alliance/78, accessed October 21, 2020.

Salvia leucophylla, Salvia mellifera, Sambucus nigra, Xylococcus bicolor, and *Hesperoyucca whipplei*. Subordinate species of trees include *Juglans californica, Quercus agrifolia, Pinus torreyana*, and *Schinus molle*. This alliance is present along the southern California coast and occurs on gentle to abrupt slopes and coastal bluffs. Soils are typically loamy and clayey.[*]

***Salix laevigata* Woodland Alliance - Red Willow Thickets:** This woodland alliance consists of riparian woodlands dominated by *Salix laevigata* and *Salix gooddingii* as single species stands or as mixed stands, which may or may not include *Populus fremontii*. Other tree species include *Acer macrophyllum*, *Alnus rhombifolia*, *Alnus rubra*, *Celtis laevigata* var. *reticulata*, *Fraxinus velutina*, *Juglans microcarpa*, *Platanus racemosa*, *Populus balsamifera*, *Prosopis glandulosa*, *Quercus pungens*, *Salix hookeriana*, *Salix sitchensis*, *Sapindus saponaria* var. *drummondii*, and/or *Ungnadia speciosa*. These stands occur in riparian areas with deep alluvial soils.[†]

***Salvia apiana* Shrubland Alliance - White Sage Scrub:** This shrubland alliance consists of shrublands that include *Salvia apiana*, *Eriogounum fasciculatum*, *Salvia mellifera*, and *Artemisia californica*. Other subordinate species include *Encelia farinosa*, *Ericameria* spp., *Isocoma menziesii*, *Malacothamnus fasciculatus*, *Malosma laurina*, *Rhus* spp., and/or *Hesperoyucca whipplei*. This alliance is typically found within California's inner southern coast where the climate is relatively hot with drought conditions. Typical habitat is characterized by steep and south-facing slopes, as well as boulders and intermittently flooded arroyos, washes, and channels. Soils are characterized as coarse or fine-textured, colluvial-derived, well-drained, moderately acidic to slightly saline, and in some cases alluvial.[‡]

***Salvia mellifera* Shrubland Alliance - Black Sage Scrub:** This alliance is a type of coastal sage scrub habitat. This vegetation series is dominated by California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), bush monkeyflower (*Mimulus aurantiacus*), purple sage (*Salvia leucophylla*), white sage (*Salvia apiana*), or lemonade berry (*Rhus integrifolia*). This habitat is also important to the California gnatcatcher, which has been documented as nesting only in the California Sagebrush Series habitat along the CHSP southern boundary.

***Sambucus nigra* Shrubland Alliance - Blue Elderberry Stands and *Sambucus nigra* Shrubland Alliance/*Brassica* (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands - Blue Elderberry Stands/Upland Mustards:** These alliances are dominated by *Sambucus nigra,* which is a deciduous shrub or small tree that grows up to 30 feet and has cream or yellow flowers in the spring and purple berries in the fall. These berries are an important food source for birds.

[*] United States Geological Survey, 2014, A3461 *Rhus integrifolia* Coastal Bluff Chaparral Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899584, accessed October 21, 2020.
[†] United States Geological Survey, 2013, A3752 *Salix gooddingii - Salix laevigata* Riparian Forest Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899804, accessed October 21, 2020.
[‡] United States Geological Survey, 2014, A3884 *Eriogonum fasciculatum - Salvia apiana* Xeric Scrub Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899935, accessed October 21, 2020.

This alliance typically occurs in moist soil nearby stream sides or seeps, and thrives next to or in regularly irrigated areas; although it also may grow well in dry soils. Within these alliances, *Sambucus nigra* sometimes cooccurs with *Brassica nigra*.[*]

***Schinus* (*molle*, *terebinthifolius*) - *Myoporum laetum* Semi-Natural Woodland Stands - Pepper Tree or Myoporum Groves:** This woodland alliance consists of groves of *Schinus molle*, *Schinus terebinthifolius*, or *Myoporum laetum*. These species are evergreen with aromatic leaves and are considered invasive ornamental species in California. This alliance is found in California in washes, coastal canyons, slopes, riparian areas, and roadsides. *Schinus* species grow well in dry, nutrient-rich soils and are tolerant of air pollution. *Schinus molle* typically does not form naturalized stands away from cultivation. *Myoporum laetum* typically inhabits disturbed coastal habitats.[†]

Wildlife

CHSP is a critical link in the Puente-Chino Hills Biocorridor, and it stretches almost 31 miles, from the Santa Ana Mountains to the Whittier Hills. It is critically important as a refuge to a wide variety of plant species and as a corridor between natural areas, which is essential to the survival of diverse animal species. The park's approximately 71 miles of roads and 18 miles of trails provide excellent opportunities for observing these wild animals and native plants in their native habitat.

The various habitats and microclimates of CHSP make it an ideal location for wildlife species native to Southern California. More than 200 species of mammals, birds, amphibians, reptiles, invertebrates, and insects live in the park. Some of these species include red-tailed hawks, turkey vultures, coyotes, deer, bobcats, various songbirds, and other mammals that are present in the scrub, grasslands, and woodlands. Rare, threatened, or endangered species include the least Bell's vireo, the California gnatcatcher, the coastal cactus wren, and many others.

Seventy-nine special status wildlife species have been identified by the California Natural Diversity Database (2017) as occurring or having a potential to occur within the area covered by the CHSP USGS quadrangle maps (see Table 7-3). Suitable habitat rated at moderate or higher is available within the park for 55 species, 45 of which have been reported present in the park. Of the 79 total species, 37 are designated SSC; eight are designated Federally Threatened (FT) or Federally Endangered (FE); six are designated State Threatened (ST), State Endangered (SE), or State Candidate Endangered (SCE); and five are designated as Fully Protected (FP). Twenty-nine of the special status species are present or have a moderate potential for occurring within CHSP; these species are described below. The remaining species have a low probability of presence within the park.

[*] California Native Plant Society, 2010, Blue Elderberry, available online at https://calscape.org/Sambucus-nigra-ssp.-caerulea-(Blue-Elderberry), accessed October 21, 2020.

[†] United States Geological Survey, 2014, A3329 *Schinus molle* - *Schinus terebinthifolius* - *Myoporum laetum* Ruderal Woodland Alliance, available online at https://www1.usgs.gov/csas/nvcs/nvcsGetUnitDetails?elementGlobalId=899453, accessed October 21, 2020.

Table 7-3 Special Status Animals

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
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 (*Euphydras editha quino*)	FE	-	G5T1T2 S1S2	XERCES:CI	Low, H
Fishes					
Arroyo chub (*Gila orcutti*)	-	-	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[1] (*Oncorhynchus mykiss irideus*)	FE	-	G5T1Q S1	CDFW:SSC AFS:EN	Low, H
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
Reptiles					
California glossy snake (Arizona elegans occidentalis)	-	-	G5T2 S2	CDFW:SSC	Moderate
California legless lizard (*Anniella sp.*)[2]	-	-	G3G4 S3S4	CDFW:SSC	Low

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
Coastal whiptail lizard (Aspidoscelis tigris stejnegeri)	-	-	G5T5 S3	CDFW:SSC	Present
Coast horned lizard (*Phyrnosoma 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.)[3]	-	-	G5T1T2 S1S2	CDFW:SSC	Low
Two-striped gartnersnake (Thamnophis hammondii)	-	-	G4 S3S4	CDFW:SSC IUCN:LC USFS:S BLM:S	Low
Western pond turtle (*Emys marmota*)	-	-	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

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
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 (Artemisiospriza belli belli)	-	-	G5T2T4 S3	CDFW:WL USFWS:BCC	Present
Black-crowned night heron (*Nycticorax nycticorax*)	-	-	G5 S4	IUCN:LC	Present
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 auratus)	-	-	G5 S4	CDFW:WL IUCN:LC	Present
Golden eagle (Aquila chrysaetos)	-	-	G5 S3	CDFW:FP CDFW:WL USFWS:BCC IUCN:LC	Present, F

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
				CDF:S BLM:S	
Grasshopper sparrow (Ammodramus savannarum)	-	-	G5 S3	CDFW:SSC IUCN:LC	Present, N
Great blue heron (Ardea herodias)	-	-	G5 S4	IUCN:LC CDF:S	Present
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
Continued 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

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
Snowy egret (Egretta thula)	-	-	G5 S4	IUCN:LC	Present
Southern California rufous-crowned sparrow (Aimophila ruficeps canescens)	-	-	G5T3 S3	CDFW:WL	Present, N
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 USFWS:BCC	Present, N
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	Low

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
				BLM:S	
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
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 BLM:S	Low
Townsend's big-eared bat	-	-	G3G4 S2	CDFW:SSC WBWG:H IUCN:LC	Low

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
(Corynorhinus townsendii)				USFS:S BLM:S	
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
Yuma myotis (bat) (Myotis yumanensis)	-	-	G5 S4	WBWG:LM IUCN:LC BLM:S	Present

Notes:

1. Distinct Population Segment.
2. All legless lizards in California are now designated CDFW:SSC. CA Natural Diversity Database recognizes *Anniella sp.* currently after being split from one species into five and the new taxons are being evaluated further for SSC designations.
3. CDFW recognizes coastal Southern California occurrences of south coast garter snake as a subspecies.

Plants

Thirty-five special status plant species have been identified by the California Natural Diversity Database, California Native Plant Society, Department records, and USFWS as occurring or having a potential to occur within the CHSP USGS quadrangle maps (Table 7-4). Suitable habitat is available within the park for 14 of these special status plant species, eight of which are present in CHSP. The list is also provided in Appendix A: Special Status Species.

Table 7-4 Special Status Plants

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
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.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: 1B.2 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	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
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)	-	-	G1 S1	CRPR: 1B.1	Low
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: 4.2	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

SPECIES	FEDERAL LISTING	STATE LISTING	ELEMENT RANKS	OTHER STATUS	POTENTIAL OCCURRENCES
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
Tecate cypress[a] (Hesperocyparis forbesii)	-	-	G2 S2	CRPR: 1B.1 USFS: S BLM: S	Present
Three-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 leucoephalum)	-	-	G4 S2	CRPR: 2B.2	Low

Notes:
Natural Communities with G or S Ranks 1,2,3 or 4 are included in this list. (Rank 5 is not considered imperiled.)
a. A few individual Tecate cypress trees are present within the park, too few currently to be classified as forest.
Source: Department of Parks and Recreation.

Regional Conservation Plans and Policy

CHSP is included within the Orange County Transportation Authority (OCTA) M2 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP).* Resource Management Plans (RMPs) are required for the management of the OCTA's seven preserves in accordance with the goals in the conservation plan. Specifically, the RMPs guide the ongoing protection, preservation, and management of the natural resources in the preserve.† The NCCP/HCP demonstrates that the OCTA Preserve acquisitions and restoration projects, existing conserved lands, and approved avoidance and minimization measures result in a level of conservation that

* Orange County Transportation Authority, 2016, M2 Natural Community Conservation Plan/Habitat Conservation Plan, available online at https://www.fws.gov/carlsbad/HCPs/documents/OCTA_M2_NCCP_HCP_FPlan_1016.pdf, accessed July 2, 2020.
† Orange County Transportation Authority (OCTA), 2020, Preserve Management, available online at https://www.octa.net/About-OC-Go/OC-Go-Environmental-Programs/Preserve-Management/, accessed September 9, 2020.

meets the criteria for CDFW and USFWS to issue permits under the State Natural Community Conservation Planning Act and FESA, respectively. The NCCP/HCP includes information about the Hayashi Preserve, 293.6 acres of natural habitat adjacent to CHSP to the northwest, which would complement the open space of the park by contributing habitat for wildlife migration and connectivity between the Puente Hills to the northwest and the Santa Ana Mountains to the south. The NCCP/HCP also includes several restoration projects, one of which is in CHSP and part of the OCTA program—11 acres of cactus scrub and 6 acres of coastal sage scrub restoration. The cactus scrub restoration in this project will provide breeding and foraging habitat for cactus wren and coastal California gnatcatcher. The restoration project is in the Coal Canyon linkage area, which is an existing freeway underpass being restored specifically for maintaining wildlife connectivity across State Route 91 between the Chino Hills core habitat areas and the Santa Ana Mountains. Restoration will improve the viability of the corridor for wildlife movement and provide additional high-quality habitat for resident species. Long-term management of the CHSP project area will be undertaken by the Department.[*]

Additionally, the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), is a multi-jurisdictional habitat conservation plan (HCP) that focuses on conserving species and their associated habitat in Western Riverside County. The overall goal of the plan is to maintain biological and ecological diversity within the rapidly urbanizing region. The MSHCP allows Riverside County and its cities to advise land use decisions and maintain economic strength while simultaneously addressing the State and federal Endangered Species Acts. The MSHP covers multiple species and habitats within its conservation area. It is both an HCP pursuant to Section 10(a)(1)(B) of FESA and a natural communities conservation plan (NCCP) under the NCCP Act of 2001. Participating jurisdictions can authorize "take" of plant and animal species identified within the plan area. Authority to regulate the take of threatened, endangered, and rare species is handled by the USFWS and CDFW. Within the scope of the MSHCP, these agencies grant "take authorization" for otherwise lawful actions that include public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area in exchange for the preparation and management of a cooperatively coordinated MSHCP conservation area.[†]

[*] Orange County Transportation Authority, 2016, M2 Natural Community Conservation Plan/Habitat Conservation Plan, available online at https://www.fws.gov/carlsbad/HCPs/documents/OCTA_M2_NCCP_HCP_FPlan_1016.pdf, accessed July 2, 2020.

[†] Western Riverside County Regional Conservation Authority, 2003, Multiple Species Habitat Conservation Plan, available online at http://wrcrca.conserveriverside.com/wrcrca/Permit_Docs/MSHCP_Docs/volume1/Vol1-sec1.pdf, accessed September 12, 2020.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plan, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❒	❒	■	❒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❒	❒	■	❒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❒	❒	■	❒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native 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?	❒	❒	❒	■

Discussion
Project activities in the RTMP that are covered by this initial study include road or trail closure, decommissioning, and restoration to natural conditions, including removal and rehabilitation of nonsystem trails; reconstruction and/or reengineering of existing roads and trails, including minor reroutes where needed; road-to-trail conversion; and construction of new, appurtenant facilities such as trailheads and parking improvements. The plan also provides management recommendations for change-in-use requests, new trail connections, and maintenance priorities with the goal of minimizing impacts to natural and cultural resources.

CHSP supports a diverse assemblage of plant communities and habitats that in turn provide a suitable environment for numerous special status plant and wildlife species. Project activities have the potential to impact sensitive biological resources both directly (e.g., removal, injury or death) or indirectly (e.g., habitat modification). Negative impacts produced by each activity or project need to be assessed on a case-by-case basis in order to develop the appropriate CEQA compliance determination. Measures and/or requirements to avoid, minimize, or eliminate impacts are described below.

a)

i. Special status plant species: As described in the Environmental Setting and Appendix A, CHSP has suitable habitat for 14 special status plant species, eight of which are present in CHSP. Road and trail projects have the potential to impact special status plant species through direct removal, soil disturbance, mechanical disturbance (e.g., brushing, mowing), or changes in hydrology or solar radiation. Without knowing the distribution of sensitive plants, project activities along roads and trails have the potential for significant adverse effects. Because sensitive plant populations can pioneer new areas, sensitive plant surveys must be kept current. CDFW recommends botanical surveys every five years in forested habitats.[*] Integration of SPRs GEN-1 and GEN-3 through GEN-6, BIO-1 through BIO-5, and BIO-12 through BIO-21 would ensure that impacts from project activities would remain at a less than significant level.
ii. Special status animal species: As described in the Environmental Setting and Appendix A, 29 special status animal species are present or have at least a moderate potential for occurring within CHSP.

Southern California Arroyo Chub/Santa Ana Sucker Stream: Southern California arroyo chub (*Gila orcutti*) (SSC) and Santa Ana sucker (*Catostomus santaanae*) (FE) are two low-elevation fish species that require unique habitat for survival and propagation. Supportive habitat includes a broad width of lush riparian vegetation, such as cottonwoods (*Populus sp.*) and willows (*Salix sp.*), anchoring the river bottom. A noteworthy feature of the habitat is the heterogenous character of the riparian vegetation, vertically layered by time and past flooding events. Additional vegetation may include shrubby sandbar willows (*Salix exigua*) and standing

[*] California Department of Fish and Game (CDFW), 2009, Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities, accessed July 2, 2020.

Fremont cottonwoods (*Populus fremontii*).[*] SPRs BIO-8 through BIO-10, BIO-16, BIO-17, BIO-37 through BIO-44, HYDRO-3 through HYDRO-6, HYDRO-8, HYDRO-16, and HYDRO-17 will reduce impacts to a less than significant level.

Western spadefoot toad (*Spea hammondii*): Western spadefoot toad is an SSC. Habitat of the toad ranges from northern Baja California in Mexico to central California. They primarily live in grassland habitats, although they have been observed to live in pine-oak woodlands in the foothills. Outside of the breeding season they live in burrows made by other mammals that are about three feet deep. During the breeding season they migrate to seasonal vernal pools to reproduce. They may use small puddles of water near roadways to breed. Compared to its historic range, the toad's current distribution has been reduced due to urban development and agricultural practices.[†] SPRs BIO-3 through BIO-7, BIO-16, BIO-33, BIO-34, BIO-38 through BIO-44, BIO-46, and BIO-48 will reduce impacts to this species to less than significant.

California glossy snake (*Arizona elegans occidentalis*): California glossy snake is an SSC. Within California its range encompasses the central and southern portions of the state. Its habitat includes semiarid grassland; barren, sandy desert and scrub; rocky washes; open areas; and sandy or loamy soil. They have smooth, shiny scales, which distinguish them from related species, and their body color is light beige or grey with dark edges surrounding brown, gold, or olive-grey scale patterns. Though they are currently not considered threatened, some populations have been reduced by agricultural development and urbanization.[‡] SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 will reduce impacts to this species to less than significant.

Coastal whiptail lizard (*Aspidoscelis tigris stejnegeri*): The coastal whiptail lizard is an SSC that is found in coastal Southern California, west of the Peninsular Range and south of the Transverse Range, and north into Ventura County. It is found in a variety of ecosystems, although its preferred habitat is hot and dry open areas with sparse foliage characterized by chaparral, woodland, and riparian vegetation. The mating season begins in May and females lay one clutch of eggs per year shortly after mating. The lizard is vulnerable, with few populations due to recent, widespread declines.[§] SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 will reduce impacts to this species to less than significant.

Coast horned lizard (*Phyrnosoma blainvillii*): The coast horned lizard, an SSC, is a flat-bodied lizard with a wide oval-shaped body, scattered and pointed scales on the upper body and tail, and a large crown of spines or horns on the head. Its color is reddish, brown, yellow, or grey with dark blotches on the back and large dark spots on the sides of its neck. It has a cream,

[*] Arroyo Seco Foundation, 2001, Habitat Restoration in the Arroyo Seco Watershed, available online at https://www.arroyoseco.org/FinalReport/HabitatRestoration.pdf, accessed August 12, 2020.

[†] Los Padres Forest Watch, 2013, Western Spadefoot Toad, available online at https://lpfw.org/our-region/wildlife/western-spadefoot-toad/, accessed August 20, 2020.

[‡] Animal Diversity Web, 2013, Arizona elegans, available online at https://animaldiversity.org/accounts/Arizona_elegans/, accessed August 20, 2020.

[§] California Herps, 2020, Coast whiptail snake, available online at http://www.californiaherps.com/lizards/pages/a.t.stejnegeri.html, accessed August 21, 2020.

beige, or yellow belly with dark spots, and the belly scales are smooth. The lizard is active during warm weather, retreating underground and becoming inactive during low temperatures or extreme heat. It inhabits open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains. It is also found in grasslands, woodlands, coniferous forests, and chaparral with open areas and patches of loose soil. Historically, it is found in California along the Pacific Coast from the border of Baja California west of the deserts and the Sierra Nevada, north to the Bay Area, and inland as far north as Shasta Reservoir. Its range has been severely fragmented due to land alteration, and it has been threatened and eliminated due to habitat destruction from urbanization, agriculture, and the spread of nonnative ants.[*] SPRs BIO-3 through BIO-7, BIO-33 and BIO-34 will reduce impacts to this species to less than significant.

Coast patch-nosed snake (*Salvadora hexalepis virgultea*): The coast patch-nosed snake is an SSC that occurs in California from the northern Carrizo Plains in San Luis Obispo County, south through the coastal zone, south and west of the California deserts, and into coastal northern Baja California. It inhabits semiarid brushy areas and chaparral in canyons, rocky hillsides, and plains. It is a well-camouflaged and nonvenomous snake of grey to brown coloration with dark brown sides and a broad yellow or tan stripe down the middle of the back. It is considered uncommon along the southern coast due to land changes from development, predation, and agriculture. It has been documented as declining or absent from large areas of the Los Angeles Basin.[†] SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 will reduce impacts to this species to less than significant.

Red-diamond rattlesnake (*Crotalus ruber*): The red-diamond rattlesnake is an SSC that is a long, large-bodied pit viper, with a thin neck, large triangular head, and a rattle on the end of the tail with loose interlocking hollow segments. Its pupils are elliptical and scales are keeled. Its two pits are used to sense heat while hunting warm-blooded prey, with one pit on each side of the its head above the mouth. Rattlesnakes are venomous and a bite from this snake can be very dangerous without immediate medical treatment. This snake is primarily nocturnal and inactive during periods of excessive daytime heat. During daylight when temperatures are moderate or when the snake is in a cool, shaded area, it is more active. Rattlesnakes are ovoviparous, which means that females give birth to living young. Mating typically occurs in the spring, and the offspring, typically 3 to 20 snakes, are born from July through September. This snake is vulnerable in the state due to its restricted range, few populations, and recent and widespread declines.[‡] SPRs BIO-3 through BIO-7, BIO-33 and BIO-34 will reduce impacts to this species to less than significant.

San Diego banded gecko (*Coleonyx variegatus abbotti*): The San Diego banded gecko is an SSC that ranges through most of Southern California. It is a small, slender lizard with vertical pupils

[*] California Herps, 2020, Blainville's Horned Lizard - Phrynosoma blainvillii, available online at http://www.californiaherps.com/lizards/pages/p.blainvillii.html, accessed August 21, 2020.

[†] California Herps, 2020, Coast patch-nosed snake, available online at http://www.californiaherps.com/snakes/pages/s.h.virgultea.html, accessed August 21, 2020.

[‡] California Herps, 2020, Red diamond rattlesnake, available online at http://www.californiaherps.com/snakes/pages/c.ruber.html, accessed August 21, 2020.

and movable eyelids. Its head is triangular and wider than the neck and is dark in color. The skin is soft with small granular scales. It is active at night, hiding in burrows or under objects during the day. It hibernates from November to February. This species is threatened from urbanization and agricultural practices. SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 will reduce impacts to this species to less than significant.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*): The northwestern San Diego pocket mouse inhabits southwestern California mostly surrounding San Diego. It occupies a wide variety of temperate habitats—from grasslands and chaparral to scrub forests and deserts. The preferred habitat is low-growing vegetation or rocky outcroppings as well as sandy soil where it can dig a burrow. This mouse is moderately sized with dark coloration on top and white underneath, with black spines on the rump and white on the hips. San Diego pocket mice reproduce once a year in the spring; however, some have been known to reproduce year-round. There has been a recent decrease in habitat for this species due to urbanization and development.[*] SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 would reduce impacts to this species to less than significant.

Ringtail (aka: ring-tailed cat) (*Bassariscus astutus*): The ring-tailed cat can be found throughout California, but typically is found in rocky, desert habitats at elevations ranging from sea level to 1,400 meters. Its preferred habitat consists of rocky outcroppings, canyons, or talus slopes, and it can be mostly found in semiarid landscapes, deserts, chaparral, oak woodlands, juniper woodlands, pine woodlands, and montane conifer forests. It may also occupy riparian habitats depending on food availability. This species is similar in appearance to a raccoon with eyes that are ringed by black or brown and set within buffy patches. The body is more similar to a cat with dark brown fur and a pale buff. This species mates from February to May and its litter ranges from one to four offspring born in May or June.[†] SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 would reduce impacts to this species to less than significant.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*): The San Diego black tailed jackrabbit is an SSC that only occurs on the coastal side of the Southern California mountain ranges. It is strictly herbivorous and primarily feeds on a variety of grasses but will also feed on shrubs and forbs during the fall and winter. Populations are declining in Southern California as a result of hunting, development, pest control, and agricultural land conversions.[‡] SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 would reduce impacts to this species to less than significant.

San Diego desert woodrat (*Neotoma lepida intermedia*): The San Diego desert woodrat is an SSC that occurs in California in two disjunct areas—northeastern California and southeastern

[*] Animal Diversity, 2004, Chaetodipus fallax - San Diego pocket mouse, available online at https://animaldiversity.org/accounts/Chaetodipus_fallax/, accessed August 21, 2020.

[†] Animal Diversity, 2003, Ring Tailed Cat, available online at https://animaldiversity.org/accounts/Bassariscus_astutus/, accessed August 21, 2020.

[‡] San Diego Management and Monitoring Program, 2010, San Diego black-tailed jackrabbit, available online at https://sdmmp.com/species_profile.php?taxaid=900973, accessed August 21, 2020.

California. In Southern California it is present from southern Mono County south throughout the Mojave Desert and from north-central Tulare County south through the Tehachapi and San Bernardino Mountains. It is abundant in rocky areas from sea level to 2,600 meters. Its habitat consists of juniper or sage brush and coastal sage scrub. More specifically, it can be found within rock crevices, at the base of creosote or cactus, or in the lower branches of trees.[*] SPRs BIO-3 through BIO-7, BIO-33, and BIO-34 will reduce impacts to this species to less than significant.

Western pond turtle (*Emys marmorata*): The western pond turtle is an SSC species that inhabits both aquatic and terrestrial environments. They are found within brackish waters, agricultural ditches, estuaries, reservoirs, ephemeral creeks, vernal pools, wetlands, ponds, streams, lakes, and rivers. They prefer areas that provide cover from predators, such as vegetation and algae, and they require basking sites for thermoregulation. Mating usually occurs from May through August, and females lay eggs in low vegetation and hard, dry soil.[†] Other than its potential to increase sedimentation, this plan should not affect western pond turtles. SPRs BIO-16, BIO-42 through BIO-45, and BIO-48 as well as other SPRs that reduce sediment input into waters would reduce potential impacts to less than significant.

Nesting raptors and migratory birds: Suitable habitat occurs within CHSP for numerous species of raptors and migratory birds, several of which are designated federally or State threatened or endangered. These species include the white-tailed kite (*Elanus leucarus*; SSC), yellow-breasted chat (*Icteria virens*; SSC), yellow warbler (*Setophaga petechia;* SSC), southwestern willow flycatcher (*Empidonax traillii extimus*; FE and SE), northern harrier (*Circus cyaneus*; SSC), loggerhead shrike (*Lanius ludoyicianus*; SSC), least Bell's vireo (*Vireo bellii pusillus*; FE and SE), grasshopper sparrow (*Ammodramus savannarum*; SSC), golden eagle (*Aquila chrysaetos*; SSC), coastal California gnatcatcher (*Polioptila californica californica*; FT), and coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) (SSC). Nesting raptors and migratory birds are protected by the federal Migratory Bird Treaty Act (16 US Code §§ 703 to 712) and by the California Fish and Game Code (§§ 3503, 3503.5, and 3513). Under these laws, all raptors and migratory birds and their nests are protected. Road and trail projects have the potential to impact special status avian species. Compliance with SPRs BIO-3 through BIO-11, BIO-28, BIO-29, BIO-30, BIO-31, BIO-33, BIO-34, and BIO-35 would ensure that impacts from project activities would remain at a less than significant level.

Sensitive bat species: Several sensitive bat species are known to occur in CHSP and are expected to breed within the park—western mastiff bat (*Eumops perotis*), western red bat (*Lasirurs blossevillii*), pallid bat (*Antrozous pallidus*), hoary bat (*Antrozous pallidus*), long-eared myotis bat (*Myotis evotis*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*). These species can be very susceptible to disturbance at their natal and maternal roost sites, especially

[*] California Department of Fish and Wildlife, 2008, California Wildlife Habitat Relationships System - California Interagency Wildlife Task Group – Desert Woodrat, pdf.

[†] Animal Diversity, 2008, Emys marmorata Western Pond Turtle, Pacific Pond Turtle, available online at https://animaldiversity.org/accounts/Emys_marmorata/, accessed August 21, 2020.

during the natal and maternal season, May and June, when human disturbance can displace females from their roosts. Currently, there are numerous trails that are situated adjacent to roost sites. However, with the implementation of BIO-3 through BIO-7, BIO-29, BIO-30, and BIO-31, impacts would be avoided.

b) As described in the Environmental Setting section and Appendix A, there are currently 27 identified vegetation communities in CHSP that are recognized by CDFW as special status natural communities. With additional surveys, other alliances may be detected.

Although project activities identified in the RTMP would be unlikely to cause significant impacts to special status natural communities, compliance with SPRs BIO-13 through BIO-18 would ensure that impacts on natural communities from project activities would remain at a less than significant level.

Sensitive riparian areas exist within the park, and project activities could create impacts. Compliance with SPRs BIO-13 through BIO-19 and BIO-20 would reduce these impacts to a level of less than significant. Implementation of other measures to reduce impacts would also be identified in a CDFW 1602 Lake or Streambed Alteration Agreement, as described in Section 'c'.

c) Numerous permanent and intermittent streams and USACE-jurisdictional wetlands occur within CHSP. The RTMP identifies activities that could be subject to the jurisdictional authority of the USACE, RWQCB, and CDFW requiring 401 and 404 permits and a CDFW 1602 Lake or Streambed Alteration Agreement prior to the start of work.

In addition to best management practices and SPRs identified in hydrology section of this initial study, all permits necessary to conduct the proposed project or activity would be obtained prior to the start of any work. All permit/agreement conditions would be implemented, reducing any potential impacts to a less than significant level.

d) It is not expected that any management recommendations or projects identified in the RTMP would interfere substantially with the movement of any native resident wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Although unlikely, depending on location, construction activities identified in the RTMP could temporarily affect fish passage. Because there are listed fish species in the park, any potential impact would be addressed by conditions identified in consultations with USFWS and CDFW and in a CDFW 1602 Lake or Streambed Alteration Agreement. Implementation of applicable SPRs and 1602 Agreement conditions would reduce any potential impacts to a less than significant level.

e) The Department is not subject to local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; however, Department policy and its

mission statement incorporate the protection of natural resources into the short-term and long-term management goals for its park units. Therefore, there would be no impact.

f) The CHSP RTMP would not interfere with the adopted OCTA M2 NCCP/HCP. Therefore, there would be no impact.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

VI. Cultural Resources

Environmental Setting

Precontact Information

CHSP is in the southern inland portion of the traditional Tongva or Gabrielino territory, in close proximity to the Juaneño, Luiseño, Serrano, and Cahuilla Native American groups. According to the Tongva/Gabrielino and their system of beliefs and rituals associated with the creator god *Chengiichngech/Chinigchinich*, they have occupied this territory since time immemorial. The Tongva/Gabrielino territory encompassed more than 2,500 square miles, and prior to European contact, had grown to more than 5,000 people living in up to 100 towns that stretched across Southern California, including three of the Channel Islands, San Clemente, Santa Catalina, and San Nicolas.[*]

Early Holocene (~9000 B.C. to ~7000 B.C.)

Archaeological evidence on the Channel Islands demonstrates that a maritime-adapted, seafaring culture existed in Southern California at least 10,000 years ago.[†,‡] Cultural traditions of these early inhabitants resemble what some archaeologists refer to as the San Dieguito tradition of San Diego County, an early hunting culture characterized by abundant scrapers, large percussion-flaked bifaces, flaked crescentic stones, and projectile points. Grinding tools (manos and metates) are rare, indicating a hunting and gathering/collecting subsistence pattern that likely relied on a variety of resources including birds, mollusks, and large and small mammals rather than on wild seeds and plant foods.[§,**]

Early to Middle Holocene (~7000 B.C. to ~3000 B.C.)

Sometime between around 9,000 to 7,000 years before present, the climate of the southern California region changed. What was once an environment that supported a variety of flora and fauna across abundant marshlands, estuaries, and lakeshores transformed into warmer and drier land, closed lagoons, and eroding coastlines. Sites of this era are technologically

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[*] King, Chester. Native American Indian Cultural Sites in the Santa Monica Mountains. Prepared for the Santa Monica Mountains and Seashore Foundation with the National Park Service Pacific West Region, Santa Monica Mountains National Recreation Area. Prepared by Topanga Anthropological Consultants, Topanga, CA. 2000.

[†] Wallace, William J. A Suggested Chronology for Southern California Coastal Archaeology. In *Southwestern Journal of Anthropology* 11(3):214-230. 1955. (Reprinted in *The California Indians: A Source Book*, edited by R. F. Heizer and M. A. Whipple, pp. 186-201. University of California Press, Berkeley, CA, 1971).

[‡] Salls, Roy A. Early Holocene Maritime Adaptation at Eel Point, San Clemente Island. In *Hunters-Gatherers of Early Holocene Coastal California*, edited by Jon M. Erlandson and Roger H. Colten. Perspectives in California Archaeology, Vol. I pp. 63-80. Institute of Archaeology, University of California Los Angeles, 1991.

[§] Warren, C. N. Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Eastern New Mexico University Contribution to Anthropology*. Vol 1 (3):1-14. Portales. 1968.

[**] Salls, Roy A. Early Holocene Maritime Adaptation at Eel Point, San Clemente Island. In *Hunters-Gatherers of Early Holocene Coastal California*, edited by Jon M. Erlandson and Roger H. Colten. Perspectives in California Archaeology, Vol. I pp. 63-80. Institute of Archaeology, University of California Los Angeles, 1991.

dominated by grinding implements (manos and metates) in the archaeological record, and thus this period has been termed by some as the Millingstone Horizon. It is also often linked with hammering tools and fire-affected rock features, indicating a source of flaked tools and baking and/or roasting of food resources.[*,†] Archaeological data indicates that similar changes in subsistence were occurring throughout much of California at this time.

Middle to Late Holocene (~3000 B.C. to ~A.D. 1000)

Sometime during the Millingstone Horizon, a new group of people began migrating into Southern California, absorbing and/or displacing the previously residing Hokan-speaking (Chumash) peoples. Anthropologists refer to these migrating people as Uto-Aztecans (previously referred to as Shoshonean by some) because they spoke a language belonging to the Uto-Aztecan linguistic stock that once extended across the Great Basin region of Utah, Nevada, and California.[‡] The exact date of arrival of the Uto-Aztecans in this region of California is under much debate. Nevertheless, it is academically accepted that the Tongva/Gabrielino society, an Uto-Aztecan group, has been within its historic boundaries for at least the last 2,500 years.[§,**]

The transition from the Middle to Late Holocene, also referred to as the Intermediate Horizon, is often characterized by basket-hopper mortars, mortars, and pestles, marking a potential shift in reliance on hard-shelled seeds and plants to fleshier fruit-like plant matter, such as acorn and islay (Hollyleaf cherry).[††] Acorn and islay (large seeds) are not available consistently throughout the year and need to be harvested in a relatively short period, thus warranting the need for food storage. The shift in reliance on tools used to process such seeds indicates the availability of storage, allowing time to be spent on time-consuming projects such as building large boats and fishing nets.[‡‡] Additionally, sites of this era typically show evidence of a higher frequency of chipped-stone artifacts and the occasional use of bow and arrow.

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[*] McCawley, William. *The First Angelinos. The Gabrielino Indians of Los Angeles.* Ballena Press Publishers' Services, Novato, CA. 1996.

[†] Glassow, M., L. Gamble, J. Perry and G. Russell. Prehistory of the Northern California Bight and the Adjacent Transverse Ranges, In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 191-213. AltaMira Press, Lanham, MD. 2007.

[‡] McCawley, William. *The First Angelinos. The Gabrielino Indians of Los Angeles.* Ballena Press Publishers' Services, Novato, CA. 1996.

[§] McCawley, William. *The First Angelinos. The Gabrielino Indians of Los Angeles.* Ballena Press Publishers' Services, Novato, CA. 1996.

[**] King, Chester. Native American Indian Cultural Sites in the Santa Monica Mountains. Prepared for the Santa Monica Mountains and Seashore Foundation with the National Park Service Pacific West Region, Santa Monica Mountains National Recreation Area. Prepared by Topanga Anthropological Consultants, Topanga, CA. 2000.

[††] Wallace, William J. A Suggested Chronology for Southern California Coastal Archaeology. In *Southwestern Journal of Anthropology* 11(3):214-230. 1955. (Reprinted in *The California Indians: A Source Book*, edited by R. F. Heizer and M. A. Whipple, pp. 186-201. University of California Press, Berkeley, CA, 1971).

[‡‡] King, Chester. Native American Indian Cultural Sites in the Santa Monica Mountains. Prepared for the Santa Monica Mountains and Seashore Foundation with the National Park Service Pacific West Region, Santa

Late Holocene to Late Prehistoric Period (~A.D. 1000 to ~A.D. 1750)

The Late Prehistoric Period is notable for several important changes among the early inhabitants of Southern California, including the increased use of bow and arrow (inferred by the increased observation of small, finely chipped projectile points); steatite containers; pottery vessels; fishhooks; personal ornaments made of shell, bone and stone; and bone tools.[*,†,‡] Archaeological sites from this period also often display evidence of population growth, and the growth of regional subcultures, such as the Uto-Aztecan subcultural group of the Tongva/Gabrielino, whose name derives from the group's incorporation with the Spanish colonization and the San Gabriel Mission.[§]

Ethnographic Information

The Tongva/Gabrielino are reported to have been the wealthiest, most populous, and most powerful ethnic nationality in aboriginal Southern California, other than the Chumash.[**,††,‡‡] The Tongva/Gabrielino possessed a material culture reflecting sophisticated knowledge of the working qualities of natural materials and elaborate artisanship. They were particularly known for their tools, utensils, and ritual objects. The Tongva/Gabrielino traded their creations, food products, and animal skins over a broad region of present-day Southern California.

San Gabriel Mission baptism records list village names and an occasional note concerning village locations. These location notes and the number of individuals baptized suggest that at least four large villages were situated in the Santa Ana River Basin near CHSP. The Native Americans of these villages are hypothesized to have regularly exploited the natural resources of the Chino Hills. Two such villages, *Wapijanga* and *Pashiinonga*, are said to have been located within Chino Hills. According to J. P. Harrington's interview with a Gabrielino informant, Jose Maria Zalvidea, *Pashiinonga* was the name for Rancho del Chino and was derived from păsi, the

Monica Mountains National Recreation Area. Prepared by Topanga Anthropological Consultants, Topanga, CA. 2000.

[*] Wallace, William J. A Suggested Chronology for Southern California Coastal Archaeology. In *Southwestern Journal of Anthropology* 11(3):214-230. 1955. (Reprinted in *The California Indians: A Source Book*, edited by R. F. Heizer and M. A. Whipple, pp. 186-201. University of California Press, Berkeley, CA, 1971).

[†] Moratto, Michael J. *California Archaeology*. Academic Press, Orlando, Florida. 1984.

[‡] McCawley, William. *The First Angelinos. The Gabrielino Indians of Los Angeles.* Ballena Press Publishers' Services, Novato, CA. 1996.

[§] McCawley, William. *The First Angelinos. The Gabrielino Indians of Los Angeles.* Ballena Press Publishers' Services, Novato, CA. 1996.

[**] Kroeber, A. L. *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, D.C. (Reprinted, Dover Publications, New York, 1976). 1925.

[††] McCawley, William. *The First Angelinos. The Gabrielino Indians of Los Angeles.* Ballena Press Publishers' Services, Novato, CA. 1996.

[‡‡] King, Chester. Native American Indian Cultural Sites in the Santa Monica Mountains. Prepared for the Santa Monica Mountains and Seashore Foundation with the National Park Service Pacific West Region, Santa Monica Mountains National Recreation Area. Prepared by Topanga Anthropological Consultants, Topanga, CA. 2000.

word for chia, a common plant in CHSP and ranked along with acorn and islay as one of the most important plant foods in the region.[*]

Historic Information
The historic period of the park dates from the first recorded Euro-American explorations along the Santa Ana River in the late-18th century and continues through ranching endeavors of the mid-20th century.

This area was originally part of the extensive grazing land granted to the San Gabriel Mission, which was established in 1771. During the Mexican Republic era, the area served as spillover grazing land for Rancho Santa Ana del Chino to the north, Rancho La Brea to the west, and Ranchos Cañon de Santa Ana and La Sierra Yorba to the south. In 1848, when Mexico ceded California to the United States, it became part of the United States public domain. Documented legal acquisition of public land in the park began during the last three decades of the 19th century.

Throughout its recorded history, the area served primarily as grazing land, although some late-19th and early-20th century agriculture, horticulture, oil exploration, and mining activities occurred in parts of the park. Historic activity left only one complex of historic buildings (Rolling M Ranch) and scattered historic features. However, stock grazing had a significant effect on the park. Cattle and sheep grazing eliminated native grasses and grains once used by Native Americans as food sources, and ranchers introduced nonnative grasses to feed stock herds.

Hispanic Period (1771 to 1848)
Although exploration occurred both north and south of the park, there is no documented evidence indicating the park was formally surveyed by Euro-Americans during the 18th or early 19th century, nor legally acquired prior to the 1830s. Mission San Gabriel was established just 20 miles northwest of the park, so stock grazing may have occurred on park land as early as the 1770s.

Early American Period (1848 to 1920)
In contrast to the surrounding region, there is no evidence of permanent activity other than grazing in the present-day park prior to the U.S. Surveyor General's public domain surveys. These surveys began in 1853 and were not completed until 1894. The deputy surveyor's field notes do not note any structures, fences, or wagon roads in the park, although much of the land was obtained and used for grazing during this period.

Legal acquisition of public domain land within CHSP by private individuals did not begin until the early 1870s. Many of those filings were associated with the small ranching community of Rincon just east of the park boundary along the Prado Basin. Local ranchers, such as Fenton Slaughter who purchased Raymundo Yorba's home and property in 1868, established successful

[*] McCawley, William. *The First Angelinos: The Gabrielino Indians of Los Angeles.* Ballena Press Publishers' Services, Novato, CA. 1996.

sheep and cattle ranching operations that extended into the eastern limits of CHSP. Activity and ownership increased during the Great Land Boom of the mid-1880s. Those who purchased land in the Chino Hills for ranching included the founder of the town of Chino, Richard Gird. By 1895, much of the future park was under absentee ownership, such as the San Francisco-based Chino Land and Water Company.

Although most of the Chino Hills was in ownership by 1900, the first published USGS quadrangle map of 1902 indicates only three miscellaneous structures and a wagon road within current park boundaries. These structures were likely associated with various ranching and mineral extraction activities. Although no large deposits were located or exploited within the park, several oil wells and mines have been documented from this period.

Twentieth Century Development Period (1920s to 1980)

During the interwar years of the 1920s to the 1940s, the ranching industry in Chino Hills reached its most active period. In 1921, local dairy rancher Frank Pellissier purchased most of the Chino Land and Water Company holdings for his dairy herds, including the area of the future Rolling M Ranch. The first aerial photographs of the region in the late 1930s indicate numerous cleared areas that had obviously received regular grazing along almost all the watershed canyons of the park, including the Santa Ana River and Carbon Canyon. The 1940s also saw increased development of the Rolling M Ranch complex. Aerial photographs show several structures and cleared areas on the site by 1940. In 1948, the Mollin Investment Company acquired 1,720 acres, subsequently giving the area the name of the Rolling M Ranch. The company enlarged and improved the corral system and rehabilitated and enlarged the main house. Mollin owned the property until the establishment of the state park in the 1980s.

Cultural Resources in the Park

Cultural resources within CHSP include those from both the prehistoric and historic periods. Some areas of the park have not been surveyed for archaeological resources, so the full extent of archaeological resources in the park is not known. Descriptions and locations of recorded sites are in the park's files.

Prehistoric Resources in the Park

The Native American sites in CHSP indicate that the indigenous people of the Santa Ana River Basin used the area for hunting and gathering. To date, 11 Native American sites and many isolated artifacts have been identified and recorded within the project area. Table 7-5 further describes these resources. There are additional known prehistoric resources within the park that are not shown in the table because they are not in or near the known project areas.

Archaeological surveys of limited scope within the Sonome Canyon area have yielded no archaeological sites to date. The most recent dates for sites in the Prado Basin and Chino Hills are not well defined but fall around 1,000 years before present (BP). Mission baptismal records indicate the former presence of aboriginal villages near CHSP (as mentioned in the Prehistoric Setting Section), however, archeological data on these villages is lacking. One site within CHSP yielded dates between 1,070- and 2,380-years BP.

Table 7-5 Known Prehistoric Resources in/near Project Area

PRIMARY NUMBER	RESOURCE DESCRIPTION
P-36-003690	Site with midden, flakes, and milling stones
P-36-005097	Multi-component site containing milling tools and debitage and elements of the historic Rolling M Ranch
P-36-005279	Site with slab metate
P-36-005280	Site with semicircle rock features with rock lines, triangular stones, manos, metates and debitage
P-36-005281	Site with a milling station on sandstone outcrop
P-36-005283	Site with milling station, metates, and manos
P-36-005284	Site with three manos and flaking station
P-36-005286	Milling site with core, pestle and mano fragments
P-36-005287	Site with slick on sandstone outcrop
P-36-010714	Multi-component site with a milling tool scatter and historic trash scatter
P-36-010715	Site with milling tools including metates, stone bowl fragments, and manos
P-36-060003	Slab metate
P-36-060004	Metate on sandstone outcrop
P-36-060005	Mano
P-36-060006	Quartz projectile point
P-36-060007	Quartz flaked tool
P-36-060008	Granitic mano
P-36-060009	Volcanic projectile point
P-36-060010	Two granitic manos
P-36-060011	Granitic mano
P-36-060012	Granitic mano
P-36-060014	Metate
P-36-060015	Chalcedony projectile point
P-36-060018	Two granitic manos
P-36-060019	Two granitic manos
P-36-060021	Granitic mano
P-36-060022	Granitic metate
P-36-064360	Chert debitage
FC20*	Ground stone tool
Isolate 3*	Mano
Isolate 4*	Flake

PRIMARY NUMBER	RESOURCE DESCRIPTION
Isolate 5*	Mano
Isolate 7*	Metate
Isolate 8*	Mano
Isolate 14*	Mano

Note: * Indicates Primary Number is unknown, thus field name was used.

Historic Resources in the Park

The park's historic period resources include various structures, features, and cultural landscapes. Most are associated with ranching, the dominant historic land use. Other historic resources are associated with mineral and oil extraction, transportation and other public utilities, and varied agricultural and horticultural uses. Sites, features, and objects assessed not to be significant cultural resources by the Department early in its proprietorship, including corrals, fencing, dumps, old machinery and mining equipment, water troughs, and small buildings, were subsequently removed to return the park to a more natural setting and eliminate potential dangers to wildlife and park patrons.[*]

Bane Canyon/Rolling M Ranch Area:

The known historic resources within the Bane Canyon/Rolling M Ranch area consist of the Rolling M Ranch Historic District, P-30-001291, a historic site containing the remains of a retaining wall with a historic trash pit; portion of P-36-007010, a historic road alignment (further discussed below); P-36-010714, a multi-component site containing a historic trash scatter; and an additional documented historic trash dump.

Rolling M Ranch Historic District:

Documentation of the Rolling M Ranch's historic features completed by the Department in 2000 and updated in 2001 presented the various buildings and features that comprise the ranch as groupings or concentrations of historic resources.[†,‡]

A Historic Conditions Report for the Rolling M Ranch completed in 2004 identified 26 contributing and five non-contributing resources within eight "Historic Resource Areas" associated with the ranch (see Figure 7-2 and Table 7-5).

The earliest extant improvements on the Rolling M Ranch are believed to date to the Pellissier ownership, between 1921 and 1945. These improvements include at least one of the windmills

[*] California State Parks, Chino Hills State Park: General Plan, Pg. 43 -44. Sacramento: State of California. The Resources Agency. California Department of Parks and Recreation, August 1986.

[†] Bevil, Alexander D., Historic Resources Report for the Rolling M Ranch, Chino Hills State Park. San Diego: CA DPR, Southern Service Center, January 2000 (revised 2001).

[‡] Bevil, Alexander D., DPR 523 Recordation Forms for Rolling M Ranch Historic District. January 29, 2001.

(No. 3) and associated cisterns and watering troughs. The main residence is also thought to date to the Pellissier period, although it was moved from its original location, renovated, and expanded. The stone check dam along Aliso Creek south of the ranch complex likely also dates to the Pellissier occupation, or even earlier. The principal buildings of the Rolling M Ranch were constructed between about 1943 and 1952.[*]

Although the Rolling M Ranch is not listed in either the California Register of Historical Resources or the National Register of Historic Places, it was evaluated by a qualified Department historian and recommended as eligible for inclusion in both as the "Rolling M Ranch Historic District".[†] The historic district record was submitted to the California Historical Resources Information System (CHRIS) in September 2020.

[*] Slawson, Dana N. and Glenn Dea. Historical Survey and Conditions Report: Rolling M Ranch, Chino Hills State Park, Chino Hills CA. Prepared by Greenwood and Associates on behalf of the Department of Parks and Recreation (Inland Empire District). Pacific Palisades, CA: January 20, 2004.

[†] Bevil, Alexander D., PRC 5024 Historical Review for Repaint Residence No. 1 project (01/02-IE-16). January 3, 2002. On file at the Southern Service Center, San Diego.

Figure 7-2. Rolling M Ranch Historic Resource Area

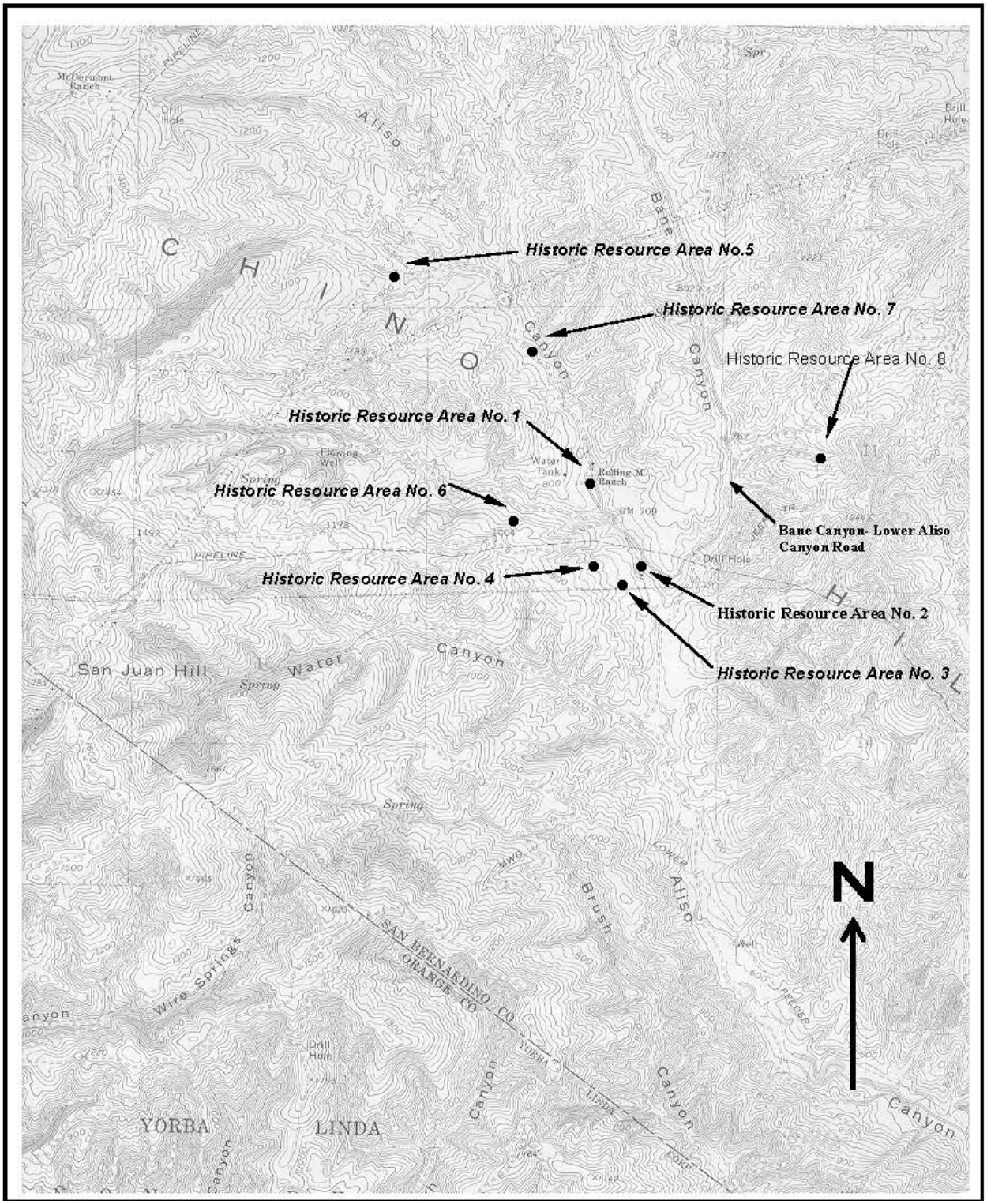


Table 7-6 Rolling M Ranch Historic Resources

AREA	CONTRIBUTING RESOURCES	NONCONTRIBUTING RESOURCES
Historic Resource Area No. 1 (Ranch Headquarters Area)	13—Barn; Main Residence; Steel Shed; Livestock Chute; Livestock Scale; Windmill No. 2; Shed/Pump House; Concrete Block Cistern; Steel Water Tank; Stone Check Dam; Earthen Berm; Ranch Employee's Residence Site; Bathroom Building Foundation	3—Weather station; picnic ramada; modern storage sheds
Historic Resource Area No. 2	3—Windmill No. 3; Concrete Cistern No. 3; Concrete Watering Troughs No. 3	1—Wooden Feed Bins
Historic Resource Area No. 3	1—Steel Watering Trough	
Historic Resource Area No. 4	3—Steel Feeding Troughs; Steel Watering Troughs; Riveted Steel Watering Trough	
Historic Resource Area No. 5	3—Windmill No. 1; Earthen Dam and Pond; Concrete Cistern No. 1	
Historic Resource Area No. 6		1—Hopper-type Feeder
Historic Resource Area No. 7	2—Concrete Cistern No. 2; Concrete Watering Troughs No. 2	
Historic Resource Area No. 8	1—Livestock Watering Trough	
TOTAL	**26**	**5**

Discovery Center/Telegraph Canyon Area

Information in copies of historical and current maps, archival records, aerial photographs, and previous projects pertaining to the history of the Chino Hills/Rolling M Ranch area is inconclusive regarding the earliest use of Bane Canyon as a transportation corridor.

The earliest documented use of the canyon as a minor wagon road appears in a 1938 copy of an 1860 map of "Old Highways" in Greater Los Angeles, Orange, San Bernardino, and Riverside counties. Because the map is drawn at a crude scale, it is difficult to ascertain the road's exact location compared to current park maps. A best guess is there was an unimproved dirt wagon road extending eastward from La Habra along what appears to be Telegraph Canyon to a point approximately two miles northwest of San Juan Hill. From here the road forks into two separate roads. One continues in a northerly direction, connecting itself to another dirt wagon road in what appears to be Soquel Canyon. At this point the road traveled in a northeasterly direction to meet the Butterfield Stage Road (today's Pomona-Rincon Road). The second road continues eastward to a point approximately one mile north of San Juan Hill. Likewise, the map shows the eastern fork of Telegraph Canyon Road heading toward the Butterfield Stage Road along a line

just south of the T2S/T3S Township Section boundary (no range indicated). Instead of continuing eastward toward the stage road, and the Yorba-Slaughter Station, it jogged northward and ran parallel to the stage road (along what may very well be the present East Fence Line Trail) until reaching the station a mile or so southeast of where it met the Soquel Canyon Road.

More than likely, the roads followed well-established Native American trails. According to the 1860/1938 map (Figure 7-3), there were at least four Native American villages or rancherías surrounding Chino Hills. The roads could also have been later frequented by Spanish Colonial and again later by Mexican vaqueros herding cattle to and from the surrounding ranchos. Road connections at La Habra connected what is now CHSP to El Camino Real, the main wagon road between San Diego and Los Angeles. To the northeast, the northern portions of the road provided access to Chino and the Old Mission Road (at Pomona), linking it to Mission San Gabriel to the west and its eastern asistencia near San Bernardino. Asistencias, or "sub-missions", though smaller than the missions, typically had a chapel, living quarters, workshops, and crops and extended the reach of the missions to serve a larger community; the father from the nearby mission would travel to the various asistencias in the area to perform a weekly mass. From 1858 to 1861, the Butterfield Stage Road connected the area to Rincon and then continued through Temescal Canyon to San Diego County, with links to Mexico, Arizona, and eventually St. Louis, Missouri.

An early 1930s map of San Bernardino County does not show any dirt roads within what is now CHSP. It does, however, show three improved roads approaching the "Pellissier Ranch" (in Township Section 34) by way of Highway 71 and the Los Serranos Country Club. Located in neighboring Township Section 35 to the east, one of the roads is noteworthy. It follows the same northeast to southwest alignment of a single-lane road that appears in the previous 1902/1939 map (Figure 7-4) and a subsequent 1967/1981 U.S. topographic map of the Prado Dam Quadrangle (Figure 7-5). The latter describes it as an "improved, all-weather light-duty road" that begins at a point on the Pomona-Rincon Road. From here, it travels southwesterly some 2,000 feet past a large structure next to a claypit. Until recent times, this pit was an operating brickyard. The road continues into the northwest corner of Township Section 35, where it rises some 800 feet through a short pass, under high-tension electrical power lines, and into the northeastern corner of Township Section 34. At this point, it enters Bane Canyon and continues along the creek's eastern bank in a southerly direction toward the middle of Section 34 and Township Section 3. From here, the road travels in a southeasterly direction through Section 3, where it meets a junction with an unimproved dirt road. The dirt road snakes in a northeasterly direction across an unnamed ridgeline into Township Section 2. The road was built apparently to service another high-tension electric power line that still bisects the park. The Bane Canyon Road continues under the latter in a southerly manner, traveling across the northeastern corner of Township Section 10 into neighboring Section 11, where it meets the junction of the Slaughter Canyon Road. The latter connected Bane Canyon to the historic Yorba-Slaughter Adobe and former Butterfield Stage Station. Except for another line of electrical power poles and a windmill/pump in Township 11's northeast corner, the map does not indicate any additional buildings or structures on, what is now, Department land. The Bane

Canyon Road continues along the canyon, from Township Section 11's southwestern corner into the southeastern corner of Township Section 10. At this point, it reaches a three-way junction that branches northwest into Upper Aliso Canyon and southerly into Lower Aliso Canyon.

Because of the road's improved, "all-weather" condition, and from past research pertaining to the history of Pellissier and the Rolling M Ranch, the Upper Aliso/Bane Canyon roads would have been adequate for trucking cattle in and out of the ranch using tractor/trailer rigs to the Pomona-Rincon Road and to a creamery at Chino.

Bane Canyon appears to have been used as a minor transportation corridor moving people, goods, and livestock through the area now known as CHSP by 1860 (or earlier). Documentary evidence reveals that it played a major role in the operation of the historic Pellissier/Rolling M Ranch complex during its 1921-1950 period of historic significance. Prior to an archival investigation of the road's history, a Department historian conducted a field survey of the road, from the park entrance off Elinvar Road to a point near the campground and the McLean Overlook road junction. The survey consisted of a slow drive along the gravel-laden dirt road with a visual inspection of the route along the way. There were no obvious significant historic ranch-related structures or objects either on or immediately adjacent to the road.

While it may be argued that the route may be potentially historic, the roadbed itself, is not. Alterations and improvements made after the historic period have diminished its historic integrity. Despite the expansion of the Los Serranos residential community during the mid-1990s, the Department continued to use the Bane Canyon entrance. By this time, highway and residential development had all but obliterated the historic roadway from the park's entrance to the Rincon-Pomona Road (DPR 2004: 29-31).[*] Therefore, the planned road improvements would not have an adverse effect on the historic resource.

Aliso Canyon Trail, P-36-007010 – Historic Road Alignment: A 1939 reprint of a 1902 US topographic map of the Corona Quadrangle shows only one unimproved dirt road traversing the future park (Figure 7-4). It runs along the lower Aliso Canyon drainage in a northerly direction from the Santa Ana Canyon road and railroad junction west of Prado. The road continued northward until the second Township Section south and west of T3S and R8W, respectively. It then continues in a northeasterly direction toward the Pomona-Rincon Road, near the junction of T3S/R8W Township lines. The road alignment appears to be following a route up Lower Bane Canyon, over the ridge to Slaughter Canyon, to the Yorba-Slaughter Adobe. The map indicates one miscellaneous structure along the Slaughter Canyon Road. Contemporary tax records for this parcel do not indicate improvements, suggesting that this structure may have been associated with seasonal use for ranching or mineral extraction activities, particularly petroleum. Although no large deposits were ever located or exploited within the future park, several abandoned wells and mines along the route have been

[*] California Department of Parks and Recreation (DPR), Final Environmental Impact Report (EIR) for Chino Hills State Park Entrance Road & Facilities project (SCH# 20040210307). November 2004.

documented. Recorded site P-36-00710 functions as a service road today and contains 0.76 mile of multi-use hiking, biking, and equestrian trail.

Four known historic resources are within the Discovery Center/Telegraph Canyon Area. They consist of P-30-001101, a historic dwelling site with historic trash scattered throughout; P-36-013627, the historic "O" powerline; and a 1930s homestead site. A portion of P-36-007010, a historic road alignment (further discussed above), is also within this area. Several of the resources are bisected by trails. Adjacent resources include oil test wells and historic ranching features, such as windmills and feed troughs.

Slaughter Canyon Trail – Historic Use: Slaughter Canyon was named after local rancher Fenton Slaughter, who purchased Raymundo Yorba's home and property in 1868 and established a successful sheep and cattle ranch that extended into the eastern limits of CHSP. Legal acquisition of public domain land in CHSP by private individuals did not begin until the early 1870s. Many of those filings were associated with the small ranching community of Rincon just east of the park boundary along the Prado Basin.

Santa Ana River/Coal Canyon Area: A portion of one known archaeological resource, P-36-007010, a historic road alignment (discussed above), is within the Santa Ana River/Coal Canyon Area.

Aliso Canyon Trail - Current Use: The Aliso Canyon Trail travels north-south from the Santa Ana River Trail near the City of Corona to Upper Aliso Canyon adjacent to the City of Chino Hills. This multi-use trail runs from the northeasterly section of the park through the Rolling M Ranch area to the southeasterly section of the park and is popular with hikers, equestrians, and mountain bikers. The Aliso Canyon Trail can be accessed via trailheads near Rolling M Ranch and from the Santa Ana River Trail.

Lower Aliso Canyon contains what is planned to serve as a segment of the Juan Bautista de Anza National Historic Trail, a 1,210-mile trail commemorating the 1775-76 journey of approximately 240 men, women, and children from Nogales, Arizona to establish the first non-Native settlement at San Francisco Bay.[*,†] The plan proposes the designation of Lower Aliso Canyon Trail to Telegraph Canyon Trail as the route of the Bautista de Anza National Historic Trail through the park and calls for executing a National Historic Trails agreement with the National Park Service.

[*] California Department of Parks and Recreation (DPR). California Recreational Trails System: Collaborative Lesson from the Pacific Crest National Scenic Trail, California Coastal Trail and Juan Bautista De Anza National Historic Trail. California Department of Parks and Recreation, Statewide Trails Section. November 2013.
[†] National Park Service (NPS). 2020, Juan Bautista de Anza National Historic Trail: An Epic Journey Through New Spain, accessed April 13, 2020, available online at https://www.nps.gov/juba/index.htm.

Figure 7-3. Pictorial and Historical Map of Los Angeles County

Figure 7-4. 1902 Topographic Map

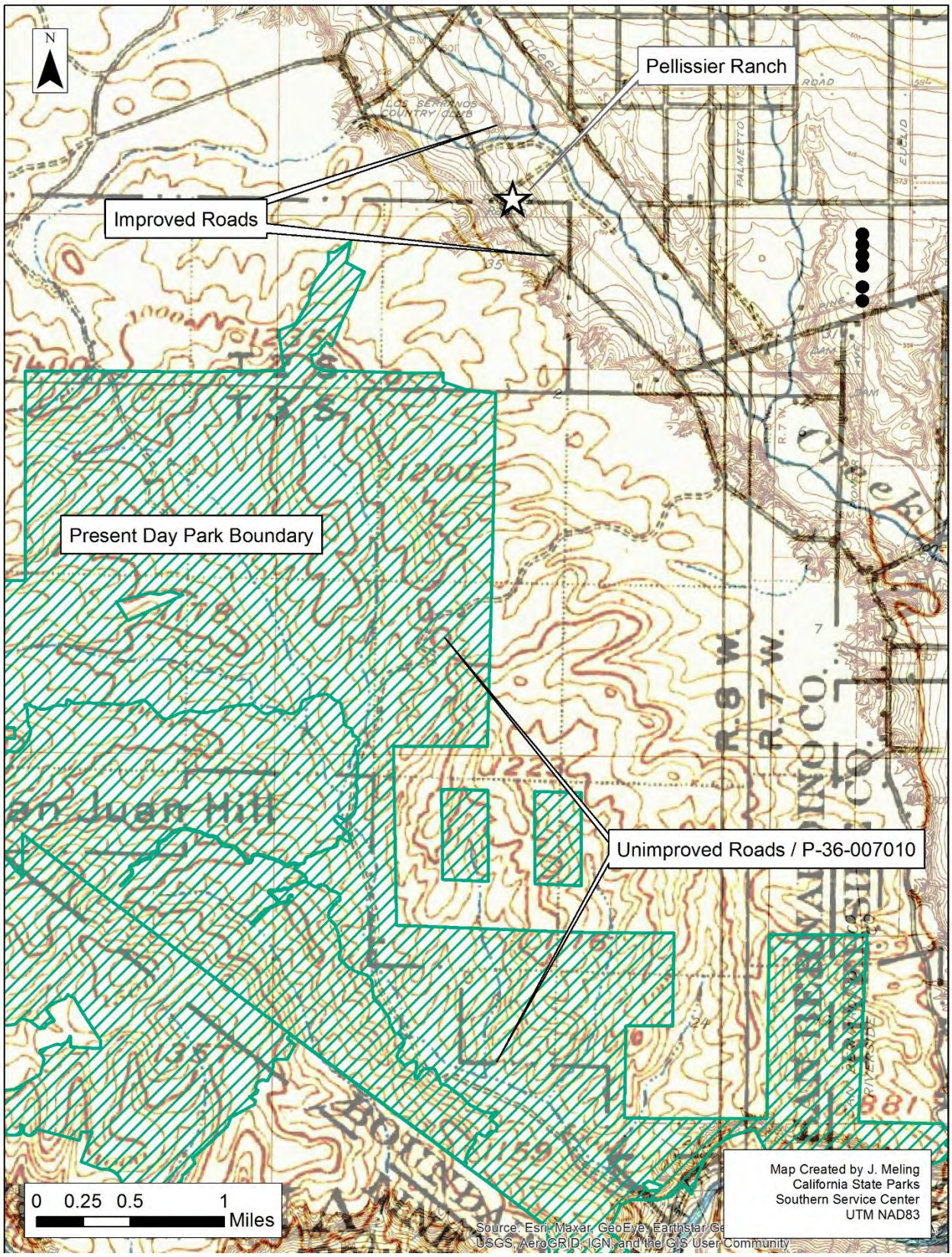
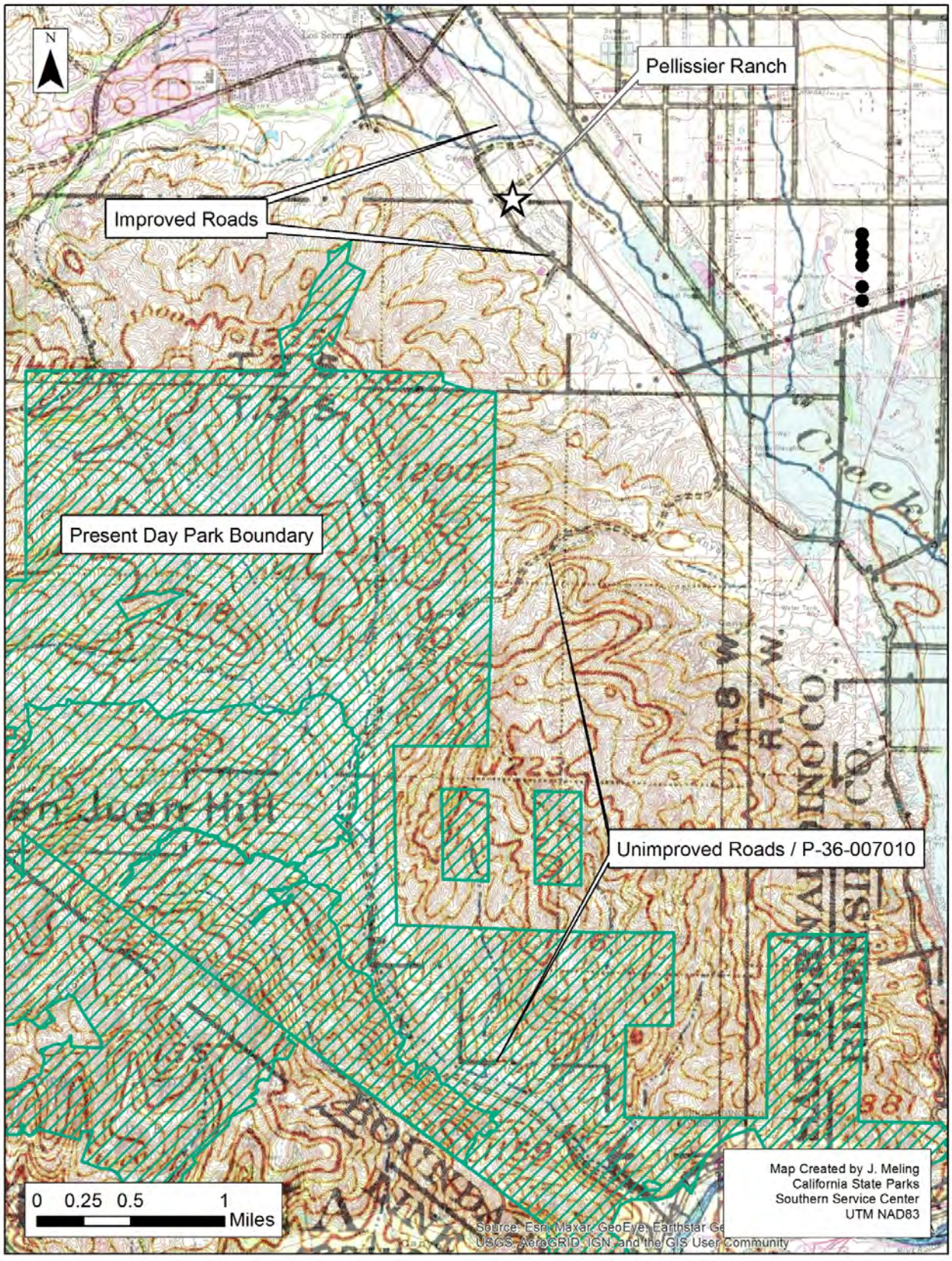


Figure 7-5. 1967 Topographic Map



Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	❒	❒	■	❒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	❒	❒	■	❒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	❒	❒	■	❒

Discussion

Implementation of the various activities associated with the RTMP could result in substantial changes to significant identified historical and archaeological resources, as well as resources considered eligible for listing on the National Register of Historic Places and/or the California Register of Historical Resources. According to CEQA Guidelines Section 15064.5(b)(1), a substantial adverse change in the significance of a historical resource involves the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (California Code of Regulations, Title 14, Division 6, Chapter 3, Article 5). Data obtained from the Department's cultural resource files indicate cultural resource surveys have been limited, making it probable that many archaeological and historic sites both on and under the surface remain for discovery.

Road and trail maintenance and construction could cause substantial adverse changes to significant archaeological and historical resources. Causes of potential adverse changes include ground disturbance related to construction activities (i.e., excavation, grading, trenching), and by alterations to potentially historic buildings or structures that could impair the physical characteristics of a resource that convey its historical significance. Future road and trail management in unsurveyed areas could unearth and possibly damage such resources. However, with the implementation of the SPRs discussed below, the impact to historic and/or archaeological resources would be less than significant.

a) The Rolling M Ranch Historic District has been previously evaluated and recommended as eligible for listing in the California Register of Historical Resources. This Historic District encompasses a number of locally significant historic resources, including buildings, structures, and objects, that are part of a cultural landscape representing early 20th century ranching

activities that were once common throughout Southern California. The plan includes trail reconstruction/reengineering of portions of Bane Canyon Trail and Lower Aliso Canyon Trail near the historically significant Rolling M Ranch Historic District. However, with SPRs CUL-1 and CUL-2, which ensure review, evaluation, and monitoring of all ground disturbing activities by a qualified archaeologist, this work would result in less than significant impacts.

SPR CUL-3 addresses potential impacts to historic resources and the need for consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

The park also contains a number of historic roads and trails. However, pursuant to the park's General Plan and historic preservation laws, the RTMP does not call for the removal of any of these roads or trails. In some cases, historic roads are no longer sustainable for use by vehicles and a recommendation has been made to convert the road to a trail. In these cases, appropriate conservation measures will preserve the historic roadbed while preventing damage to other cultural and natural resources. SPRs CUL-6 and CUL-7 specifically address the treatment of historic roads and trails and would result in less than significant impacts to these resources.

b) Previously recorded cultural resources are adjacent to roads and trails included in the RTMP. Due to the proximity of known archaeological resources (both prehistoric and historic), measures shall be in place that include additional review of project work to evaluate the potential of adverse effects to resources (SPR CUL-1) and implementation of treatments that are compliant with the Secretary of Interior's Standards for the Treatment of Historic Properties (SPR CUL-2) prior to commencement of work. These measures would result in less than significant impacts.

c) CHSP has not been systematically surveyed for paleontological resources. However, many fossils have been found in the Chino Hills area. Abundant fossil deposits have been documented in the Puente Formation, which is present throughout the park. Because there are no unique paleontological resources or sites identified within the proposed project site, SPR CUL-4 would ensure less than significant impacts when the RTMP is implemented.

d) There are no known human remains in the Project area. SPRs CUL-20 and CUL-22 ensure that if any remains are discovered, all applicable State and federal laws will be followed. Impacts are less than significant.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified within this section.

VII. Energy

Environmental Setting

State Renewable Portfolio Standards

The state's electricity grid is transitioning to renewable energy pursuant to California's Renewable Portfolio Standards (RPS). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. Electricity production from renewable sources is generally considered carbon neutral. As a result, the carbon intensity of California's electricity is decreasing over time as the percentage of renewables increases. Senate Bill 350 (de Leon) was signed into law in September 2015 and established an RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. Senate Bill 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. On September 10, 2018, Senate Bill 100 was signed and raised California's RPS requirements to 60 percent by 2030. SB 100 also established a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under SB 100 the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

2017 Climate Change Scoping Plan

The *2017 Climate Change Scoping Plan* and was approved on December 14, 2017. The *2017 Climate Change Scoping Plan* establishes a new emissions limit of 260 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030. The *2017 Climate Change Scoping Plan Update* includes potential regulations and programs to achieve the 2030 target.*

* California Air Resources Board, 2017, California's 2017 Climate Change Scoping Plan, The Strategy for Achieving California's 2030 Greenhouse Gas Target, available online at https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed May 30, 2020.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	❒	❒	■	❒
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	❒	❒	■	❒

Discussion

a) The following discussion addresses the potential energy demands from construction activities associated with the proposed project.

Short-Term Construction

Construction of the proposed project would create temporary increased demands for fuel. Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. Upon completion of project construction, the use of all construction equipment would cease. Furthermore, the construction contractors are anticipated to minimize nonessential idling of construction equipment during construction in accordance with Section 2449 of the California Code of Regulations. Such required practices would limit wasteful and unnecessary energy consumption.

Construction activities associated with future projects identified in the RTMP could involve the use of heavy-duty construction equipment that would generate substantial noise. These activities include site preparation (e.g., excavation, grading, and vegetation clearing), road and trail reconstruction, slope recontouring to reduce erosion and runoff, drainage structure upgrades, adding or removing aggregate material, and the construction of new trail and/or trail structures such as bridges. To perform these activities, a combination of heavy equipment, small trail construction equipment (e.g., compactors, rock drills, chainsaws), and handheld tools are typically used. Excavators are used to prepare the site by removing trees and brush. Dozers are also used to decompact the ground surface and to accumulate and pile ground mulch for use on finished surfaces. Graders and rollers may be used to outslope and reshape road surfaces. Dump trucks are used to import aggregate for surface hardening. Heavy equipment machines may be used

separately or simultaneously to complete the work. Handheld tools may include shovels, grub hoes, bow saws, loppers, and drawknives. Additionally, the proposed project would be required to comply with SPRs AQ-1 and AQ-10 through AQ-15 for construction-related emission control measures, which would help ensure that there would not be an inefficient use of energy.

Therefore, overall, it is expected that construction fuel associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than similar projects, and impacts would be less than significant with respect to construction-related energy demands.

Long-Term Operation

The project would not result in long-term operational impacts because it does not propose changes to existing infrastructure that would require the inefficient use of energy. Thus, operation of the project would not result in inefficient, wasteful, or unnecessary consumption of energy during operation. The proposed project would not result in a significant impact related to electricity, natural gas, or motor vehicle transportation energy during operation

b) Applicable plans include plans adopted by the California Energy Commission to reduce energy consumption and/or greenhouse gas emissions from energy consumption, the City of Chino Climate Action Plan, and the 2017 Climate Change Scoping Plan.

The RTMP is consistent with all applicable State and local plans, policies, and regulations. Work proposed for this project is in compliance with the CHSP General Plan and, with adoption of this Negative Declaration and implementation of the SPRs herein, would be in compliance with CEQA. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

VIII. Geology and Soils

Environmental Setting

Geology

CHSP straddles the north end of the Santa Ana Mountains and the southeast portion of the Puente-Chino Hills, which together form the Peninsular Range's geomorphic province in Southern California. This geomorphic formation interrupts the generally flat Los Angeles Basin with a variety of mountains, rolling hills, and canyons on its south and east sides, which are separated by faults associated with and parallel to the San Andreas Fault System. The hills are a result of folding and uplift along the Whittier fault zone and Chino fault. The geology of the Puente-Chino Hills are made up of a thick sequence of middle to upper Miocene marine sedimentary rocks of the Puente Formation, deposited from approximately five to fifteen million years ago. The Puente Formation has been divided into four members: from the oldest to most recent—the La Vida, Soquel, Yorba, and Sycamore Canyon members.

Petroleum resources are associated with this formation and have been explored and exploited in the Los Angeles region since the late 1800s. Fine clay soils are found in these formations and in alluvial deposits that wash down from the hills and mountains during winter rains. The Topanga Formation underlies the Puente Formation within CHSP. It was deposited approximately 15 million years ago and consists of massively bedded sandstone and conglomerate with interbeds of siltstone and minor claystone.[*,†,‡]

Topography

The Chino Hills are part of a group of hills that also includes the Puente Hills to the northwest. These hills form a roughly triangular area of approximately 35 square miles of canyons, hills, valleys, and steep slopes. The hills are bounded to the northwest by the San Gabriel Valley, to the northeast by the San Bernardino Valley, and to the south by the Santa Ana River Canyon and the Los Angeles Basin.

The principal stream drainages in the park are Telegraph Canyon running east to west and Aliso Canyon running north to south. Slopes in the Telegraph drainage are generally steeper than the Aliso drainage. The most level areas in the park are near Aliso Creek, at the mouth of Telegraph Canyon, and adjacent to the Santa Ana River. The highest elevations in CHSP are San Juan Hill at

[*] California Department of Parks and Recreation, 2002, Chino Hills State Park – Our Mission, available online at https://www.parks.ca.gov/pages/648/files/ChinoHillsFinalWebLayout2016.pdf, accessed July 6, 2020.

[†] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, accessed July 7, 2020.

[‡] City of Chino Hills, 2015, General Plan, available online at https://www.chinohills.org/DocumentCenter/View/11275/General-Plan---Final-approved-by-CC-2-14-15-4-21?bidId=, accessed July 6, 2020.

1,781 feet and Gilman Peak at 1,865 feet, and the lowest elevations are along the Santa Ana River at 430 feet.[*]

Seismicity

The Chino and Whittier faults are located north and south-southwest of CHSP, respectively, with a small portion of the Whittier Fault extending into the southwestern portion of the park near Telegraph Canyon. Both the Whittier and Chino faults may be branches of the Elsinore Fault, which is a major structural feature of the Peninsular Range's Geomorphic Province to the south.[†,‡] Other nearby minor faults include the Central Avenue, San Jose, and Walnut Creek faults. These faults and the sediment and bedrock types in the Chino Hills area control the potential geologic impacts that could affect the park. Earthquakes on faults can trigger several geologic phenomena, including ground shaking, fault rupture, liquefaction and associated hazards, and subsidence. Because no lakes, oceans, or other large bodies of water are within CHSP, the park is not subject to seiches.[§]

In 2002, the California Geological Survey zoned the Chino Fault and certain secondary traces, including the junction with the Elsinore Fault, as "active," pursuant to the guidelines of the Alquist-Priolo Earthquake Fault Zone Act (A-P Act).[**] The purpose of the act is to reduce losses from a surface fault rupture. Wherever an Alquist-Priolo earthquake fault zone exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault, and any structure must be placed a minimum distance from the fault (generally 50 feet).[††]

The most recent, large, nearby earthquake that impacted day-to-day life in the area and caused some structural damage occurred on July 29, 2008. Characterized as being on an oblique-reverse fault, it measured 5.4 on the Richter scale and originated eight miles below the City of Chino Hills.[‡‡]

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[*] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, accessed July 7, 2020.

[†] California Department of Conservation, 2015, Fault Activity Map of California, available online at https://maps.conservation.ca.gov/cgs/fam/, accessed August 3, 2020. `

[‡] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, accessed July 7, 2020.

[§] City of Chino Hills, 2015, General Plan, available online at https://www.chinohills.org/DocumentCenter/View/11275/General-Plan---Final-approved-by-CC-2-14-15-4-21?bidId=, accessed July 6, 2020.

[**] Department of Conservation, 2002, Chino Fault – Riverside and San Bernardino Counties, California, available online at https://gmw.conservation.ca.gov/shp/EZRIM/Reports/FER/247/FER_247_Report_20021008.pdf, accessed July 7, 2020.

[††] California Department of Conservation, 2019, Alquist-Priolo Earthquake Fault Zones, available online at https://www.conservation.ca.gov/cgs/alquist-priolo, accessed July 7, 2020.

[‡‡] Los Angeles Times, 2008, Epicenter under Chino Hills, available online at http://www.latimes.com/news/local/la-sci-quake30-2008jul30,0,7281322.story, accessed August 3, 2020.

Soils

CHSP is located within Soil Region VII: Southern California. Within 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. Chino Hills soils are typically upland soils, formed in place with minor occurrences of alluvial soils.

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

Past land use practices, the steepness of the watersheds, and the rapid surface runoff create a high potential for erosion throughout CHSP. The park consists of numerous roads, fences, and power and gas lines. In various locations, livestock have created linear paths along steep fence lines, which has led to the development of gullies and the loss of vegetation and soil, potentially contributing to future landslides. Roads also cause gullying, mass wasting, and vegetative loss. An increase in water runoff is a result of vegetation removal and water being diverted from natural watercourses and concentrated through culverts. Water bars, berms, and ditches also lead to erosion of the roads and adjacent land within the park.[*]

[*] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, accessed July 7, 2020.

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

Discussion

ai) As described previously, the California Geological Survey zoned the Chino Fault and certain secondary traces, including the junction with the Elsinore fault, as "active" pursuant to the guidelines of the A-P Act.[*] This designation confers specific safety requirements for structures built in the area. However, the RTMP does not call for the construction of new structures within the park except for potential minor trail structures such as switchbacks and retaining walls. Furthermore, any modifications to existing structures would be serviced by workers who would be in the park during the day and would not be housed within the park. Therefore, potential project impacts associated with exposure of people or structures to adverse effects from the rupture of a known fault would be less than significant.

aii) The project is located within the highly seismic Southern California region within proximity to several active or potentially active fault systems. The State defines faults in three ways, namely: Holocene-active faults, which are faults that have moved during the past 11,700 years and are regulated under the A-P Act; pre-Holocene faults, which are faults that have not moved in the past 11,700 years; and age-undetermined faults, which are faults where the recency of fault movement has not been determined (these faults are considered Holocene-active until proven otherwise).[†] As mentioned above, the Holocene-active Chino, Whittier, and Elsinore faults are proximate to the site and, therefore, the project site is susceptible to ground shaking during a seismic event. However, the project would not include structures, and workers would be attending the site only intermittently. Therefore, impacts related to seismically induced surface rupture or ground shaking would be less than significant.

aiii) Liquefaction is a phenomenon that occurs when loosely packed and waterlogged sandy or silty sediments at or near the ground surface lose their strength during times of strong ground shaking and take on the characteristics of a liquid. When liquefaction occurs below buildings and other structures, major damage may occur.[‡]

According to the Los Angeles County Liquefaction Maps, CHSP is not within an area of high liquefaction potential. The nearest such area is in the eastern portion of Chino Hills in the

[*] Department of Conservation, 2002, Chino Fault – Riverside and San Bernardino Counties, California, available online at https://gmw.conservation.ca.gov/shp/EZRIM/Reports/FER/247/FER_247_Report_20021008.pdf, accessed July 7, 2020.

[†] Department of Conservation – California Geological Survey, 2018, Earthquake Fault Zones, available online at https://www.conservation.ca.gov/cgs/Documents/SP_042.pdf, accessed August 3, 2020.

[‡] United States Geological Survey, 2020, What is Liquefaction?, available online at https://www.usgs.gov/faqs/what-liquefaction?qt-news_science_products=0#qt-news_science_products, accessed August 3, 2020.

vicinity of the SR-71; this portion of the city is underlain by saturated alluvial sediments.[*,†] Nevertheless, the RTMP would not include structures, and workers would be attending the site only intermittently during project work. Therefore, impacts related to seismically induced surface failure including liquefaction would be less than significant.

iv) According to the CHSP General Plan, the park has major geologic hazards and sensitivities, which include a susceptibility to landslides. The area has been identified as the most landslide -prone area in southwestern San Bernardino County. Although the majority of the landslides occurred a long time ago by human standards, these areas are still considered unstable because the landslide deposits are mostly perched on hillslopes awaiting some triggering mechanism. CHSP soils are mostly upland soils composed of clay or clay-loam surfaces with minor occurrences of alluvial sandy loam soils. Due to the steepness of the watersheds, past land-use practices, and rapid surface runoff due to the upland soils, there is a high potential for erosion throughout the park. Nevertheless, the RTMP project would not include structures, and workers would be attending the site only intermittently during project work. Additionally, work permitted under the RTMP would be needed in response to or in anticipation of landslides, rather than as a potential cause of them. Therefore, impacts related to landslides would be less than significant.

b) Objectives of the RTMP include prioritizing road and trail maintenance, reconstruction/reengineering, removal, and rerouting to achieve a more sustainable road and trail system. Adoption of the plan will allow staff to prioritize eroding trails and improvements to reduce erosion.

No change in use was proposed in the RTMP; therefore, project level review for change in use is not considered in this document. Future change in use requests will be evaluated pursuant to the process outlined in the RTMP. Approved change in use requests will receive subsequent evaluation to assess potential impacts on soil erosion resulting from physical changes to the trails.

These change in use projects could involve the disturbance of surface soils during minor construction activities, including trail rerouting, restoration, decommissioning, rehabilitation, and installation of road/trail structures (e.g., steps, retaining walls) as well as soil disturbance caused by use-related activities (i.e., type and intensity of use).

Impacts will be assessed by evaluating the implementation of proposed changes in use in the context of the SPRs, which were incorporated as part of the Program Environmental Impact

[*] County of Los Angeles, 2018, Liquefaction Zones, available online at http://geohub.lacity.org/datasets/lacounty::liquefaction-zones?geometry=-118.369%2C33.863%2C-117.061%2C34.062, accessed August 3, 2020.

[†] GMU Technical, Inc., 2011, Geotechnical Conditions Update for City of Chino Hills General Plan, available online at https://www.chinohills.org/DocumentCenter/View/9801/Appendix-F---Geotechnical-Conditions-Update?bidId=, accessed August 3, 2020.

Report (PEIR) for the Trail Change in Use Evaluation Process, adopted by the Department on May 2, 2013.

Significant impacts from erosion during routine road and trail maintenance activities as well as from trail changes in use would be avoided through implementation of SPRs GEO-1 through GEO-27. Thus, these impacts would be less than significant.

c) As discussed in sections a.ii) and iv) above, the project site would potentially be subject to landslides. The proposed project would not include the construction of significant structures, and workers would be attending the site only intermittently for project work. Additionally, future work would be implemented as a preventative measure to mitigate potential impacts associated with landslides. Therefore, potential impacts associated with landslides, lateral spreading, subsidence, liquefaction, and collapse would be less than significant.

d) Expansive soils have the ability to shrink or swell as the water content changes. Although the soils in CHSP are upland soils characterized by clay or clay-loam surfaces that have expansive properties, because the project entails no significant structures, potential impacts related to expansive soils would be less than significant.

e) No septic facility is proposed as part of the project. Therefore, there would be no impact.

f) Fossils have been found within the Chino Hills area, and the geological Puente Formation, present throughout CHSP, is known to contain abundant fossil deposits.[*] Paleontological resources found in the State Park System require protection from damage. As such, trail improvements conducted as a result of the RTMP will be done in accordance with the Paleontological Resource Protection Policy as identified in Section 0309.2 of the Department Operations Manual. In conformance with SPR CUL-4, if a paleontological resource is discovered, work within 100 feet of the find will be temporarily halted and the Department will be notified. Therefore, impacts to paleontological resources will be less than significant impacts.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

[*] California Department of Parks and Recreation, 1999, Chino Hills General Plan – Pg. 30, accessed July 7, 2020.

IX. Greenhouse Gas Emissions

Environmental Setting

Regulatory Framework

The USEPA announced on December 7, 2009, that greenhouse gas (GHG) emissions threaten the health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The USEPA's final findings respond to the 2007 United States Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements, but allow the USEPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation.[*] The USEPA's endangerment finding covers emissions of six key GHGs—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to future development facilitated by the proposed project because they constitute the majority of GHG emissions.[†]

The *2017 Climate Change Scoping Plan* and was approved on December 14, 2017. The *2017 Climate Change Scoping Plan* established a new emissions limit of 260 million metric tons of carbon dioxide equivalent for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030. The *2017 Climate Change Scoping Plan Update* includes the potential regulations and programs to achieve the 2030 target.[‡]

Any future developments would be required to comply with the current Building Energy Efficiency Standards and California Green Building Standards Code (CALGreen), at minimum, which include performance standards for energy efficiency and require installation of electric vehicle charging stations and secured bicycle parking.[§,**]

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[*] United States Environmental Protection Agency (USEPA), 2009. EPA: Greenhouse Gases Threaten Public Health and the Environment, Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity, December, http://yosemite.epa.gov/opa/admpress.nsf/0/08D11A451131BCA585257685005BF252.

[†] United States Environmental Protection Agency (USEPA), 2014, Climate Change Indicators: U.S. Greenhouse Gas Emissions, available online at https://www.epa.gov/climate-indicators/climate-change-indicators-us-greenhouse-gas-emissions, accessed on August 11, 2020.

[‡] California Air Resources Board, 2017, California's 2017 Climate Change Scoping Plan, The Strategy for Achieving California's 2030 Greenhouse Gas Target, available online at https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed August 11, 2020.

[§] California Energy Commission, 2020, Building Energy Efficiency Standards – Title 24, available online at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards, accessed August 11, 2020.

[**] Department of General Services, 2020, CALGreen, available online at https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen#@ViewBag.JumpTo, accessed August 11, 2020.

The San Bernardino Associated Governments (SANBAG) developed the San Bernardino County Regional Greenhouse Gas Reduction Plan in 2014. The plan includes a regional greenhouse gas inventory and summarizes actions that participating jurisdictions have selected to reduce GHG emissions. As part of the plan, the City of Chino Hills, which includes a portion of CHSP, selected the goal of reducing its community GHG emissions to a level that is 20 percent below its projected emissions in 2020. The City has committed to additional local measures and to support applicable regional measures, including a reduction in water use in the city, encouraging solar energy for existing housing, and coordinating with the City's wastewater treatment provider to upgrade to more energy efficient equipment at the wastewater treatment plant.[*]

[*] City of Chino Hills, 2014, Chino Hills General Plan Update - Greenhouse Gas Study, available online at https://www.chinohills.org/DocumentCenter/View/9802/Appendix-G---Greenhouse-Gas-Study?bidId=, accessed August 11, 2020.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	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 of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	❒	❒	❒	■

Discussion

a) The RTMP project is a management tool that will be used to assess change in use requests and manage the roads and trails to minimize impacts to the cultural and natural resources. Maintenance and construction activities associated with the project would include reconstructing, reengineering, and rerouting segments of existing roads and trails, annual maintenance and clearing of drainages and brush, and converting old roads into recreational trails. Because these maintenance and construction activities would include temporary usage of construction equipment, transportation of materials, clearing of vegetation, and excavation for new trails, emissions of ozone precursors and generation of fugitive dust is anticipated. However, due to the temporary nature of the project and compliance with applicable Air Quality SPRs, the RTMP would not result in a new source of greenhouse gas emissions that would result, either directly or indirectly, in a significant impact on the environment. Therefore, any impact would be less than significant.

b) The project consists of a guiding document for park managers, staff, and volunteers who construct trail improvements, maintain or repair existing trails, or are otherwise involved with trail construction or maintenance. The plan establishes goals for the overall trail system as well as guidelines for appropriate trail uses, closures, reroutes, maintenance, repair, and monitoring. The plan also defines trail-specific actions for individual trails as well as recommended future planning efforts. As stated under the Air Quality discussion, the project would not conflict with or obstruct implementation of the 2016 Air Quality Management Plan for the SCAQMD, which promotes reductions in greenhouse gases, criteria pollutants, and toxic risk, as well as efficiencies in energy use, goods movement, and transportation.[*] The project would also not be in conflict with the *2017 Climate Change Scoping Plan Update,* which includes potential regulations and programs to achieve the 40 percent decrease in 1990 GHG levels by

[*] South Coast Air Quality Management District, 2016, Final 2016 AQMP-CARB/EPA/SIP Submittal, available online at http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp, accessed June 22, 2020.

2030.[*] The RTMP will also conform with the requirements of the San Bernardino County Regional Greenhouse Gas Reduction Plan.[†]

Additionally, the project would not conflict with the 2010 Clean Communities Plan (CCP), which aims to reduce the exposure of air toxics and air-related nuisances throughout the SCAQMD with an emphasis on cumulative impacts. The elements of the CCP are community participation, community exposure reduction, communication and outreach, agency coordination, nuisance, and source-specific programs.[‡]

Therefore, because the project would not conflict with or obstruct any plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases, there would be no impact.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

[*] California Air Resources Board, 2017, California's 2017 Climate Change Scoping Plan, The Strategy for Achieving California's 2030 Greenhouse Gas Target, available online at https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed August 11, 2020.

[†] City of Chino Hills, 2014, Chino Hills General Plan Update - Greenhouse Gas Study, available online at https://www.chinohills.org/DocumentCenter/View/9802/Appendix-G---Greenhouse-Gas-Study?bidId=, accessed August 11, 2020.

[‡] South Coast Air Quality Management District, 2010, Clean Communities Plan, available online at http://www.aqmd.gov/home/air-quality/clean-air-plans/clean-communities-plan, accessed June 22, 2020.

X. Hazards and Hazardous Materials

Environmental Setting

The California Department of Toxic Substances Control (DTSC) defines a hazardous material within the California Code of Regulations, Title 22, Section 66260.10 as: [*]

> A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

Chemical and physical properties that classify a substance as hazardous include the properties of reactivity, corrosivity, ignitability, and toxicity. Health effects caused by hazardous materials exposure are influenced by factors such as the frequency of exposure, the exposure dose, the exposure pathway, and individual susceptibility.

The DTSC maintains a hazardous waste and substances list, known as the Cortese List, that is used by State and local agencies as well as developers to comply with CEQA requirements by disclosing locations and information about nearby hazardous materials sites.[†]

In California, the unified hazardous materials and hazardous waste management program, known as the "Unified Program" was established by the Secretary for Environmental Protection. The Certified Unified Program Agencies, under the Unified Program, locally administer and implement requirements, inspections, and permits for six programs, including the Underground Storage Tank (UST) program and the Hazardous Waste Generator/Tiered Permitting Program.

GeoTracker is the SWRCB's data management system for sites that impact or have the potential to impact water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, such as Leaking Underground Storage Tank (LUST) sites, Department of Defense sites, and Cleanup Program sites. GeoTracker also contains records for various unregulated projects as well as permitted facilities, including irrigated lands, oil and gas production, operating permitted USTs, and land disposal sites.[‡]

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[*] Thomson Reuters Westland, 2020, Definitions, available online, accessed at https://govt.westlaw.com/calregs/Document/I9F2AC740D4BA11DE8879F88E8B0DAAAE?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default).

[†] Department of Toxic Substances Control, 2020, Cortese List, available online at https://www.envirostor.dtsc.ca.gov/public/, accessed August 5, 2020.

[‡] State Water Resources Control Board, 2020, GeoTracker, available online at https://geotracker.waterboards.ca.gov/, accessed August 5, 2020.

Hazardous Materials

A review of the Cortese List through Envirostor and Geotracker provides documentation that there are no active hazardous materials on-site. The closest active hazardous materials site to the park is a former on-site oil well with storage tanks at 3811 Prospect Avenue, Yorba Linda, CA 92886, Orange County, approximately 0.5 mile from the southwestern boundary of the park. The property was historically used for agricultural purposes, as an oil well, and a greenhouse facility. In 2016, single-family homes were being built on the site. Based on remedial action completed on-site, DTSC concurred that all agreed upon response actions have been completed for the site and no further activities are required. It is presumed that the case will be closed in the foreseeable future.[*]

The Chino Hills were primarily used for grazing throughout their recorded history; however, some late 19th and early 20th century horticulture, agriculture, mining, and oil exploration also took place. Exploratory oil wells were drilled in the hills, but most were not successful. Additionally, the Chino Hills once had significant cattle ranching activity, and facilities associated with the historic ranching activities remain, including many of the park's roads and trails, a loading chute, cattle scale, barn, and foreman's residence.[†] There is no evidence of industrial use in the park except as related to agriculture, mining, oil exploration, and cattle ranching. Historic oil exploration and mining may have involved the use of heavy metals and hydrocarbons, and these materials were poorly regulated during the mid-20th century.

The types of materials used and stored at CHSP that could be hazardous include fluids such as motor vehicle and mechanical equipment fuels, oils, and other lubricants. The Department maintains storage facilities for these fuels and lubricants in the park. No storage facilities or other structures or industrial sites that could contain hazardous materials are at the sites of the proposed project.

Airports

No airports are in or adjacent to park property. The nearest public airports are in the City of Chino, approximately four miles from the northeastern end of the park, and the City of Corona, approximately three miles from the southeastern end of the park. There are no private airstrips within the area.

Schools

The closest schools are Orange Grove High School, Jefferson Elementary School, and Parkridge Elementary School, all in the City of Corona. These schools are located in urban communities to the east of the park and all are more than four miles away from the park's boundary.

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[*] Department of Toxic Substances Control, 2019, Approval of Removal Action Completion for 3811 Prospect Avenue, Yorba Linda, available online at https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/7754322648/Pulte%20Group%20RACR%20Approval%20letter%207-3-19.pdf, accessed August 5, 2020.

[†] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, accessed July 7, 2020.

Wildland Fire

Large areas of CHSP are in a high or very high fire hazard area.[*] Small portions of the perimeter of CHSP are intermixed with the Wildland-Urban Interface (WUI), especially along the northern, southern, and western perimeters.[†] Fires are an integral part of the natural world, but historical human alteration of the natural fire cycle has allowed unnatural plant succession and fire fuel buildup. The Department employs fire fuel management practices in the State Park System to minimize and manage the potential risk. The California Department of Forestry and Fire Protection (CAL FIRE) has the primary responsibility for wildland fire response in the park. Closer to populated communities, mutual aid agreements also exist with local fire protection agencies. Some trails in the park also serve as fire access roads. The Orange County Fire Authority conducts field visits and uses the park's roads to access different areas throughout the year and during a fire or other emergency.[‡]

The Department has adopted the Department Operations Manual (DOM) to provide protocols for the various aspects of park operations, including fire management and planning. The Wildland Fire Management component (Section 0313.2.1.1) of the DOM's manual's Natural Resources Section identifies the Wildland Fire Management Policy, which requires preparation of a Wildfire Management Plan for each Department-operated unit that may experience wildland fires. The Wildfire Management Plan for each unit provides requisite information for managing wildfire events, such as the locations of sensitive park resources, facilities, water supplies, and existing roads. Assembly Bill 2144 specifies that CHSP shall adopt a Wildfire Management Plan no later than January 1, 2022.[§]

[*] Cal Fire, 2020, California Fire Hazard Severity Zone Viewer, available online at https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414, accessed August 5, 2020.

[†] University of Wisconsin-Madison, 2010, Wildland-Urban Interface, available online at http://silvis.forest.wisc.edu/data/wui-change/, accessed August 5, 2020.

[‡] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, accessed July 7, 2020.

[§] California Legislative Information, 2017, AB-2144 State parks: Chino Hills State Park: wildfires, available online at https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=201720180AB2144, accessed August 5, 2020.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	❒	❒	■	❒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	❒	❒	■	❒
c) Emit hazardous emissions or handle hazardous 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 material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	❒	❒	❒	■
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	❒	❒	❒	■
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	❒	❒	❒	■
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	❒	❒	■	❒

Discussion

a) The user types addressed in the RTMP include “other power driven mobility devices” (OPDMDs) and nonmotorized recreational uses. These users do not typically handle or transport hazardous materials. Therefore, projects implemented pursuant to the RTMP would

not increase the use or transport of hazardous materials at CHSP. Typically, the only routine use and transport of hazardous materials is associated with maintenance and requires common hazardous materials such as fuel and lubricants for equipment and vehicles and detergents and solvents for cleaning. These hazardous materials are used and stored consistent with USEPA and Occupational Safety and Health Administration (OSHA) standards. Approval of the RTMP would not substantially change the operations and maintenance of the park, and staff would continue to use, transport, store, and dispose of these hazardous materials consistent with USEPA and OSHA regulations. In addition, SPR HAZ-3 requires coordination with utility companies when ground disturbance is necessary within existing utility alignments. This coordination reduces potential accidents related to damage of gas or electrical lines. During construction, SPRs HAZ-4 through HAZ-7, HAZ-12, and HAZ-14 require several measures to prevent accidental leaks, spills, or other emission of hazardous materials into the environment, including frequent leak inspections and maintenance of construction vehicles, a spill prevention plan, a materials management plan, vehicle wash stations, and suitable staging areas. No substantial increased risk of accidental upset or emission of hazardous materials would occur. Any potential impact is therefore less than significant.

b) Existing trails may cross land where hazardous materials have been previously used or stored, including former oil exploration sites. Implementation of the proposed RTMP involves prioritization of maintenance, adding or removing user types on existing trails, minor trail relocation to improve sustainability, and possible new trail connection to improve circulation. If a subsequent project under the RTMP requires route modification that must occur in an area where hazardous materials are thought to have been previously handled or stored, SPRs HAZ-1 and HAZ-2 require avoidance of these areas when feasible. If avoidance is not feasible, preparation of a Phase I Environmental Site Assessment (ESA) by a qualified hazardous material professional and recommendations therein will be implemented (see SPR HAZ-1). The recommendations in the Phase I ESA could include soil removal and other minor remediation. Construction activities associated with any necessary remediation would be conducted according to USEPA and OSHA standards and would reduce potential impacts related to exposure of construction workers and trail users to hazardous materials in soils. There are no known areas of the park that have serpentine soils containing naturally occurring asbestos.[*] Any potential impact is considered less than significant.

c) Implementation of the RTMP will comply with Section 17213 of the California State Education Code prohibiting the use of toxic or hazardous materials and wastes within a quarter mile of a school.[†] Approval of the RTMP will not result in hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste. The nearest school to the park unit boundary is more than four miles away, and the nearest known historical mining and

[*] Napa Valley College, 1985, California's Serpentine by Art Kruckeberg, available online at http://www.napavalley.edu/people/ajohnson/Documents/VWT%20132%20Spring%202015/10%20-%20Problem%20Soils%20(117%20-%20130).pdf, accessed August 10, 2020.

[†] California Legislative Information, 2008, Education Code, available online at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213, accessed August 5, 2020.

oil exploration activities would have no impact on existing schools. Implementation of SPRs noted above would prevent accidental leaks, spills, or other emission of hazardous materials into the environment. Therefore, the proposed project would have a less than significant impact from hazardous emissions, materials, substances, or wastes to nearby schools.

d) The Cortese List discloses information related to the location of hazardous waste sites. A search of the Cortese List on Geotracker and Envirostor did not reveal the presence of any open or active hazardous material sites that have not yet been remediated within or adjacent to CHSP pursuant to Government Code § 65962.5.[*] Therefore, because the proposed project is not included on a list of hazardous material sites, it would not create a significant hazard to the public or the environment, and there would be no impact.

e) CHSP is not in an airport land use plan, nor within two miles of a public airport, public use airport, private airstrip, nor within the boundaries of an airport land use plan. Therefore, there will be no impacts from airport-related hazards.

f) Approval of the RTMP will have no effect on any adopted emergency response plan or emergency evacuation plan. Therefore, no impact would result.

g) Many roads and trails in CHSP are in relatively remote areas and pass-through areas with brush and trees. Most of these areas are subject to high risk of wildland fire due to being designated as WUI. Except for instances where minor trail realignment is necessary (e.g., to avoid a sensitive resource), the proposed RTMP would not result in new areas of public access. Further, trail realignment typically occurs on small segments of trail adjacent to existing trail alignments.

> Regarding potential ignition sources, existing State law (CCR Title 14, Division 3, §§ 4311 and 4314) prohibits the use of fireworks in state parks and restricts smoking and campfires to designated areas. Internal combustion engines are prohibited on roads and trails designated for nonmotorized uses, with exception to those associated with law enforcement officers, emergency services, or easement holders. Furthermore, trail operation would remain consistent with the DOM requirements for visitor safety, including the future unit-specific Wildfire Management Plan.
>
> Construction activities could be required for new trail connections to improve circulation routes, road decommissioning, reengineering, or if a qualifying change-in-use project approved under the proposed process requires minor modifications or realignment to accommodate the new user type(s) or to avoid existing environmental problem areas. The proposed project includes several SPRs designed to minimize the risk of fire ignition and maximize the effectiveness of fire suppression. Implementation of SPRs HAZ-10 through HAZ-14 would reduce the risk of ignition associated with construction activities by

[*] EnviroStor, 2020, EnviroStor and Geotracker Map, available online at https://www.envirostor.dtsc.ca.gov/public/map/?global_id=60001667, accessed August 5, 2020.

requiring a Fire Safety Plan, reducing spark potential, reducing fuels, providing radio communication with CAL FIRE, and providing water trucks. Implementation of these SPRs would minimize construction-related potential for risk of wildland fire. Therefore, the RTMP would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires, and the impact associated with approval of the RTMP is considered less than significant.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XI. Hydrology and Water Quality

Environmental Setting

The SWRCB oversees the implementation of the National Pollution Discharge Elimination System program (NPDES) and creates permitting requirements to regulate pollutant discharges, which includes those resulting from construction-related activities. SWRCB works in conjunction with the RWQCBs to implement water quality protection goals and objectives. CHSP lies within the jurisdiction of the Santa Ana Regional Water Quality Control Board.[*]

Section 402 of the Clean Water Act regulates the discharge of pollutants to waters of the U.S. The NPDES Construction General Permit applies to grading, grubbing, and other ground-disturbance activities.[†] Construction activities on more than one acre are subject to NPDES permitting requirements, including the preparation of a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP identifies stormwater collection and discharge points, specific drainage patterns across a site, and best management practices that dischargers will use to protect stormwater runoff during construction and at operation.[‡]

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, Soquel, Sonome, and Telegraph canyons. The first three canyons include land in private ownership outside the park; however, 96 percent of Telegraph Canyon is within park boundaries, as is some of Carbon Canyon. A majority of the headwaters of these canyons is currently used for grazing, but significant upstream portions of the Carbon Canyon, Soquel Canyon, and Sonome Canyon watersheds are residential.

Several roads that cross streams exist in Bane, Aliso, Telegraph, and Soquel canyons. In some areas, increased soil erosion, turbidity, and damage to aquatic habitat has occurred because of road use through stream channels.

Climate and Precipitation

The climate at CHSP is typically Mediterranean with cool, moist winters and warm, dry summers. Local weather conditions are greatly influenced by wind patterns. Westerly breezes bring in moist marine air, which moderates temperatures and frequently brings in low clouds or fog. Easterly breezes bring in dry desert air, which accentuates temperature extremes (raising

[*] California Waterboards, 2020, Santa Ana Region 8, available online at https://www.waterboards.ca.gov/santaana/about_us/regional_boundaries_map.html, accessed April 27, 2020.

[†] US Environmental Protection Agency, 2017, Section 404 of the Clean Water Act, Section 402: National Pollutant Discharge Elimination System, available online at https://www.epa.gov/cwa-404/clean-water-act-section-402-national-pollutant-discharge-elimination-system, accessed March 24, 2020.

[‡] US Environmental Protection Agency, 2007, Developing a Stormwater Pollution Prevention Plan (SWPPP),, available online at https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp, accessed March 24, 2020.

maximums and lowering minimums). Occasionally, strong (35 to 50 miles per hour) easterly winds may blow for several days, sometimes raising temperatures over 100 degrees Fahrenheit. Known as Santa Anas, these winds produce low humidity and reduce fuel moisture, which, with the high wind speeds, create extreme fire hazard conditions.

Average annual precipitation in the Chino Hills area ranges from 15 to 18 inches. Typically, the summer months are dry. Rain from December through March usually produces 75 percent of the annual precipitation with significant runoff, which initiates the period of stream flow. The dry summer period typically leads to depletion of soil moisture, cessation of vegetative growth, and termination of stream flow.[*]

Watershed: Surface Water

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

Groundwater

Groundwater in the park plays a minor role in the hydrology of the area. Groundwater in the area is recharged naturally by precipitation. Percolation areas are where a portion of the precipitation and subsequent runoff percolates into the ground. There have not been any surveys to determine the depth, quality, and quantity of the groundwater.

Flooding

A small area of CHSP is in the Santa Ana Canyon and Santa Ana River Flood Plain. This area between the Green River Golf Course and State Route 71 is subject to the Lower Santa Ana River Canyon Resource, Floodplain, and Habitat Management Plan. Department staff participated in the study group that developed the plan. Flowage easement rights are required in this portion of the park for the Santa Ana River Mainstem Project, per an agreement between the Riverside County Flood Control and Water Conservation District and the Department.

Water Quality Regulation

The SWRCB oversees the implementation of the NPDES and creates permitting requirements to regulate pollutant discharges, including those resulting from construction related activities. SWRCB works in conjunction with RWQCB to implement water quality protection goals and

[*] California Department of Parks and Recreation, 1999, Chino Hills State Park, available online at https://www.parks.ca.gov/pages/21299/files/chino%20hills%20finalgp.pdf, accessed May 30, 2020.

objectives. CHSP lies within the jurisdiction of the Santa Ana Regional Water Quality Control Board.[*]

Section 402 of the Clean Water Act regulates the discharge of pollutants to waters of the U.S. The NPDES Construction General Permit applies to grading, grubbing, and other ground-disturbance activities.[†] Construction activities on more than one acre are subject to NPDES permitting requirements, including the preparation of a SWPPP. A SWPPP identifies stormwater collection and discharge points, specific drainage patterns across a site, and Best Management Practices that dischargers will use to protect stormwater runoff during construction and at operation.[‡]

Water Quality

The Santa Ana River passes through the park in the southeast corner. It drains a large area of Southern California and passes through the cities of San Bernardino, Riverside, Corona, and other communities before entering CHSP. Treated sewage effluent as well as nonpoint source pollution is discharged into the river by many of these communities, resulting in river pollution. Poor water quality seriously threatens aquatic resources, including the native fishes and the wildlife species that feed upon them.

The Department will work with State and regional water quality control entities and other appropriate agencies to seek solutions to the water quality problems in the section of Santa Ana River that passes through CHSP.

[*] California Waterboards, 2020, Santa Ana Region 8, available online at https://www.waterboards.ca.gov/santaana/about_us/regional_boundaries_map.html, accessed May 30, 2020.

[†] US Environmental Protection Agency, 2017, Section 404 of the Clean Water Act, Section 402: National Pollutant Discharge Elimination System, available online at https://www.epa.gov/cwa-404/clean-water-act-section-402-national-pollutant-discharge-elimination-system, accessed May 30, 2020.

[‡] US Environmental Protection Agency, 2007, Developing a Stormwater Pollution Prevention Plan (SWPPP), available online at https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp, accessed May 30, 2020.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	❒	❒	■	❒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	❒	❒	■	❒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site; ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows?	❒	❒	■	❒
d) In a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	❒	❒	■	❒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	❒	❒	■	❒

Discussion

a, ci–iv) Approval of the RTMP will not violate water quality standards, alter drainage patterns resulting in erosion or flooding, or degrade water quality. It includes provisions for a

maintenance plan in which roads and trails are prioritized and will receive cyclical and prorated maintenance. Roads and trails will be designed, constructed, reengineered, reconstructed, and/or rerouted to improve sustainability and drainage and prevent erosion. On a project basis, all drainage crossings identified in the Drainage Structure Condition Index Assessment will be reengineered and/or reconstructed, prioritizing the most significant affected structures first. In general, disturbance to the trails may result from construction, including widening where necessary to create safe passing spaces, slope stabilization, and possible reroutes. SPRs GEO-1 through GEO-27 and HYDRO-1 through HYDRO-25 will ensure that erosion and soil loss will remain at a less than significant level.

Approval of the RTMP would have no effect on groundwater supplies or interfere with groundwater recharge.

Additionally, approval of the RTMP would not result in placing housing or other structures that would impede or redirect flood flows within a 100-year flood hazard area.

Therefore, impacts to hydrology and water quality resulting from approval of the RTMP would be less than significant.

d) CHSP is inland and does not contain any large bodies of water. Therefore, the project would not be subject to tsunami or seiche. Design-related measures HYDRO-16 through HYDRO-18, GEO-10, GEO-11, GEO-14 through GEO-16, and GEO-23 would reduce overall risk of resultant projects' potential to cause inundation. Therefore, less than significant impacts would result.

e) Projects that generate runoff pollutants are required under the NPDES to develop and implement a Water Quality Management Plan (WQMP) that identifies the site design, source control, and treatment control best management practices (BMP). These BMPs would effectively prohibit non-stormwater discharges from entering into the storm drain system and reduce the discharge of pollutants into stormwater conveyance systems to the maximum extent possible. Although the activities allowed under the proposed project would likely not result in runoff pollutants, any future work outside of those described in the RTMP that would have the potential to release those pollutants would need to be disclosed in a WQMP as part of the construction documents for review and approval during the plan check process and before issuance of the building permit for the project. The WQMP would identify permanent BMPs that would be constructed as part of the project and implemented during on-site operations to reduce pollutants entering the storm drain system. Therefore, the proposed project would not conflict with or obstruct implementation of a WQCP or sustainable groundwater management plan, and there would be a less than significant impact.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XII. Land Use and Planning

Environmental Setting

CHSP is situated in the counties of Orange, Riverside, and San Bernardino. As of 2018, CHSP encompassed approximately 14,173 acres, most of which consists of rolling hills separated by steep canyons. CHSP is wholly owned and operated by the Department. Its General Plan, adopted in 1999 by the California State Park and Recreation Commission, directs the long-range management, development, and operation of the park. To facilitate land use and resource management, the General Plan identifies four management zones: 1) Core Habitat Zone, 2) Natural Open Space Zone, 3) Historic Zone, and 4) Recreation and Operations Zone.

- Core Habitat Zone – This zone includes the areas of highest biological resource sensitivity in the park, including very sensitive wildlife habitats that are crucial to the movement and survival of many plant and animal species.
- Natural Open Space Zone – This area includes natural, cultural, and aesthetic resources, and provides recreational opportunities. The zone generally is less biologically sensitive than the Core Habitat Zone but has patches of sensitive resources that require protection. The boundary of the Natural Open Space Zone is generally delineated by roads and trails, the park boundary, and other management zone boundaries.
- Historic Zone – This area includes historic and prehistoric features and cultural landscapes within the park that must be protected from impacts that may compromise their integrity. The zone includes the Rolling M Ranch complex, the windmill area west of the campground, and Windmill Pond. Management of the zone is intended to preserve and protect cultural resources and provide for development of appropriate visitor services, recreational opportunities, and operational facilities that do not detract from the historic setting and experience. The Historic Zone allows visitors to experience a landscape from a past era. Management efforts and land use decisions will be based on preservation of this value. The Historic Zone includes significant historic landscape features, important views from the Rolling M Ranch, and other cultural resources.
- Recreation and Operations Zone – This area houses existing or future visitor services and park operations facilities. Such facilities include public vehicle roads, maintenance structures, a visitor center, campgrounds, a campfire area, and employee housing. This zone is already developed and any future development will not adversely affect significant natural or cultural resources. The management intent for this zone is to provide for vehicle access, structured recreation, visitor services, and operational needs.

The boundary of the Recreation and Operations Zone is generally delineated by existing roads, the campground, and staging areas. The zone incorporates the current entrance road up to the Historic Zone, a proposed entrance road through Slaughter Canyon, the road leading to and including the McLean Overlook, the area currently used for equestrian staging, an area west of the Rolling M Ranch, and the Lemon Grove area. In the event of a developed park entrance road through Slaughter Canyon, the Bane Canyon entrance road will be included in the Natural Open Space Zone.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Physically divide an established community?	❒	❒	❒	■
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	❒	❒	❒	■

Discussion

a) The physical division of an established community typically refers to the construction of a physical feature (such as a wall, interstate highway, or railroad tracks) or the removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying areas. Approval of the RTMP would not result in any physical changes that would divide an established community. Therefore, no impact would result.

b) The RTMP is consistent with all applicable State and local land use plans, policies, and regulations. Work proposed for this project is in compliance with the 1999 General Plan and, with adoption of this Negative Declaration and implementation of the project requirements herein, would be in compliance with CEQA. Therefore, no impact would result.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XIII. Mineral Resources

Environmental Setting

The California Geological Survey (CGS), formerly the California Division of Mines and Geology, classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act (SMARA) of 1975 and assists in the designation of lands containing significant aggregate resources. CGS's Mineral Land Classification (MLC) Project provides objective economic-geologic expertise to assist in the protection and development of mineral resources through the land-use planning process. Since its inception in 1978, the MLC Project has completed 97 classification studies covering about 34 percent of the state.[*] The SMARA classification for the area encompassing CHSP is Special Report 143, Part III, "Mineral Land Classification of the Greater Los Angeles Area: Classification of Sand and Gravel Resource Areas, Orange County-Temescal Valley Production-Consumption Region."[†]

No minerals are currently mined within CHSP. Petroleum has 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 a number of oil wells have been drilled in the Chino Hills, there is no record of commercial production within the park.[‡] Most of the Chino Hills were in ownership by 1900. The first published USGS quadrangle map of 1902 indicates three miscellaneous structures and a wagon road within current park boundaries. These structures were most likely associated with various ranching and mineral extraction activities, and although no large mineral deposits were located or exploited within the park, several mines and oil wells have been documented from this period.[§] Public Resources Code § 5001.65 does not permit the commercial extraction of mineral resources on Department property. However, Department staff have acknowledged that there are several private holdings in the park that may give the owners the ability to extract resources.

[*] California Geologic Survey (CGS), 2017, Mineral Resources and Mineral Hazards Mapping Program, California Department of Conservation, available online at https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/, accessed August 10, 2020.

[†] California Geologic Survey (CGS), 2013, Publications of the SMARA Mineral Land Classification Project Dealing With Mineral Resources in California. California Department of Conservation, Minerals Program, SMARA Mineral Land Classification Project, Sacramento, CA, available online at http://www.conservation.ca.gov/cgs/minerals/mlc/Documents/SMARA_Publications_March_2013.pdf, accessed August 10, 2020.

[‡] California Department of Parks and Recreation Inland Empire District, 2018, Chino Hills State Park, Chino Hills Habitat Restoration – Initial Study/Mitigated Negative Declaration.

[§] California Department of Parks and Recreation, 1999, Chino Hills General Plan – Pg. 30, accessed July 7, 2020.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Result in the loss of availability of a known mineral resource that would be a 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) Commercial exploitation of resources in units of the State Park System is prohibited (California Public Resources Code § 5001.65.) Nevertheless, approval of the RTMP would not result in the loss of mineral resources or loss of access to them. Therefore, no impact would result.

b) CHSP has not been classified or nominated as a locally important mineral resource recovery site, according to the CGS Generalized Aggregate Resource Classification Map.* Therefore, no impact would result.

Mitigation Measures

None required.

* California Geologic Survey (CGS), 1981, Generalized Aggregate Resource Classification Map – Orange County -Temescal Valley and Adjacent Production – Consumption Regions 1981, available online at https://filerequest.conservation.ca.gov/RequestFile/59198, accessed August 10, 2020.

XIV. Noise

Environmental Setting

This project site consists of the 14,173 acres of CHSP, most of which are made up of rolling hills. The entire park is a vital link in the 31-mile long Puente-Chino Hills Wildlife Corridor, which extends north and west into the Los Angeles Basin from the north end of the Santa Ana Mountains.

Potentially sensitive noise receptors in the area consist of existing park residences, administrative facilities, and campsites. Rolling M Ranch includes 20 campsites (each containing a picnic table, charcoal grill, lantern hanger, tent pad, and parking pad), an equestrian camp corral, two primitive group camps, a group picnic area, an outdoor amphitheater equipped with screen, and access to major trails including Lower and Upper Aliso Canyon Trails, Telegraph Canyon Trail, South Ridge Trail, and Bane Canyon Road. Rolling M Ranch contains full restroom and shower facilities and a day-use parking lot with accessible parking stalls. There is an accessible interpretive trail between the day use parking facilities and the campground that showcases a variety of the park's native plant species.[*] There is also a Discovery Center at 4500 Carbon Canyon Road in Brea that provides exhibits on local plants and animals, wildlife corridors, biodiversity, geomorphology, and human impacts on open space.[†]

Sound is any detectable fluctuation in air pressure and is generally measured on a logarithmic scale in decibels (dB). When unwanted sound (i.e., noise) is measured, an electronic filter is used to de-emphasize extremely high and low frequencies, to which human hearing has decreased sensitivity. Resulting noise measurements are expressed in weighted frequencies called A-weighted decibels (dBA). Zero dBA is the low threshold of human hearing, and a sustained noise of 90 dBA or more is painful and can cause hearing loss (Table 7-7: Typical Noise Levels).

Table 7-7 Typical Noise Levels

SOUND	SOUND LEVEL ABOVE AMBIENT (DBA)	RELATIVE LOUDNESS (APPROXIMATE)	RELATIVE SOUND ENERGY
Jet aircraft, 100 feet	130	128	10000000
Rock music with amplifier	120	64	1000000
Thunder, snowmobile (operator)	110	32	100000
Boiler shop. Power mower	100	16	10000

[*] California Department of Parks and Recreation, 1999, Chino Hills State Park, available online at https://www.parks.ca.gov/pages/21299/files/chino%20hills%20finalgp.pdf, accessed May 30, 2020.

[†] Chino Hills State Park, 2011, Providing Interpretive Programs for the Public, available online at http://www.chinohillsstatepark.org/uncategorized/discovery-center, accessed September 9, 2020.

SOUND	SOUND LEVEL ABOVE AMBIENT (DBA)	RELATIVE LOUDNESS (APPROXIMATE)	RELATIVE SOUND ENERGY
Orchestral crescendo at 25 feet, noisy	90	8	1000
Busy Street	80	4	100
Interior of department store	70	2	10
Ordinary conversation, 3 feet away	60	1	1
Quiet automobile at low speed	50	½	0.1
Average office	40	¼	0.01
City residence	30	1/8	0.001
Quiet country residence	20	1/16	0.0001
Rustle of leaves	10	1/32	0.00001
Threshold of hearing	0	1/64	0

Source: Federal Transit Administration. (2006). Transit Noise and Vibration Impact Assessment. U.S. Dept. of Transportation: Office of Planning and Environment, May 2006. Website: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf. (Accessed 2020).

Noise is further described according to how it varies over time and whether the source of noise is moving or stationary. Background noise in a particular location gradually varies over the course of a 24-hour period with the addition and elimination of individual sounds. Several terms are used to describe noise and its effects. The equivalent sound level (Leq) describes the average noise exposure level for a specific location during a specific time period, typically over the course of one hour. The Community Noise Equivalent Level (CNEL) is a 24-hour average of Leq with an additional five dBA penalty for noise generated between the hours of 7:00 p.m. and 10:00 p.m. and a 10 dBA penalty during the hours of 10:00 p.m. and 7:00 a.m. The penalties account for how much more pronounced a noise is at night when other sounds have diminished. Federal, State, and local governments have established standards to protect people from adverse health effects such as hearing loss and disruption of certain activities. Noise is defined in the California Noise Control Act, Health and Safety Code, California Code of Regulations § 46022, as excessive or undesirable sound made by people, motorized vehicles, boats, aircraft, industrial equipment, construction, and other objects. The Soundscape Protection Policy states that the Department will preserve, to the greatest extent possible, the natural soundscapes of parks from degradation due to noise (i.e., undesirable human-caused sound) and will restore degraded soundscapes to the natural condition wherever possible. The Department will take action to prevent or minimize all noise that, through frequency,

magnitude, or duration, adversely affects the natural soundscape or natural resources (e.g., loud motorized equipment during critical mating and rearing periods).*

Trails within CHSP are intended to provide opportunities for visitors to enjoy the natural, historic, and cultural resources offered in the park. The park is surrounded by a densely populated region so existing noise levels throughout the park may vary greatly depending on the individual trail's location with respect to surrounding noise sources, the types of designated trail uses of an individual trail, and local topography and ground cover (e.g., sand, grassland, forest). In general, most trails are relatively quiet due mostly to ridgelines providing a buffer, as well as to the natural setting and quiet nature of typical activities that take place there, such as hiking, sightseeing, camping, and bicycle riding.

The ambient noise environment at CHSP is primarily influenced by vehicle traffic from visitors entering and leaving the park. The level of vehicle-related traffic varies depending on the season of the year and the time of day. Other factors that could influence vehicle traffic noise include parking lot capacity and the distance of parking lot and access roads to a trail. Other, minor sources of noise may originate from activities taking place on trails within the park, such as people talking.

* Department of Parks and Recreation (DPR), 2004, DPR Operations Manual – 0300 Natural Resources. Sacramento: California Department of Parks and Recreation.

Would the proposed project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	❒	❒	■	❒
b) Generation of excessive groundborne vibration or groundborne noise levels?	❒	❒	■	❒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	❒	❒	❒	■

Discussion

a) Construction activities associated with future projects and annual road maintenance identified in the RTMP could involve the use of heavy-duty construction equipment that would generate substantial noise levels. These activities include site preparation (e.g., excavation, grading, and vegetation clearing), road and trail reconstruction, slope recontouring to reduce erosion and runoff, upgrades to drainage structures, adding or removing aggregate material, and the construction of new trail and/or trail structures such as bridges. To perform these activities, a combination of heavy equipment, small trail-construction equipment (e.g., compactors, rock drills, chainsaws), and handheld tools are typically used. Excavators are used to prepare the site by removing trees and brush. Dozers are also used to decompact the ground surface and to accumulate and pile ground mulch for use on finished surfaces. Graders and rollers may be used to outslope and reshape road surfaces. Dump trucks are used to import aggregate for surface hardening. Heavy equipment may be used separately or simultaneously to complete the work. Handheld tools may include shovels, grub hoes, bow saws, loppers, and drawknives.

A significant portion of the construction work related to projects under the RTMP would be performed using handheld tools. However, the loudest equipment that would be used for construction on any individual road or trail project within CHSP would be a dozer and excavator or grader and roller. The noise levels generated by these pieces of equipment reach up to 85

dBA Lmax each at a distance of 50 feet.[*] It is conservatively assumed that noise generating equipment will be operated simultaneously, in which case the combined noise level would be approximately 88.0 dBA Lmax at a distance of 50 feet.

Construction activities associated with projects included under this RTMP would be subject to several SPRs that would reduce construction-related noise levels. For instance, SPR N-1 restricts construction to daytime hours; SPR N-2 requires that all construction equipment be maintained appropriately and equipped with the proper intake and exhaust shrouds; SPR N-3 ensures that all equipment engine shrouds will be closed during equipment operation; SPR N-4 requires that construction equipment and staging areas be located as far as possible from sensitive receptors; SPR N-5 restricts equipment idle time; SPR N-6 prohibits pile driving, blasting, or drilling; SPR N-7 ensures that proper notification of construction activities is provided if any sensitive receptors are nearby; and SPR N-8 restricts construction activity from occurring within 50 feet of land uses sensitive to ground vibration and 30 feet from historically significant structures that could be vulnerable to structural damage from ground vibration.

Compliance with these noise-related SPRs will reduce construction-related noise at any potential sensitive receptor and would not result in the exposure of noise-sensitive receptors to a substantial temporary increase in ambient noise levels. Therefore, this impact would be less than significant.

b) Groundborne vibration and groundborne noise results from the use of heavy construction equipment and may vary depending on the specific construction equipment used and activities involved. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. The effects of ground-borne vibration include feelable movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Ground vibrations from construction activities do not often reach a level that can cause damage to structures, but they can achieve the audible and feelable ranges in buildings that are very close to a work site. A conservative estimate for the highest level of ground vibration that could be produced by a large bulldozer is 0.089 in/sec PPV at a distance of 25 feet. This level is less than the level at which structural damage may occur to normal buildings (0.2 in/sec PPV at a distance of 25 feet) or to old or historically significant buildings (0.1 in/sec PPV at a distance of 25 feet).[†] SPR N-8 excludes heavy equipment operation within 50 feet of vibration-sensitive land uses, such as residential buildings, schools, hospitals, and places of worship, and within 30 feet of historically significant structures or known archaeological sites. High levels of ground vibration can be generated by pile driving, blasting,

[*] Federal Highway Administration, 2006, Roadway Construction Noise Model User's Guide. Final Report, U. S. Department of Transportation, available online at https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf, accessed September 23, 2020.

[†] Federal Highway Administration. (FHWA). (2006). Roadway Construction Noise Model User's Guide. Final Report. U. S. Department of Transportation. Website: https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf. (Accessed 2020).

and drilling; however, these activities would be prohibited by SPR N-6. Therefore, this impact would be less than significant.

c) CHSP is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private air strip. Therefore, no impact would occur as a result of these project activities.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XV. Parks and Recreation

Environmental Setting

CHSP is situated in the counties of Orange, Riverside, and San Bernardino. Nearby transportation corridors include the Riverside Freeway (State Highway 91), which traverses the southern part of the park; State Highway 71, which passes to the east; and Carbon Canyon Road (State Highway 142), which crosses through the northwestern portion of the park. CHSP is bordered on the northeast by the city of Chino Hills, on the east by Corona, on the south by Yorba Linda and Anaheim, on the west by Brea. It is close to the communities of Chino, Olinda Village, Sleepy Hollow, and Diamond Bar. Riverside is approximately 16 miles to the east of the park along Highway 91.

Visitors enjoy both active and passive forms of recreation that focus primarily on trail use. The park contains approximately 71 miles of roads and 18 miles of trails. People from adjacent communities frequently visit the park to walk, jog, bike, or horseback ride. The park is also a popular spot for family and equestrian campers as well as picnickers. The campground offers comfortable and appealing sites suitable for families, small groups, and equestrians. Several family picnic sites are located inside the park. The park is open seven days a week for day use; campsites are available for rent year-round. School programs, Junior Ranger programs, and educational talks are also offered year-round.[*] Please refer to Section 3, Page 10 of the RTMP for additional information on park attendance.

[*] Chino Hills State Park, 2016, Web Pamphlet, accessed on June 1, 2020, available online at https://www.parks.ca.gov/pages/648/files/ChinoHillsFinalWebLayout2016.pdf

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

Discussion

a) Trail users would be displaced during maintenance, construction, and/or upgrades to individual trails. However, during closure, park visitors would be able to use most of the other 71 miles of roads and 18 miles of trails at CHSP. Park staff and signage would inform visitors about any temporary closures. Area closure signage would be posted at all trail access points, campgrounds, and information kiosks during trail maintenance or construction work, as described in SPR GEN-9.

As noted in Section 3.3 of the RTMP, CHSP has many adjacent landowners and managers of public and private property. Neighboring lands include utilities, open space, freeways, parks, grazing lands, a landfill, oil fields, and residential development. There are recreational trails and opportunities available to the west, south, and east of CHSP. Some of these trails continue into the park.

One of the purposes of the RTMP is to maximize visitor use and experiences, which is consistent with the CHSP General Plan goal of developing new opportunities and facilities for optimizing public enjoyment of the park's natural, cultural, and recreational values.

No change-in-use evaluations were performed as part of the development of this RTMP. Future change-in-use requests will be evaluated in accordance with the Department's change-in-use program. This program facilitates and makes consistent the review of change-in-use proposals that would add or remove uses from existing recreational roads and trails in the State Park System. This process is intended to identify the ability of a trail to safely accommodate new uses.

Any change-in-use project that requires trail modifications prior to implementation will also require a subsequent environmental document before it could move forward to construction. Therefore, no potential change in use project would contribute substantially to an increase in

use such that substantial physical deterioration of CHSP would occur or be accelerated, because such use would only be allowed where the design of the trail was deemed to be adequate for the predicted volume of use. Therefore, there would be no impact.

b) The proposed project is intended to provide focus for management of paved and non-paved roads and trails and will be a tool that will be used to assess and prioritize maintenance needs to maximize their sustainability. Although recreational facilities (roads and trails) would be affected by the project, part of the intent is to improve the sustainability of said roads and trails. As is indicated throughout this document, approval and implementation of the RTMP will not result in adverse physical effects on the environment with incorporation of applicable project requirements, as identified in Chapter 2. Therefore, there would be no impact.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XVI. Population and Housing

Environmental Setting

CHSP lies in one of the more densely populated urban communities in the East Los Angeles Basin of the Southern California metropolitan complex. The park currently serves the counties of Orange, Riverside, and San Bernardino, and approximately 18 million people live within a one-hour drive of the park.[*] Housing within the park is limited to campgrounds and park staff residences. As a recreational facility, the development of permanent housing is not planned. The permanent population of the park is relatively static, based on Department staffing requirements, and no significant growth is anticipated in the foreseeable future. The park is both a local recreational resource and a destination used by locals and out of town visitors alike, but does not offer business or residential opportunities within its boundaries.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Induce substantial unplanned population growth or growth for which inadequate planning has occurred, 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 people or housing, necessitating the construction of replacement housing elsewhere?	❒	❒	❒	■

Discussion

a, b) The RTMP does not have a housing component and includes no additions or changes to the existing local infrastructure. It would neither modify nor displace any existing housing and would displace no one, either temporarily or permanently. Any jobs generated as a result of the project would be short term, with no permanent connection to the park location. Therefore, there would be no impact to population growth or housing.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

[*] U.S. Economic Development Administration, 2019, StatsAmerica, available online at http://www.statsamerica.org/radius/big.aspx, accessed September 23, 2020.

XVII. Public Services

Environmental Setting

CHSP is located amongst the densely populated urban communities in the East Los Angeles Basin of the Southern California metropolitan complex. Approximately 18 million people live within a one-hour drive of the park, and this number is expected to escalate as rural communities in the vicinity rapidly transform into subdivisions.[*]

Fire Protection

Fire protection is provided by CAL FIRE and supported by the cities of Chino Hills, Anaheim, Yorba Linda, Corona, and Brea; the Orange County Fire Authority; Chino Valley Fire District; and the Corona Fire Department, as necessary.

Police Protection

Police protection for the unit consists of a staff of five Department rangers, with backup provided by the San Bernardino County Sheriff's Department on the Chino Hills side, Brea Police Department on the west side, and Orange County Sheriff's on the south side.

Schools

The park is adjacent to the Placentia-Yorba Linda Unified School District and the Chino Valley Unified School District; however, the park has no schools or school population.

Libraries

The nearest libraries to the park include the James S. Thalman Chino Hills Branch Library in the City of Chino Hills and the East Anaheim Branch Library in the City of Anaheim. The park has no dedicated libraries, however the Chino Hills State Park Discovery Center at the western entrance of the park includes information exhibits and education resources for visitors to the park.[†]

Parks and Other Public Facilities

There are recreational trails available to the west, south, and east of CHSP. These trails include:
Western Area (Cities of Brea and Yorba Linda, Unincorporated County of Orange and County of Los Angeles)

- Carbon Canyon Regional Park is adjacent to CHSP, west of the Discovery Center. It has active recreational facilities and a connecting trail into CHSP.
- Firestone Boy Scout Reservation, now owned by the City of Industry, is north of Sonome Canyon on Tonner Road, between Brea and Diamond Bar in unincorporated Los Angeles County; however, there are no existing trail connections and the property is not open to the public.

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[*] U.S. Economic Development Administration, 2019, StatsAmerica, available online at http://www.statsamerica.org/radius/big.aspx, accessed September 23, 2020.

[†] Chino Hills State Park, 2020, Chino Hills State Park Interpretive Association, available online at http://www.chinohillsstatepark.org/uncategorized/discovery-center, accessed October 14, 2020.

- Olinda Historic Museum and Trail are just northwest of the CHSP Discovery Center and can be accessed via Carbon Canyon Road to Santa Fe Road in the City of Brea.

Southern Area (Cities of Yorba Linda, Corona, and Anaheim; Counties of Orange, San Bernardino, and Riverside)

- Riverside and Orange counties are currently in the planning stages for further development and improvement of the Santa Ana River Trail, which is planned to proceed through the southeastern corner of the park. The Santa Ana River Trail provides commuting and recreational use opportunities for pedestrians, equestrians, and bicyclists. Ultimately, it is proposed that the Santa Ana River Trail will be a multiuse trail that will connect the San Bernardino Mountains to Huntington Beach and Newport Beach.
- The Green River Golf Course is south of Aliso Canyon, along the Santa Ana River, and is accessed from Green River Road in Corona.
- Cleveland National Forest, CDFW's Coal Canyon Ecological Reserve, and Irvine Ranch Open Space are south of and adjacent to Coal Canyon. Irvine Ranch Open Space is not open for public access, and arrangements to enter must be made in advance.
- Featherly Regional Park is south of CHSP along the Santa Ana River and is accessed via Gypsum Canyon Road.
- The Quarterhorse Drive Trailhead managed by the City of Yorba Linda is a formal access point into CHSP established for the southern area of Yorba Linda.

Eastern Area (Cities of Chino Hills and Chino; Counties of San Bernardino and Riverside)

- Prado Regional Park is in San Bernardino County east of State Route 71.

The nearest State Park System units are California Citrus State Historic Park, 13 miles to the east; Pio Pico State Historic Park, 18 miles to the northwest; Bolsa Chica and Huntington State Beaches and Crystal Cove State Park, all 24 miles to the southwest; and Lake Perris State Recreation Area, 29 miles to the east.

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

Discussion

a.i–v) The RTMP is intended to provide focus for management of paved and nonpaved roads and trails. It will be a management tool that will be used to assess and prioritize maintenance needs and to maximize route sustainability.

Fire Protection

No components of the proposed RTMP would contribute to a significant increase in park visits, and the level of required public services is expected to remain relatively static. However, use of construction equipment in the vicinity of flammable vegetation at the project sites could present an increased risk of fire that could result in additional demands on CAL FIRE and local fire response teams. Any impact on services would be temporary, and nothing in the project scope would contribute to the need for an increase in the level of fire protection after construction is complete. Integration of SPR HAZ-10 would reduce the potential impact to fire protection services to a less than significant level.

Police Protection

Five Department rangers patrol CHSP, with emphasis on public use areas. Rangers have full law enforcement authority and only require assistance from local police as backup for unusual situations. No additional demands on rangers or local police are expected as a result of this project. Therefore, there would be no impact.

Schools

No schools exist within the project area. No changes would affect existing schools or require additional schools or school personnel. Therefore, there would be no impact.

Parks and Other Public Facilities

The proposed RTMP includes no new provisions for connectivity to trails in outside agency parks and open space districts. As such, there would be no impacts to other parks, nor would the project affect other public facilities. Therefore, there would be no impact.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XVIII. Transportation

Environmental Setting

CHSP is situated in the counties of Orange, Riverside, and San Bernardino (see Figures 1 and 2). Nearby transportation corridors include the Riverside Freeway (State Highway 91) to the south, State Highway 71 to the east, and Carbon Canyon Road (State Highway 142) to the north and west. The Sonome Canyon area is just north of Carbon Canyon Road and is adjacent to Los Angeles County. The park is bordered on the north by the city of Chino Hills, on the east by Corona, on the south by Yorba Linda and Anaheim, and on the west by Brea. It is close to the communities of Chino, Olinda Village, Sleepy Hollow, and Corona. Riverside is approximately 16 miles to the east of the park along Highway 91.

The Orange County Transportation Authority and the Southern California Association of Governments (SCAG) are lead agencies of the Four Corners Policy Committee. This committee is made up of representatives from county, city, and local government agencies; regional transportation agencies; and private organizations in the affected area. The area that surrounds CHSP is named for the four corners of the counties of Los Angeles, San Bernardino, Orange, and Riverside, which come together at this location and include State Routes 57, 90, 142, 71, 91, 60, 83, and Interstate 15.

Roadways

The roads that traverse the counties of Orange, Riverside, and San Bernardino include freeways, major arterial streets, local streets, and rural roads. Nearby transportation corridors include the Riverside Freeway (State Highway 91), which traverses the southern part of the park, State Highway 71, which passes to the east, and Carbon Canyon Road (State Highway 142), which crosses through the northwestern portion of the park.

Regional Transportation

SCAG is the authority for the Regional Transportation Plan (RTP) that incorporates CHSP and communities in the region. This plan addresses mobility, economic, social, and environmental goals and objectives for transportation planning for the region.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	❒	❒	❒	■
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	❒	❒	❒	■
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❒	❒	❒	■
d) Result in inadequate emergency access?	❒	❒	❒	■

Discussion

a) The RTMP is not designed to expand facilities for increased use, but to address management and resource protection objectives. Implementation of the plan will not conflict with any other applicable plan, ordinance, or policy with respect to the performance of the circulation system, including all modes of transportation. Therefore, no impact will result.

b) The intent of the RTMP is to preserve, maintain, and enhance facilities in the park, but not to increase park visits. Therefore, there is no anticipated increase in park usage as a result of the plan, and no impacts are anticipated.

c) The RTMP would address policy and management of roads and trails, including resource protection and trail sustainability. There are no transportation-related design changes associated with this project and no incompatible uses. Therefore, no impact would result.

d) The RTMP addresses those areas within the boundaries of CHSP; roads affected by the project serve as access roads within the park and are not primary commute corridors or thoroughfares. No areas within the park would be permanently closed as a result of this project. Therefore, no impact would result.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XIX. Tribal Cultural Resources

Environmental Setting

Tribal consultation was initiated in July of 2019 and included a search of the Native American Heritage Commission's (NAHC) Sacred Lands Files. The NAHC responded that the search of the file was positive for tribal cultural resources and provided contact information for the Gabrieleno/Tongva San Gabriel Band of Mission Indians and the Juaneño Band of Mission Indians Acjachemen Nation, in addition to a list of 15 other tribal representatives from Gabrieleno/Tongva, Juaneño, Cahuilla, and Luiseño territories.

Letters were sent to all representatives on the NAHC list on August 20, 2019. Follow up emails were sent out to those who had not responded on September 17, 2019. On October 22, 2019, both follow-up phone calls and emails with a digital copy of the original letter were sent to those who had not responded. Seven tribes responded by either mail or phone call.

The Agua Caliente Band of Cahuilla Indians deferred to other tribes in the area.

The Gabrieleno Band of Mission Indians – Kizh Nation provided information regarding tribal cultural resource concerns within CHSP. They requested tribal monitoring for all ground-disturbing activities and evaluation of potential resources by the Department and tribal representatives. If significant resources are encountered, they requested that avoidance or other measures be implemented, and that any human remains be treated appropriately. It was also requested that these measures be included in the environmental documents, plans, and construction constraints. They also requested a copy of this draft document.

The Gabrieleno/Tongva San Gabriel Band of Mission Indians requested to be a consulting tribal party and stated that due to the apparent extensive ground-disturbing activities by way of trail extensions, reroutes, and landscaping that there should be tribal involvement.

The Juaneño Band of Mission Indians Acjachemen Nation stated that both Native American and archaeological monitors are recommended for all ground-disturbing activities related to this project.

The Pala Band of Mission Indians deferred to local tribes but noted that it is recommended to have a tribal cultural monitor on-site for any surveys or ground disturbance.

The Pauma Band of Luiseño Indians stated that they support the local tribes' recommendations.

The Rincon Band of Luiseño Indians recommended the Department confer with the local tribes regarding traditions and customs.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	❒	❒	■	❒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe.	❒	❒	■	❒

Discussion

CEQA Guidelines Section 15064.5(b)(1) defines a substantial adverse change in the significance of a historical resource (including historical, archaeological, or tribal cultural resources) as the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

ai–ii) There are no tribal cultural resources currently listed or documented to be determined eligible to the California Register of Historical Resources or any local register of historical resources as defined by Public Resources Code Section 5020.1(k) within the project area.* However, the NAHC reported that the sacred lands file search was positive.

There are no tribal cultural resources currently documented to be significant by the Department pursuant to Public Resources Code 5024.1 within the project area. There are also no known human remains within the proposed project area. However, the NAHC reported that the sacred lands file search was positive.

Based on consultation with Native American tribal representatives familiar with this area (see above), CHSP is known as an area with vast traditional cultural resources including natural and mineral resources, animals, water, and oil. Particularly sensitive areas include where chia grows, along stream courses, next to and along ridgelines, and along existing ancient trails (i.e., Telegraph Canyon Road and Cold Canyon Road). The plan includes project work near areas identified as containing elements of these traditional cultural resources.

Thus, it is possible that during future consultation for individual trail projects identified in this plan, that specific tribal cultural resource may yet be identified and determined eligible to the California Register of Historical Resources, local registers, or determined significant pursuant to Public Resources Code 5024.1. It is also possible that previously unknown tribal cultural resources or human remains may be encountered during project construction.

Construction of new roads and trails or the maintenance of existing facilities pursuant to the RTMP could lead to an encounter of human remains or to substantial adverse changes in the significance of tribal cultural resources that are eligible for the California Register of Historical Resources or local registers or are determined to be significant pursuant to Public Resources Code 5024.1. Causes of potential adverse changes include construction activities (e.g., excavation, grading, trenching), road and trail management and maintenance (including vegetation management/maintenance), ongoing road and trail use by park staff and the public, and erosional changes related to road and trail construction, maintenance, and use.

However, with the implementation of the SPRs listed below, the impact to tribal cultural resources would be less than significant. SPRs CUL-1 and CUL-13 ensure review and evaluation of all project work to identify any tribal cultural resources that may be encountered during project work and ensure that tribal cultural monitoring occurs as appropriate. SPR CUL-15 ensures additional consultation to identify any tribal cultural resources that could be impacted by the project prior to the implementation of specific projects. SPR CUL-3 calls for the evaluation of any identified tribal cultural resources and ensures that appropriate treatment measures are implemented to eliminate impacts or reduce the level of impact to less than significant. In addition, should human remains be encountered, CUL-20 and CUL-23 ensure that

* Office of Historic Preservation, California Historical Resources, 2020, available online at https://ohp.parks.ca.gov/ListedResources/

the discovery is handled according to applicable State and federal laws, and that tribal customs and traditions been taken into consideration should the remains be determined to be Native American in descent. Compliance with these SPRs would result in less than significant impacts.

Mitigation Measures

Compliance with the relevant policies, regulations, and programs identified in this section will preclude the need for mitigation.

XX. Utilities and Service Systems

Environmental Setting

CHSP is a 14,173 -acre park in the counties of Orange, Riverside, and San Bernardino encompassing primarily rolling hills. The park includes approximately 200 easements to numerous utilities, including power lines, natural gas lines, sewage lines, water lines, and other infrastructure typical of utilities or service systems. Water for the majority of the park's camping and day use facilities is provided by Department-owned and -operated water storage and distribution systems. The Metropolitan Water District of Southern California operates the Robert B. Diemer Water Filtration Plant at a 200-acre facility adjacent to the southern boundary of the park in Orange County. Wastewater management is provided by individual septic systems with leach fields within the park. Energy service for the park is provided by Southern California Edison. Park staff collect garbage from cans and transport it to the nearest dumpster where the refuse is collected and transported to a landfill by a local refuse disposal company.

Would the proposed project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	❒	❒	■	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	❒	❒	❒	■
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	❒	❒	❒	■
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	❒	❒	❒	■

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	❒	❒	❒	■

Discussion

a) The proposed project would not result in the expansion of the existing wastewater treatment facilities or the construction of new facilities. Therefore, no impact would result. Some alterations of existing drainage patterns could occur as part of subsequent projects to improve road or trail sustainability consistent with the RTMP. However, alteration to overall drainage patterns would be minimal, with little if any changes in total stormwater runoff. Approval of the RTMP would not result in the expansion of the existing stormwater facilities or the construction of new facilities. This impact would be less than significant.

b) The proposed project has no wastewater component or effect on existing wastewater treatment systems. Therefore, no impact would result.

c) The RTMP is a policy and management document, the approval of which would not result in the generation of any additional solid wastes. Therefore, no impact would result.

d–e) This project will comply with all federal, State, and local statutes and regulations as they relate to solid waste. Therefore, no impact would result.

Mitigation Measures

No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

XXI. Wildfire

Environmental Setting

CAL FIRE ranks the fire risk in all "State Responsibility Areas"—unincorporated areas in California for which the State is responsible for fire protection—as moderate, severe, and very severe. This ranking system is based on fuel (vegetation type and density), terrain (fires spread faster over steeper topography), weather (e.g., wind and precipitation), and other relevant factors. State responsibility areas tend to be at higher risk for wildfire since they are most often in Wildland-Urban Interface (WUI) areas on the fringes of urban development and adjacent to wild vegetation. These areas often have higher winds than urban areas due to the lack of tall buildings and the steeper topography, both of which contribute to increased fire hazard risk.

The southern and western portion of CHSP is in a Very High Fire Hazard Severity Zone according to CAL FIRE.[*] However, only the perimeter around the park lies in the WUI, not the park itself.[†]

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the proposed project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	❒	❒	■	❒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	❒	❒	■	❒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	❒	❒	■	❒

[*] Cal Fire, 2020, FHSZ Viewer, available online at https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414, accessed August 10, 2020.

[†] University of Wisconsin at Madison, 2010, Wildland-Urban Interface (WUI) Change 1990-2010, available online at http://silvis.forest.wisc.edu/data/wui-change/, accessed August 10, 2020.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	❒	❒	■	❒

Discussion

a) As discussed under Hazards and Hazardous Materials, the Department employs fire fuel management practices in the State Park System where wildfire hazards are present to minimize and manage the potential risk. CAL FIRE has primary responsibility for wildland fire response. Closer to communities, mutual aid agreements also exist with local fire protection agencies. Some roads within the park serve as fire access roads. The Orange County Fire Authority conducts field visits and uses the park's roads to access different areas throughout the year and during a fire or other emergency.[*]

The Department has adopted the Department Operations Manual to provide protocols for the various aspects of park operations, including fire management and planning. The Wildland Fire Management component (§ 0313.2.1.1) of the Natural Resources Section of the DOM identifies the Wildland Fire Management Policy, which requires preparation of a Wildfire Management Plan for each Department-operated unit that may experience wildland fires. The plan provides requisite information for managing wildfire events, such as the location of sensitive park resources, facilities, water supplies, and existing roads. In addition, a CHSP-specific draft Wildfire Management Plan is currently under review and should be finalized soon.[†] Therefore, the impact would be less than significant.

b) As described in the Hazards and Hazardous Materials section, CHSP has many roads and trails in relatively remote areas with brush and trees. Many of these areas are subject to a high risk of wildland fire due to being designated as a Very High Fire Hazard Severity Zone. Except for instances where minor trail realignment is necessary (e.g., to avoid a sensitive resource), or short new connections to existing and nearby routes will be constructed, the proposed RTMP would not result in new areas of public access. Furthermore, the realignment of trails typically occurs on small segments of trail adjacent to existing trail alignments.

With regard to potential ignition sources, existing State law (Cal. Code Regs., Title 14, Division 3, §§ 4311 and 4314) prohibits the use of fireworks in state park units and restricts smoking and campfires to designated areas. Except for administrative and emergency vehicles, internal

[*] California Department of Parks and Recreation, 1999, Chino Hills State Park General Plan, accessed July 7, 2020.

[†] Department Staff communication, 2020, Ken Kietzer – Department Representative, September 3, 2020.

combustion engines are prohibited on roads and trails designated for nonmotorized uses. Additionally, it is unlikely that the plan will lead to an increase in the use of campfires or other open flames or fuels. Furthermore, trail operations would remain consistent with the Department's operations manual requirements for visitor safety, which includes the park-specific Wildfire Management Plan.

Construction activities would likely be required for new trail construction, road decommissioning, and trail reengineering. The proposed project includes several SPRs designed to minimize the risk of fire ignition and maximize the effectiveness of fire suppression. Implementation of SPRs HAZ-10 through HAZ-14 would reduce the risk of ignition associated with construction activities by requiring a Fire Safety Plan, reducing spark potential, reducing fuels, providing radio communication with CAL FIRE, and providing water trucks. Therefore, the RTMP would not exacerbate wildfire risk and thereby expose park visitors to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, the impact is less than significant.

c) The proposed project would not include any physical development aside from minor trail structures and therefore would not require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Any future physical development would require CEQA analysis to ensure that impacts would also not exacerbate fire risk. Therefore, the proposed RTMP is expected to result in a less than significant impact.

d) The proposed project would not include any physical development and therefore would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, postfire slope instability, or drainage changes. Any future physical development would require CEQA analysis to ensure that impacts would not exacerbate fire risk. Therefore, the proposed RTMP is expected to result in a less than significant impact.

Mitigation Measures
No mitigation beyond compliance with the relevant policies, regulations, and programs identified in this section.

7.5. Mandatory Findings of Significance

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

Discussion

a) With implementation of all applicable SPRs, the RTMP will not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of any rare or endangered plants or animals. Therefore, there would be a less than significant impact.

b) The Department conducts road, trail, and other routine maintenance on an ongoing basis. The RTMP will be a tool used to assess and prioritize maintenance needs and to maximize the sustainability of roads and trails. The implementation of subsequent maintenance projects is evaluated to ensure that they will not result in significant adverse cumulative effects on the environment. The incremental effects of the project are insignificant when viewed in

connection with the effects of past projects, other current projects, and probable future projects. Impacts from environmental issues addressed in this evaluation do not overlap with additional planned projects in such a way as to result in cumulative adverse impacts that are greater than the sum of the parts. This project will result in a less than significant impact.

c) As indicated in the impact analyses section discussions, all of the environmental effects have been determined to pose a less than significant impact on humans. Potential impacts from subsequent road and trail projects implemented under the RTMP would be reduced to a less than significant level if all applicable project requirements are fully integrated into those projects.

7.6. Organizations and Persons Consulted

This Initial Study was prepared by the following consultants and individuals:

7.6.1. Lead Agency

California Department of Parks and Recreation
Kelly Elliott, District Superintendent
Enrique Arroyo, Park Manager
Ken Kietzer, Senior Environmental Scientist
Alissa Ing, Environmental Scientist
Harmony Gugino, Environmental Scientist
Ben Spiva, Maintenance Supervisor
Ken Gordon, Supervising Park Ranger
Callie Hurd, Senior Park and Recreation Specialist
Jason Spann, Associate Landscape Architect

7.6.2. Report Preparers and Lead IS Consultant

PlaceWorks
Steve Noack, Principal, Principal-in-Charge
Sean Anayah, Associate, Project Manager
Yliana Ortega, Project Planner
Nicole Vermilion, Associate Principal, Air Quality and Greenhouse Gas
Josh Carman, Senior Associate, Noise Specialist

Section 8 APPENDICES

8.1 Glossary

ADA
An acronym for the Americans with Disabilities Act of 1990, which is a federal law prohibiting discrimination against people with disabilities and requiring that public facilities be accessible to people with disabilities. For the purposes of this plan, it refers to the standards established for accessibility by the U.S. Access under the Architectural Barriers Act.

CEQA
An acronym for the California Environmental Quality Act, which was established shortly after the federal National Environmental Policy Act in 1969. CEQA requires public involvement in and review of projects that would result in an impact on California's natural and cultural resources.

CLASSIFICATION
The designation indicating the intended use of and maintenance specifications for a particular trail.

EQUESTRIAN TRAILS
Trails that are primarily designated for use by equestrians. Hikers may also use these trails but are not the intended primary user. These trails are designed to meet the requirements of horses and their riders, protect resources, and achieve sustainability. They are not intended to be multi-use or accessible trails. The planning, layout, and design processes included herein apply to these trails, however, there are additional design criteria related to equestrian trails.

HYDROLOGY
The physical properties, distribution, and circulation of water on the surface of the land, in the soil, in underlying rocks, and in the atmosphere.

MITIGATE
Actions that are undertaken to avoid, minimize, reduce, eliminate, or rectify the adverse impacts of a management practice or trail use.

MOUNTAIN BIKE TRAIL (Bicycle Trail)
Trails that have been designated for use by non-motorized bicycles equipped for off-road use. Hikers may also use these trails but they are not the intended primary user. These trails are designed to meet the requirements of mountain bikes and their riders, protect resources, and achieve sustainability. They are not intended to be equestrian, multi-use, or accessible trails.

MULTI-USE TRAILS
Within Department properties, multi-use trails are designed to accommodate at least two user groups in addition to pedestrians – usually bike and horse riders. Multi-use trails can create linkages between critical access or interest points within a trail network. They are not intended

to be the solution to all trail user dispersion issues. Multi-use trails require fewer resources to construct and maintain and often minimize impacts to cultural and natural resources.

NON-SYSTEM TRAILS
Trails not recognized, designated, nor maintained by the park.

REHABLITATION
Includes all the work that is necessary to bring a trail or trail system up to classification standards, including returning a work site or a damaged area back to its original state. Trail rehabilitation, otherwise known as site restoration, is required to mitigate or correct damage or disturbance to wildlife, cultural resources, vegetation, soils, or water courses created by trail construction, maintenance, or visitor use.

SIGHT DISTANCE
Consists of the visible, unobstructed, forward and rear view as seen by a trail user from any given point on a trail.

SPECIFICATIONS
Standards to which trails and trail structures are built and maintained as determined by the trail's classification.

SUSTAINABLE TRAILS
A sustainable trail has been designed, constructed, or re-constructed to a standard that does not adversely impact natural and cultural resources and can withstand the impacts of the intended user group while receiving only routine cyclical maintenance. A sustainable trail must meet the needs of the intended user group to a degree that they do not deviate from the established trail alignment.

SYSTEM TRAILS
Trails recognized, designated, and maintained by the park.

TRAILHEAD
An access point to a trail often accompanied by various public facilities, such as a parking area, drinking water, restrooms, informational signs, and staging areas.

TRAIL LOG
An inventory of the physical features and conditions of a trail by trail footage.

WATERSHED
A region or area that is joined peripherally by a water parting formation, such as a ridge, hill, or mountain range, and that drains into the same water course or body.

WORK LOG
A detailed listing of existing trail elements and/or specific modifications (re-engineering, reconstruction, etc.) by location designed to improve trail conditions.

8.2 Visitor Use Survey and Responses

Park staff conducted a survey of trail users specifically for this RTMP in 2013 and 2014. The survey was provided on line as well as mailed to dozens of stakeholders and over 500 adjacent residents.

Survey and Responses

Age of Respondent:

Age Range	Number of Respondents
13-17	10
18-24	5
25-34	16
35-44	16
45-54	30
55-64	10
65+	2

How many people typically accompany you when you make use of the roads and trails :

Number of People in Party	Number of Respondents
1-2	64
3-5	24
5+	2

Is this your first visit to Chino Hills SP?

Yes	No
64	24

If you answered “No” to the above question, how many times in the past year (counting today) have you recreated/used the trails or roads at Chino Hills SP?

Number of Visits this Year	Number of Respondents
2-15	18
16-20	4
30	1
34	1
40	1
50	2
60	1
100	1

5. What access point did you use to enter Chino Hills SP?

Trailhead/Entrance	Number of Respondents
Discovery Center	30

Coal Canyon	20
Regional Park	4
Bane Canyon Road	15
Rimcrest	4
Quarter Horse	2
Brea	2
Cheat Street	1
North Ridge	1
Lambert	1
Rose	1
Lower Aliso	1
No Answer	6

How do you typically enter Chino Hills SP:

Mode of Transportation	Number of Respondents
On foot - hike, walk, run	16
Bike	57
Horse	0
Automobile	13
No Answer	2

What access point do you most frequently use to access Chino Hills SP?

Trailhead/Entrance	Number of Respondents
Bane Canyon	24
Rimcrest	8
Quarter Horse	2
Discovery Center	47
Other	1
No Answer	6

Was vehicle parking available at your desired entrance location? If not, where did you park?

Response	Number of Respondents
Yes	56
No	2
Outside Park	13
Did Not Drive to Park	13
Carbon Canyon Regional Park	1
No Answer	3

What is your primary transportation type when recreating at Chino Hills SP? (choose only one)

Primary Transportation	Number of Respondents
Hike	20

Bike	64
Horse	0
Car	3
No Answer	2

Your primary use of Chino Hills SP trails is for:

Primary Use	Number of Respondents
Recreation/Fitness	65
Joy of Riding	27
Mountain Biking	56
Wildlife Viewing	30
Scenic Views	40
Solitude	15
Historical Interests	5
Other	4
No Answer	2

Are there enough road and trail opportunities to satisfy your recreational experience for:

Recreational Activity	Yes	No
Hiking	58	4
Mountain Biking	61	13
Equestrian	14	9
Other	2	2

For trail/road usage, how could we improve your recreational experience at the park?

Improvement	Number of Respondents
Better signage	17
Improve trail conditions	22
Improve roads	5
More loop trails	13
More access to the park's roads/trails	14
More educational tours	2
More ADA trails	1
Other	26
No answer	13

Responses to "Other"

"Other" Improvements	Number of Responses
More single track	6
Open Bane Canyon Road Entrance	5
More interpretive signage about wildlife	1
Remove outhouse at Four Corners trail	1

junction	
Add credit/debit machines	1
More tables and shad at Discovery Center Trailhead for post-hike picnic	1
More ranger patrols	1
Bike lane through Carbon Canyon	1
More parking and better information	1
Add bike racks at Four Corners trail junction	1
Cows on trails	1

Which trails in Chino Hills SP do you use the most?

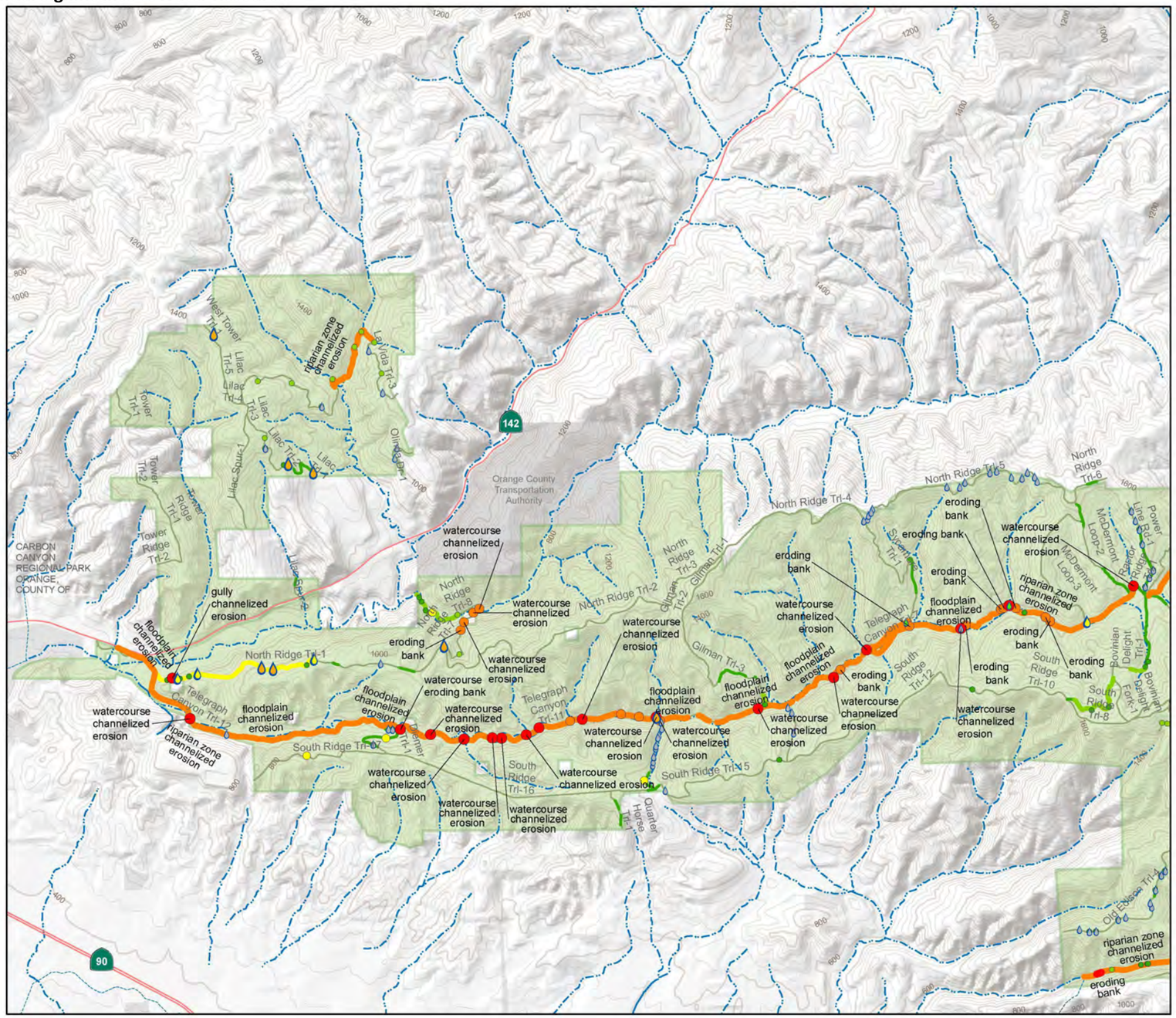
Trail	Number of Respondents
Telegraph Canyon	41
South Ridge	9
North Ridge	18
Bane Canyon	11
Bovinian	6
Lower Aliso	5
Upper Aliso	5
Scully Ridge	5
Bobcat	4
Four Corners	4
Rapture Ridge	3
Easy Street	2
Diemer	1
Brush Canyon	1
Little Canyon	1
No Answer	13

8.3 Maps: Potential Significance to Water Resources and Erosion Severity

The Potential Significance to Water Resources (PSWR) and Drainage Structure Condition Index (DSCI) maps show the potential for roads and trails to impact water resources through eroding sediment discharge and the condition of drainage structures, respectively. The PSWR is based on erosion severity, proximity/connectivity to water resources, and road or trail width. The higher the PSWR number is the greater the potential of the road or trail to impact water resources. The DSCI is an assessment of conditions observed in the water course or at a drainage structure. A high index indicates poor drainage condition.

Discovery Center/Telegraph Canyon

Map: Potential Significance toWater Resources



Potential Significance to Water Resources and Drainage Structure Condition

DISCOVERY CENTER / TELEGRAPH CANYON AREA

Potential Significance to Water Resources (PointFeatures)

- 21 - 48
- 13 - 20
- 10 - 12
- 7 - 9
- 1 - 6

Potential Significance to Water Resources (Line Features)

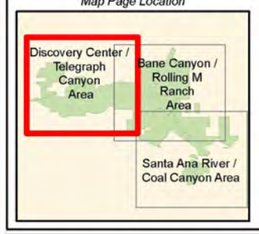
- 21 - 45 (most significant)
- 13 - 20 (higher significance)
- 10 - 12 (moderate significance)
- 6 - 9 (less significance)
- 1 - 5 (least significant)

Drainage Structure Problem Severity (Point Features)

- Critical
- High
- Moderate
- Slight
- No Problem Observed
- Park Route

- Chino Hills State Park
- Other Public Land
- Other Highway
- Local Road
- Other Stream Type
- Intermittent Stream
- Perennial Stream, River

Map Page Location



Scale
1:30,050
1 inch = 2,504 feet

Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

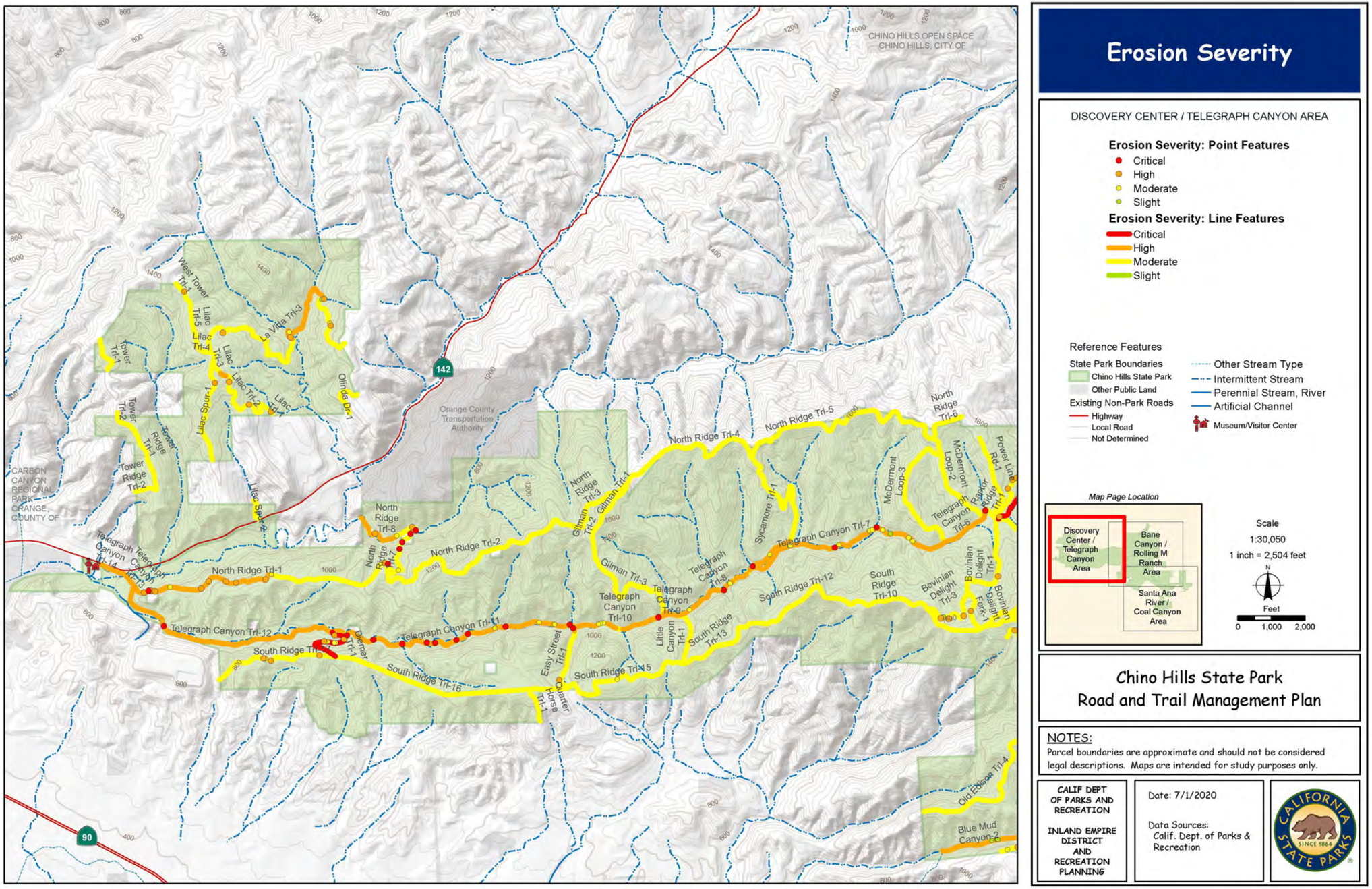
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

CALIF DEPT OF PARKS AND RECREATION
INLAND EMPIRE DISTRICT AND RECREATION PLANNING

Date: 7/1/2020

Data Sources:
Calif. Dept. of Parks & Recreation
Other Public Lands
GreenInfo, Inc.

Map: Erosion Severity



Erosion Severity

DISCOVERY CENTER / TELEGRAPH CANYON AREA

Erosion Severity: Point Features

- Critical
- High
- Moderate
- Slight

Erosion Severity: Line Features

- Critical
- High
- Moderate
- Slight

Reference Features

State Park Boundaries
- Chino Hills State Park
- Other Public Land

Existing Non-Park Roads
- Highway
- Local Road
- Not Determined

Other Stream Type
- Intermittent Stream
- Perennial Stream, River
- Artificial Channel

Museum/Visitor Center

Map Page Location

Scale
1:30,050
1 inch = 2,504 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

CALIF DEPT OF PARKS AND RECREATION

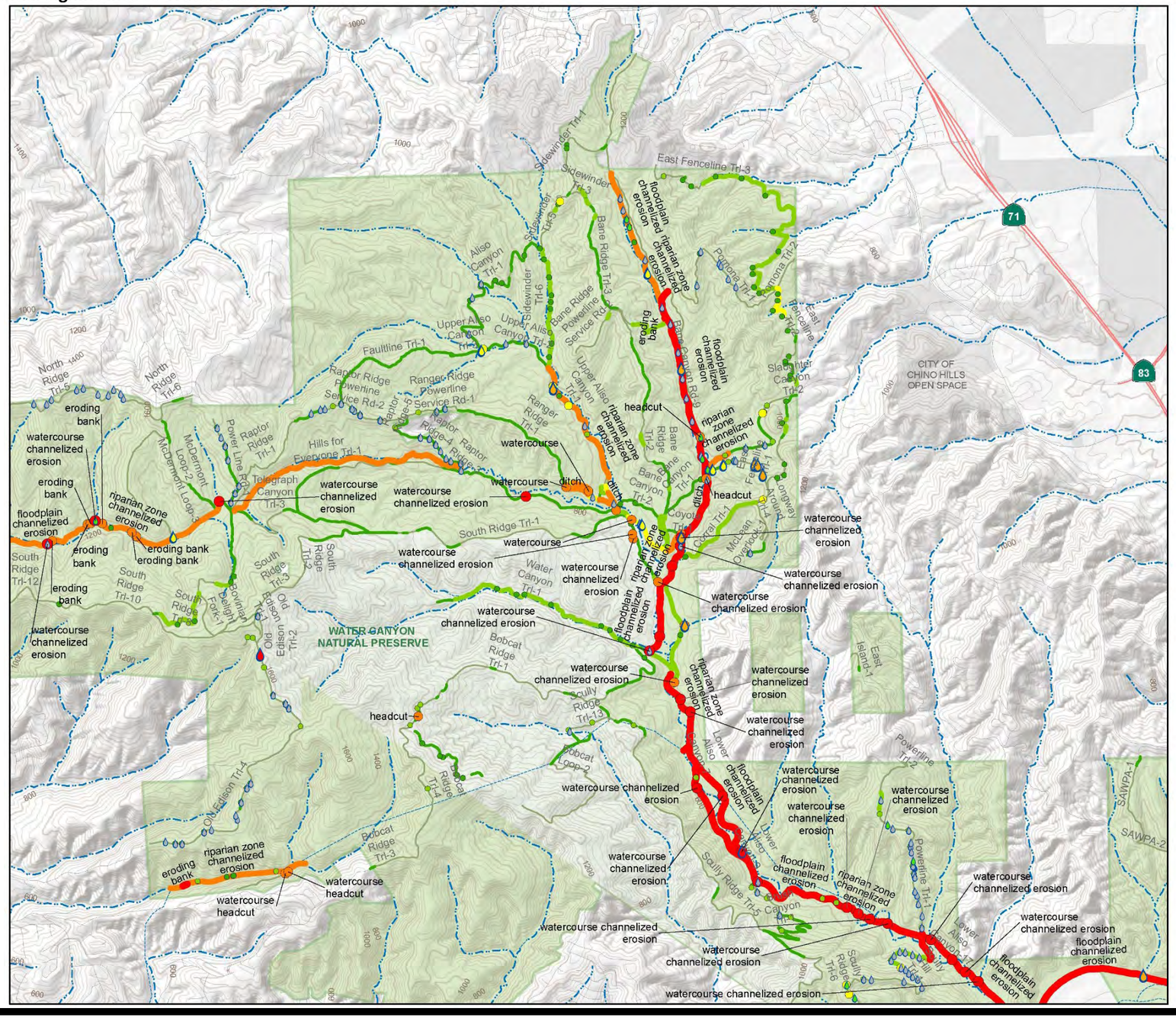
INLAND EMPIRE DISTRICT AND RECREATION PLANNING

Date: 7/1/2020

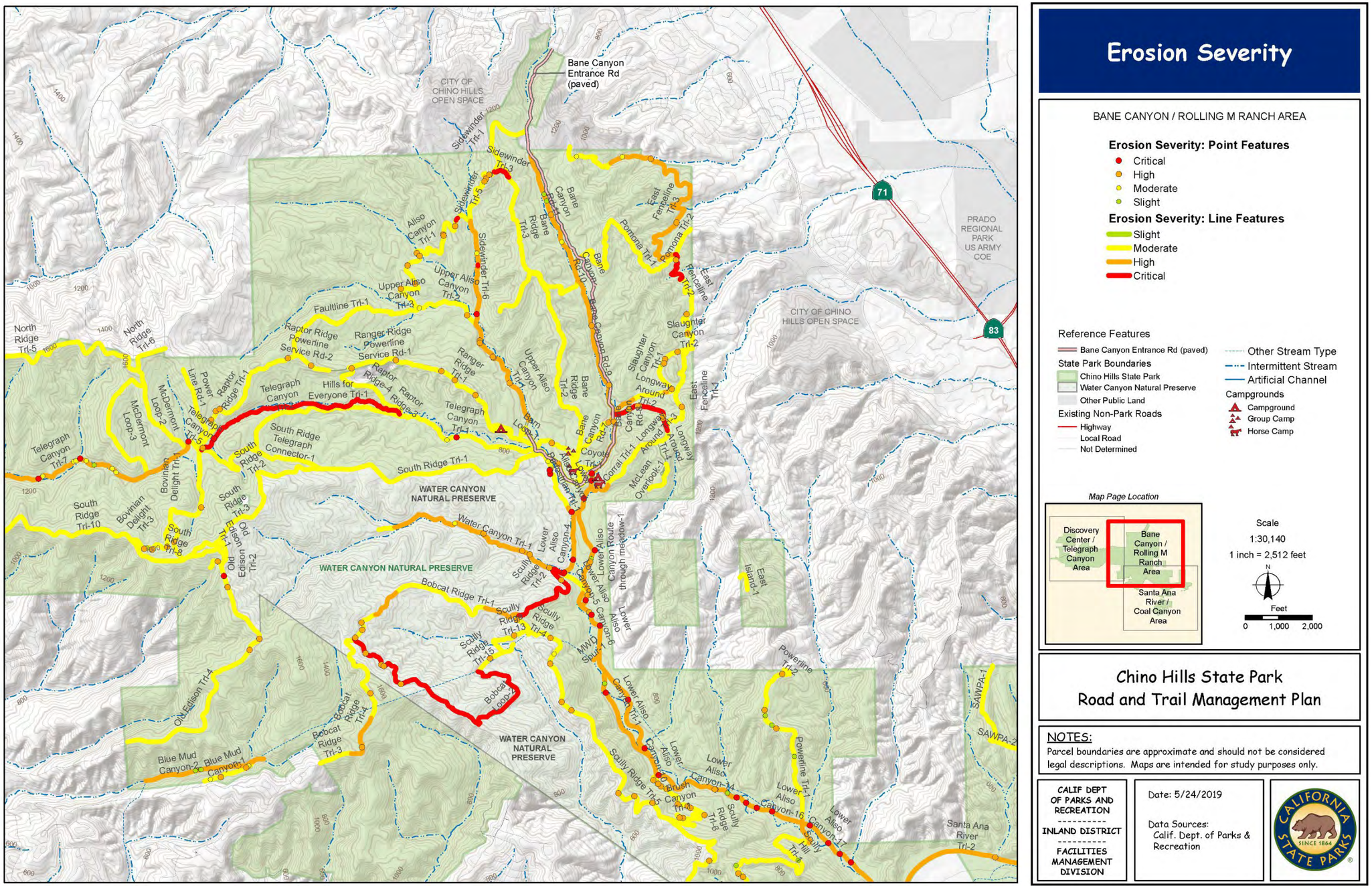
Data Sources:
Calif. Dept. of Parks & Recreation

Bane Canyon/Rolling M Ranch

Map: Potential Significance to Water Resources



Map: Erosion Severity



Erosion Severity

BANE CANYON / ROLLING M RANCH AREA

Erosion Severity: Point Features

- Critical
- High
- Moderate
- Slight

Erosion Severity: Line Features

- Slight
- Moderate
- High
- Critical

Reference Features

- Bane Canyon Entrance Rd (paved)

State Park Boundaries

- Chino Hills State Park
- Water Canyon Natural Preserve
- Other Public Land

Existing Non-Park Roads

- Highway
- Local Road
- Not Determined

- Other Stream Type
- Intermittent Stream
- Artificial Channel

Campgrounds

- Campground
- Group Camp
- Horse Camp

Map Page Location

Scale
1:30,140
1 inch = 2,512 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

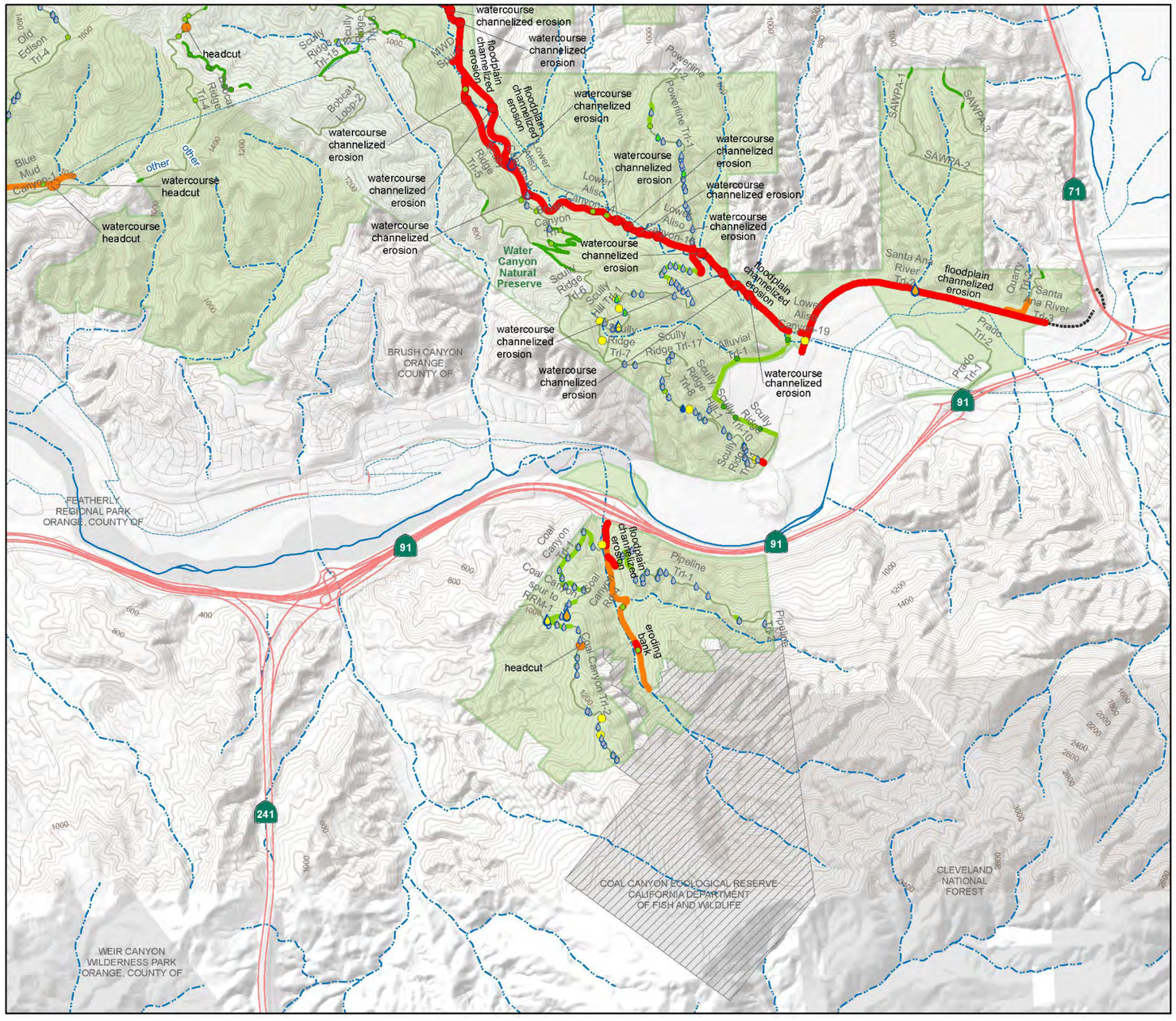
CALIF DEPT OF PARKS AND RECREATION
INLAND DISTRICT
FACILITIES MANAGEMENT DIVISION

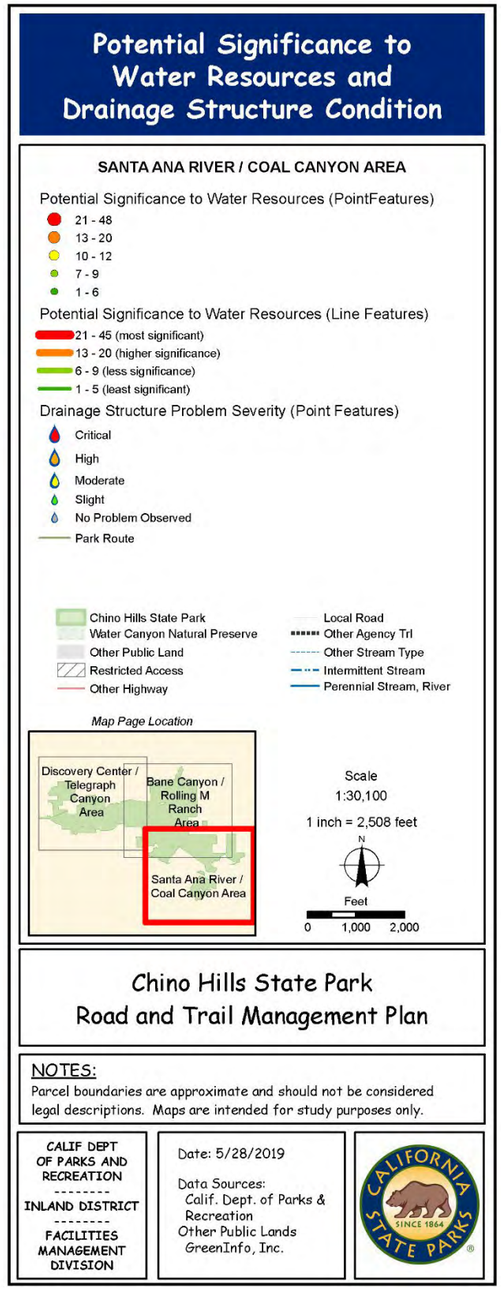
Date: 5/24/2019

Data Sources:
Calif. Dept. of Parks & Recreation

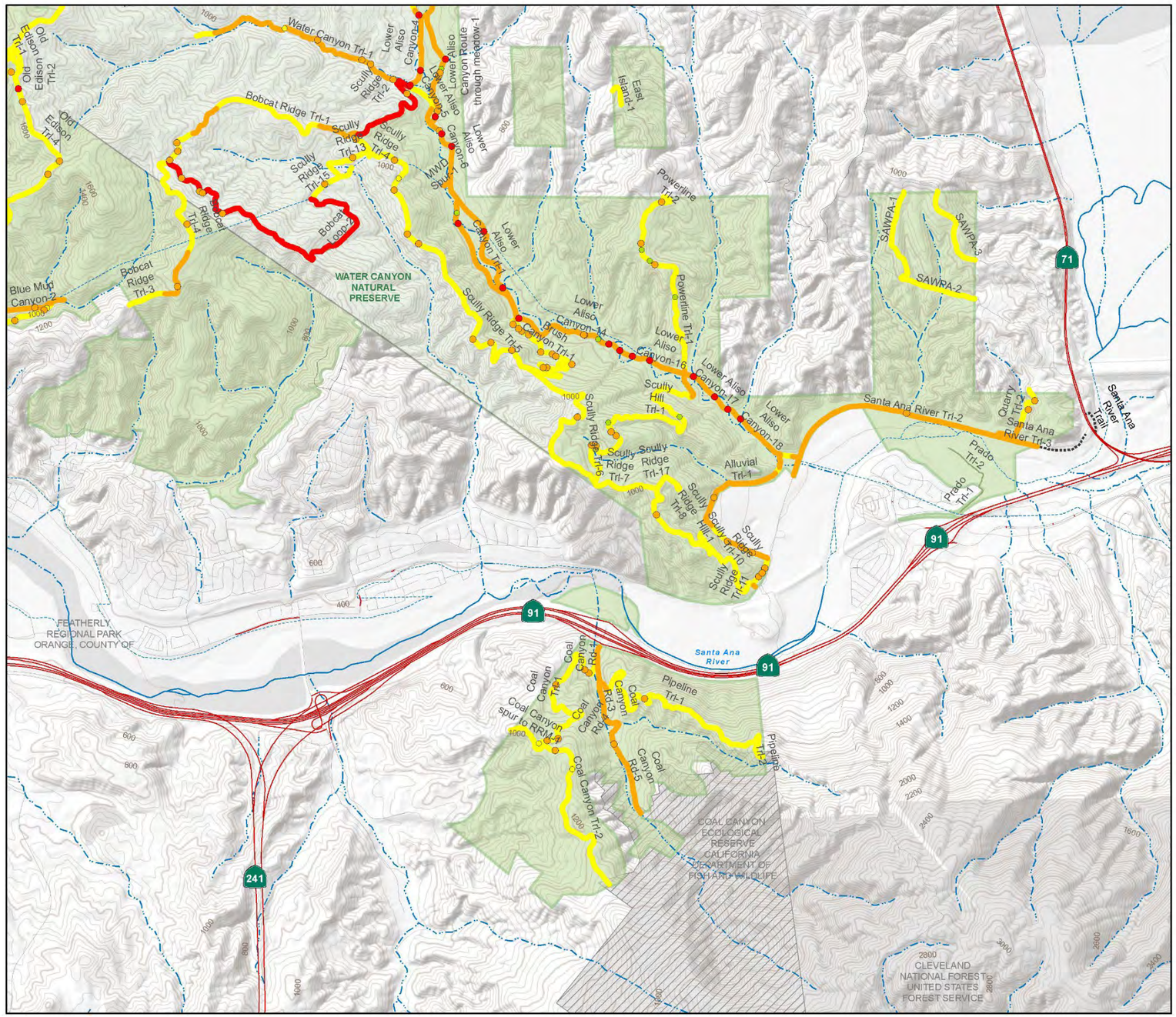
Santa Ana River/Coal Canyon

Map: Potential Significance to Water Resources





Map: Erosion Severity



Erosion Severity

SANTA ANA RIVER / COAL CANYON AREA

Erosion Severity: Point Features

- Critical
- High
- Moderate
- Slight

Erosion Severity: Line Features

- Critical
- High
- Moderate
- Slight

Reference Features

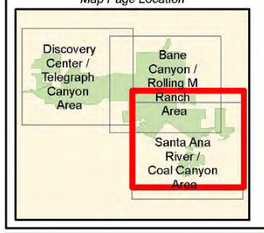
State Park Boundaries
- Chino Hills State Park
- Water Canyon Natural Preserve
- Other Public Land

Public Access Limits
- Restricted Access

Existing Non-Park Roads
- Highway
- Local Road
- Not Determined
- Other Agency Trail

Other Stream Type
- Intermittent Stream
- Perennial Stream, River
- Artificial Channel

Map Page Location



Scale
1:30,090
1 inch = 2,508 feet
N
Feet
0 1,000 2,000

Chino Hills State Park
Road and Trail Management Plan

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

CALIF DEPT OF PARKS AND RECREATION

INLAND DISTRICT

FACILITIES MANAGEMENT DIVISION

Date: 5/24/2019

Data Sources:
Calif. Dept. of Parks & Recreation

CALIFORNIA STATE PARKS SINCE 1864

8.4 Maintenance Recommendations Matrix

Chino Hills State Park Road and Trail Management Plan. Maintenance Recommendations by Segment ID

The following list is for route segments with a recommendation other than "Maintain". The recommendation of "Maintain" is assumed for all system routes and has therefore been intentionally excluded from this list.

Segment ID	Reconstruct / Re-engineer	Reroute / Remove Old Alignmnt	Remove	Monitor	Comments
Aliso Canyon Trl-1	☑	☐	☐	☐	rock armor on creek crossing
Alluvial Trl-1	☑	☐	☐	☐	Control weeds early each season with approved herbicide and/or appropriate vegetation trimming.
Bane Canyon Rd-11	☑	☐	☐	☐	Enlarge CMP and maintain for trail use
Bane Canyon Rd-11	☑	☐	☐	☐	Enlarge CMP and maintain for trail use
Bane Canyon Rd-14	☐	☐	☐	☑	Illegal OHV access/use
Bane Canyon Rd-5	☑	☐	☐	☐	Enlarge CMP
Bane Canyon Rd-9	☑	☐	☐	☐	Enlarge CMP, remove debris with consideration for riparian habitat/blue-line stream
Bane Canyon Trl-2	☑	☐	☐	☐	high pedestrian and equestrian use trail
Blue Mud Canyon-1	☑	☐	☐	☐	Outslope needed-easement holder considerations (MWD)
Blue Mud Canyon-2	☑	☐	☐	☐	Easement holder MWD to re-engineer according to OCDSIPP
Bobcat Loop-1	☐	☐	☑	☐	Remove and rehabilitate.
Bobcat Ridge Trl-1	☑	☐	☐	☐	Easement holder MWD to maintain
Bobcat Ridge Trl-3	☑	☐	☐	☐	same as above?? Seg. 3?
Bobcat Ridge Trl-3	☑	☐	☐	☐	Easement holder to maintain. Remove gate.
Bovinian Delight Trl-1	☑	☐	☐	☐	
Bovinian Delight Trl-1	☑	☐	☐	☐	Veg management needed with tread reconstruction
Bovinian Delight Trl-1	☑	☐	☐	☐	reference Photo
Coal Canyon Rd-1	☐	☐	☐	☑	Illegal OHV use/access

Segment ID	Reconstruct / Re-engineer	Reroute / Remove Old Alignmnt	Remove	Monitor	Comments
Coal Canyon spur to RRM-1	☐	☐	☑	☐	Remove trail, remove gate, and restore habitat.
Coyote Trl-1	☑	☐	☐	☐	multi use trail
East Fenceline Trl-2	☐	☑	☐	☐	
Easy Street Trl-1	☑	☐	☐	☐	Remove and rehabilitate non-system trails at intersection with Telegraph Canyon.
Equestrian Staging-1	☐	☑	☐	☐	PEF in progress for realignment of this segment along with site/facility improvements
Faultline Trl-1	☑	☐	☐	☐	
Gilman Trl-2	☑	☐	☐	☐	"No Bikes" signs may be needed
Gilman Trl-3	☑	☐	☐	☐	"No Bikes" signs may be needed
Hills for Everyone Trl-1	☐	☑	☐	☐	Reroute the trail out of the sensitive habitat
Lilac Trl-1	☑	☐	☐	☐	remove asphalt after consultation with easement holders
Lilac Trl-2	☑	☐	☐	☐	remove asphalt after consultation with easement holders
Lilac Trl-3	☑	☐	☐	☐	remove asphalt after consultation with easement holders
Lilac Trl-4	☑	☐	☐	☐	remove asphalt after consultation with easement holders
Lilac Trl-5	☑	☐	☐	☐	remove asphalt after consultation with easement holders
Little Canyon Trl-1	☑	☐	☐	☐	Emergency vehicle access needed
Longway Around Trl-1	☑	☐	☐	☐	Enlarge CMP
Longway Around Trl-2	☑	☐	☐	☐	Evaluate function of the pipe (waterbreak?)
Lower Aliso Canyon Pedestrian Trl-1	☐	☐	☑	☐	remove trail and restore habitat. Trail is redundant; alternative route available.
Lower Aliso Canyon Route through meadow-1	☐	☐	☑	☐	remove trail and restore habitat. Trail is redundant; alternative route available.
Lower Aliso Canyon-1	☑	☐	☐	☐	undersized pipe
Lower Aliso Canyon-10	☑	☐	☐	☐	

Segment ID	Reconstruct / Re-engineer	Reroute / Remove Old Alignmnt	Remove	Monitor	Comments
Lower Aliso Canyon-11	☑	☐	☐	☐	
Lower Aliso Canyon-13	☑	☐	☐	☐	
Lower Aliso Canyon-14	☑	☐	☐	☐	
Lower Aliso Canyon-15	☑	☐	☐	☐	
Lower Aliso Canyon-16	☑	☐	☐	☐	
Lower Aliso Canyon-17	☑	☐	☐	☐	
Lower Aliso Canyon-18	☑	☐	☐	☐	
Lower Aliso Canyon-19	☑	☐	☐	☐	Monitor Illegal OHV access/use
Lower Aliso Canyon-2	☑	☐	☐	☐	
Lower Aliso Canyon-3	☑	☐	☐	☐	
Lower Aliso Canyon-4	☑	☐	☐	☐	
Lower Aliso Canyon-5	☑	☐	☐	☐	
Lower Aliso Canyon-6	☑	☐	☐	☐	
Lower Aliso Canyon-7	☑	☐	☐	☐	
Lower Aliso Canyon-8	☑	☐	☐	☐	
Lower Aliso Canyon-9	☑	☐	☐	☐	MWD responsibility/Az crossing proposed
McDermont Loop-1	☑	☐	☐	☐	
North Ridge Trl-1	☑	☐	☐	☐	Road to trail conversion. Install bridge over slide location.
North Ridge Trl-7	☑	☐	☐	☐	
Old Edison Trl-4	☑	☐	☐	☐	Consult with SCE
Powerline Trl-1	☑	☐	☐	☐	Address with SCE to improve problematic/erosion-causing flume design
Powerline Trl-2	☑	☐	☐	☐	Easement holder (SCE) to address
Quarter Horse Trl-1	☐	☑	☐	☐	Very steep trail, unsustainable, in CAGN habitat.
Ranger Ridge Trl-1	☑	☐	☐	☐	veg management
Raptor Ridge Trl-1	☑	☐	☐	☐	
Santa Ana River Trl-1	☑	☐	☐	☐	Illegal OHV access/use

Segment ID	Reconstruct / Re-engineer	Reroute / Remove Old Alignmnt	Remove	Monitor	Comments
Santa Ana River Trl-2	☑	☐	☐	☐	See Route Corridors and Area Recommendations; ownership TBD
Santa Ana River Trl-3	☑	☐	☐	☐	Illegal OHV access/use
Scully Hill Trl-1	☐	☑	☐	☐	Difficult to maintain in current location
Scully Ridge Trl-12	☐	☐	☐	☑	Illegal OHV use/access
Scully Ridge Trl-13	☑	☐	☐	☐	MWD access route
Scully Ridge Trl-14	☑	☐	☐	☐	MWD riser access
Scully Ridge Trl-2	☑	☐	☐	☐	Easment holder (MWD) to address
Scully Ridge Trl-5	☑	☐	☐	☐	Ridgetop trail-need to address width for vehicles- safety concerns as a patrol route
Sidewinder Trl-1	☑	☐	☐	☐	easement holder considerations
Sidewinder Trl-3	☐	☐	☑	☐	Remove and rehabilitate. Alternate connection with Bane Trail 3 and Sidewinder Trail 2 available
Sidewinder Trl-6	☐	☑	☐	☐	Reroute trail upslope from current
Slaughter Canyon Trl-1	☑	☐	☐	☐	Enlarge CMP
South Ridge Trl-13	☑	☐	☐	☐	Reconstruct, re-engineer, and reroute as necessary to improve sustainability and ensure easement holder access.
South Ridge Trl-13	☑	☐	☐	☐	Reconstruct, re-engineer, and reroute as necessary to improve sustainability and ensure easement holder access.
South Ridge Trl-15	☑	☐	☐	☐	Reconstruct, re-engineer, and reroute as necessary to improve sustainability and ensure easement holder access.
South Ridge Trl-16	☑	☐	☐	☐	Reconstruct, re-engineer, and reroute as necessary to improve sustainability and ensure easement holder access.
Sycamore Trl-1	☑	☐	☐	☐	Repair/replace culvert, veg management plan and maintain vehicle access
Telegraph Canyon Trl-10	☑	☐	☐	☐	
Telegraph Canyon Trl-11	☑	☐	☐	☐	Explore crossing options, such as rock armored stream crossings.
Telegraph Canyon Trl-12	☑	☐	☐	☐	outslope

Segment ID	Reconstruct / Re-engineer	Reroute / Remove Old Alignmnt	Remove	Monitor	Comments
Telegraph Canyon Trl-13	☐	☐	☐	☑	Illegal OHV access/use
Telegraph Canyon Trl-7	☑	☐	☐	☐	Enlarge CMP veg management, re-contour
Telegraph Canyon Trl-8	☑	☐	☐	☐	outslope to creek
Upper Aliso Canyon Trl-1	☑	☐	☐	☐	Maintain fire access
Upper Aliso Canyon Trl-3	☑	☐	☐	☐	enlarge CMP, veg management
West Tower Trl-1	☑	☐	☐	☐	Evaluate asphalt. Address with SCE to improve problematic/erosion-causing flume design. Evaluate easement responsibilities.

8.5 Parkwide Summary of Trails

PARKWIDE SUMMARY OF EXISTING TRAILS BY USE AND ROUTE DESIGNATIONS		
Use Designation	**Mileage of Road**	**Mileage of Trail**
Hike	0	3.37
Hike and Horse	0	1.05
Hike, Bike, and Horse	70.53	13.54
Total	70.53	17.96

ROUTENAME	Route Type	Use Designation	Miles
Aliso Canyon Trl	Road	Hike, Bike and Horse	1.17
Alluvial Trl	Trail	Hike, Bike and Horse	1.10
Back side of San Juan Hill	Trail	Hike, Bike and Horse	0.10
Bane Canyon Rd	Road	Hike, Bike and Horse	4.36
Bane Canyon Trl	Trail	Hike, Bike and Horse	0.58
Bane Ridge Powerline Service Rd	Road	Hike, Bike and Horse	0.78
Bane Ridge Trl	Trail	Hike, Bike and Horse	1.84
Barn Loop	Road	Hike, Bike and Horse	0.08
Blue Mud Canyon	Road	Hike, Bike and Horse	0.93
Blue Mud Canyon MWD Spur	Road	Hike, Bike and Horse	0.07
Bobcat Ridge Trl	Road	Hike, Bike and Horse	2.30
Bovinian Delight Fork	Trail	Hike, Bike and Horse	0.25
Bovinian Delight Trl	Road	Hike, Bike and Horse	0.04
Bovinian Delight Trl	Trail	Hike, Bike and Horse	1.01
Brush Canyon Trl	Road	Hike, Bike and Horse	0.99
Campground Exit	Road	Hike, Bike and Horse	0.03
Coal Canyon Rd	Road	Hike, Bike and Horse	0.93
Coal Canyon spur to RRM	Road	Hike, Bike and Horse	0.17
Coal Canyon Trl	Road	Hike, Bike and Horse	2.07
Connector to Bane Canyon Trl	Road	Hike, Bike and Horse	0.01
Corral Trl	Trail	Hike, Bike and Horse	0.53
Coyote Trl	Trail	Hike, Bike and Horse	0.10
Day Use Parking Lot	Road	Hike, Bike and Horse	0.06
Diemer Trl	Road	Hike, Bike and Horse	0.41
Discovery Center Parking	Road	Hike, Bike and Horse	0.20

East Fenceline Trl	Trail	Hike, Bike and Horse	3.23
East Island	Road	Hike, Bike and Horse	0.12
Easy Street Trl	Trail	Hike	0.41
Equestrian Staging	Road	Hike, Bike and Horse	0.34
Faultline Trl	Trail	Hike, Bike and Horse	0.76
Gilman Trl	Trail	Hike and Horse	1.06
Gilman Trl	Road	Hike, Bike and Horse	0.17
Hills for Everyone Trl	Trail	Hike	1.31
La Vida Trl	Road	Hike, Bike and Horse	1.81
Lilac Spur	Road	Hike, Bike and Horse	0.73
Lilac Trl	Road	Hike, Bike and Horse	1.07
Little Canyon Trl	Road	Hike, Bike and Horse	0.31
Longway Around Trl	Road	Hike, Bike and Horse	0.66
Lower Aliso Canyon	Road	Hike, Bike and Horse	3.75
Lower Aliso Canyon Pedestrian Trl	Trail	Hike	0.41
Lower Aliso Canyon Route through meadow	Trail	Hike, Bike and Horse	0.61
Lower Aliso Canyon Trl	Road	Hike, Bike and Horse	0.59
McDermont Loop	Road	Hike, Bike and Horse	0.79
McDermont Loop	Trail	Hike, Bike and Horse	0.47
McLean Overlook	Road	Hike, Bike and Horse	0.21
McLean Overlook Parking Lot	Road	Hike, Bike and Horse	0.14
MWD Spur	Road	Hike, Bike and Horse	0.04
Native Plant Trl	Trail	Hike	0.04
North Ridge Connector	Road	Hike, Bike and Horse	0.11
North Ridge Trl	Road	Hike, Bike and Horse	6.89
Old Edison Trl	Road	Hike, Bike and Horse	1.80
Olinda Dr	Road	Hike, Bike and Horse	0.23
Pipeline to Star Ranch	Road	Hike, Bike and Horse	0.01
Pipeline Trl	Road	Hike, Bike and Horse	1.43
Pomona Trl	Road	Hike, Bike and Horse	1.35
Power Line Rd	Road	Hike, Bike and Horse	0.49
Powerline Trl	Road	Hike, Bike and Horse	1.16
Prado Trl	Road	Hike, Bike and Horse	0.47
Quarry Trl	Road	Hike, Bike and Horse	0.32
Quarter Horse Trl	Trail	Hike, Bike and Horse	0.20
Ranger Ridge Powerline Service Rd	Road	Hike, Bike and Horse	0.27
Ranger Ridge Trl	Trail	Hike, Bike and Horse	0.73
Raptor Ridge	Road	Hike, Bike and Horse	1.45
Raptor Ridge Powerline Service Rd	Road	Hike, Bike and Horse	0.62
Raptor Ridge Trl	Trail	Hike, Bike and Horse	0.65

Rolling M Parking Lot	Road	Hike, Bike and Horse	0.10
Rolling M Ranch Campground Rd	Road	Hike, Bike and Horse	0.43
San Juan Hill	Trail	Hike, Bike and Horse	0.20
San Juan Hill Spur	Trail	Hike, Bike and Horse	0.11
Santa Ana River Trl	Road	Hike, Bike and Horse	1.41
SAWPA	Road	Hike, Bike and Horse	1.32
Scully Hill	Trail	Hike, Bike and Horse	0.17
Scully Ridge Trl	Road	Hike, Bike and Horse	5.55
Sidewinder Trl	Road	Hike, Bike and Horse	0.54
Sidewinder Trl	Trail	Hike, Bike and Horse	1.00
Slaughter Canyon Trl	Road	Hike, Bike and Horse	0.76
South Ridge Telegraph Connector	Road	Hike, Bike and Horse	0.38
South Ridge Trl	Road	Hike, Bike and Horse	7.56
Sycamore Trl	Road	Hike, Bike and Horse	1.11
Telegraph Canyon Trl	Road	Hike, Bike and Horse	7.37
Tower Ridge Trl	Road	Hike, Bike and Horse	0.60
Tower Trl	Road	Hike, Bike and Horse	0.26
Upper Aliso Canyon Trl	Road	Hike, Bike and Horse	1.29
Utility Spur	Road	Hike, Bike and Horse	0.08
Water Canyon Trl	Trail	Hike	1.14
West Tower Trl	Road	Hike, Bike and Horse	0.15

8.6 Planning Team

The planning team for the CHSP RTMP consisted of Departmental staff with a variety of professional backgrounds, including environmental science, maintenance, GIS mapping, recreation, trails, archaeology, landscape architecture, and law enforcement. The following districts, divisions, and unit participated in the development of this plan:

Inland Empire District
Kelly Elliott, District Superintendent
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