Long Canyon Trail Improvement Project Riverside County, California

Mitigated Negative Declaration and Initial Study



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Technical Support Provided by:

Aspen Environmental Group



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1. Mitigated Negative Declaration

1.1 Project Information

The Coachella Valley Mountains Conservancy (Conservancy), a California state agency established in 1991, proposes to fund improvements to an existing National Park Service (NPS) Trail Corridor that runs in a north-south direction in the western portion of Joshua Tree National Park (JTNP), and establish a new trailhead and parking area at each end of the trail on private lands just outside of JTNP. The new southern trailhead would be located in the Coachella Valley near Desert Hot Springs in Riverside County, and the northern trailhead would be in Yucca Valley in San Bernardino County. The recreational trail would be 9.1 miles long, the majority of which is within JTNP. The Project is a joint venture among the Conservancy, the Friends of the Desert Mountains (FODM), JTNP, the Mojave Desert Land Trust (MDLT), the Palm Springs-South Coast Office of the Bureau of Land Management (BLM), and the City of Desert Hot Springs.

1.2 Introduction

Pursuant to the California Environmental Quality Act (CEQA), the Conservancy must prepare an Initial Study (IS) for the proposed Project to determine if any significant adverse effects on the environment would result from Project implementation. The IS utilizes the significance criteria outlined in Appendix G of the CEQA *Guidelines*. If the IS for the Project indicates that a significant adverse impact could occur, that could not be mitigated below a level of significance, the Conservancy would be required to prepare an Environmental Impact Report.

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA *Guidelines*, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- (b) The initial study identifies potentially significant effects, but:
 - (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

Based on the analysis in the Initial Study, it has been determined that all Project-related environmental impacts could be reduced to a less-than-significant level with the incorporation of feasible mitigation measures. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA. The mitigation measures included in this MND are designed to reduce or eliminate the potentially significant environmental impacts described in the Initial Study. Mitigation measures are structured in accordance with the criteria in Section 15370 of the CEQA *Guidelines*.

1.3 Project Description

The proposed Project is described in detail in Section 4 (Project Description). The following summarizes basic Project information.

Project Name: Long Canyon Trail Improvement Project (proposed Project)

Project Proponent: Coachella Valley Mountains Conservancy

Project Location: The Project would be located in unincorporated Riverside County (Lower Trailhead) and the Town of Yucca Valley (Upper Trailhead), see Figure 4-1. The following identifies the United States Geological Survey (USGS) 7.5-minute quads and County for each Project component.

Lower Trailhead: Seven Palms Valley (Riverside County)

Upper Trailhead: Yucca Valley South (San Bernardino County)

Long Canyon Trail: Seven Palms Valley, Yucca Valley South (Riverside and San Bernardino Counties)

1.4 Environmental Determination

Based on the analysis in the CEQA Initial Study Checklist in Section 5, the Conservancy has determined that all Project-related environmental impacts could be reduced to a less-than-significant level under CEQA with the incorporation of mitigation measures included in this document. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA.

Minimal work would occur on federal lands, and would consist of minor trail maintenance in a designated Trail Corridor within JTNP and minor road maintenance and trash removal along an existing dirt road on BLM lands near the southern trailhead. The Conservancy is coordinating with NPS and BLM to complete the appropriate documentation to comply with the National Environmental Policy Act (NEPA). Because the Project includes only minor maintenance activities on federal lands, it is expected to qualify for a categorical exclusion under NEPA.

1.5 Mitigation Measures

Table 1-1 lists the mitigation measures that are included as part of the Project to reduce or avoid potentially significant environmental effects (CEQA Guidelines Section 15071).

Table 1-1. Mitigation Measures				
Issue Area Mitigation Measure				
Biological Resources	BIO-1: CVMSHCP Compliance. All applicable avoidance and minimization measures as described in Section 4.4 of the CVMSHCP will be observed during construction and O&M activities. For O&M activities the Conservancy shall ensure that personnel are instructed to be alert for listed wildlife species. If a desert tortoise is spotted at any Project work area, activities adjacent to its location will be halted and the animal will be allowed to move away from the activity area. In addition, consistent with Section 7.3.4.2 of the CVMSHCP, the Lower Trailhead and associated facilities will be designed to be consistent with CVMSHCP Conservation Goals and Objectives, to avoid or minimize impacts to habitat occupied by Covered Species, and to discourage intrusion into environmentally sensitive areas. Interpretive facilities, access control, and signage will encourage proper resource usage, and adverse effects of passive recreation, such as trampling vegetation and erosion, will be minimized.			

Table 1-1. Mitigatio	Table 1-1. Mitigation Measures				
Issue Area	Mitigation Measure				
	BIO-2: Limit Disturbance Areas. At all work areas, mechanical disturbance of previously undisturbed habitats (including soils) will be limited to the minimum area necessary. Project disturbance areas will be sited on previously disturbed areas to the extent feasible.				
	BIO-3: Assign Project Biologist. The Conservancy will assign one or more acceptable biologists (according to CVMSHCP requirements) to conduct pre-construction surveys and construction monitoring at all Project work areas where ground disturbance would occur, as described in Mitigation Measures BIO-4 and BIO-5. An "acceptable biologist" means a biologist whose name is on a list, maintained by the Coachella Valley Conservation Commission (CVCC), of biologists who are acceptable to CVCC, CDFW, and USFWS for purposes of conducting surveys for Covered Species. The Project Biologist(s) would also conduct all surveys and monitoring for special-status species at the Upper Trailhead.				
	BIO-4: Preconstruction Surveys. The Project Biologist(s) will conduct pre-activity clearance surveys for desert tortoise and their burrows, burrowing owls (year-round), nesting birds (at Project sites where construction or maintenance activities are scheduled from January 1 to August 31), special-status plants, and other special-status species. Construction or maintenance activities outside of the breeding season for nesting birds would not require nesting bird surveys. Surveys for desert tortoise, burrowing owl, and LeConte's thrasher will be conducted according to the avoidance and minimization measures in Section 4.4 of the CVMSHCP. Pre-activity surveys will be conducted no more than 7 days in advance of any ground- or vegetation-disturbing activities in any location.				
	BIO-5: Construction Monitoring. The Project Biologist(s) will monitor ground-disturbing construction and maintenance activities, provide worker education programs, and supervise or perform other related actions. The Project Biologist(s) will be authorized to temporarily halt construction or maintenance activities if needed to prevent potential harm to any special-status species. Project activities may not disturb an active bird nest. If an active bird nest is located on or adjacent to the work site, a Project Biologist will designate and flag an appropriate buffer area around the nest where construction or maintenance activities will not be permitted. The buffer area will be based on the bird species and nature of the construction activity. The work supervisor will coordinate with the Project Biologist on planned or ongoing construction or maintenance activity surveys or monitoring requirements for each activity in those areas.				
	BIO-6: Special-Status Species Avoidance and Minimization Measures. The Project Biologist(s)and all workers shall regularly observe the work areas for desert tortoise and burrowing owl. The Project will adhere to avoidance and minimization measures for sensitive species as described in Section 4.4 of the CVMSHCP. For desert tortoise, installing exclusionary fencing per CVMSHCP guidelines for trailhead construction would be infeasible. Instead, if a desert tortoise is observed, it will be left to move away from the work site on its own. Burrowing owl measures include establishing appropriate buffers, depending on the season, where no construction or maintenance activities may occur; and coordinating with Wildlife Agencies on appropriate eviction/passive relocation procedures.				
	BIO-7: Worker Training. Employees will be trained to ensure that all workers on site (including contractors) are aware of all applicable mitigation measures for biological resources. Specifically, workers will be required to (1) limit all activities to approved work areas; (2) report any desert tortoise, burrowing owl, or other special-status species, or bird nest observation in the work areas and access routes to the supervisor or Project Biologist; (3) avoid contact with any wildlife that may approach a work area, and be aware of potential venomous reptile bites from carelessness or unnecessary harassment; (4) pick up and properly dispose of any food, trash, or construction refuse; and (5) report any spilled materials (oil, fuel, solvent, engine coolant, raw concrete, or other material potentially hazardous to wildlife) to the supervisor or on-site Project Biologist(s). During the training, the instructor will briefly discuss special-status species that may occur in the work areas, their habitats, and requirements to avoid or minimize impacts. In addition, all workers will be informed of civil and criminal penalties for violations of the federal Endangered Species Act, California Endangered Species Act, the Migratory Bird Treaty Act, relevant sections of the California Fish and Game Code, and the Bald and Golden Eagle Protection Act.				

Table 1-1. Mitigation Measures

Table 1-1. Mitigation Measures					
Issue Area	Mitigation Measure				
	BIO-8: Wildlife Avoidance. Workers will not be permitted to feed, harm, approach, harass, or handle wildlife at any time, except to move animals out of harm's way, and only as directed by a supervisor. Listed species will not be handled; if a desert tortoise enters a work area, it will not be disturbed and will be allowed to leave on its own. This condition will not exempt workers, including the Project Biologist(s), from any safety policies with regard to venomous reptiles.				
	BIO-9: Trash, Refuse, Concrete, and Other Construction Materials. All trash and food materials will be properly contained within vehicles or closed refuse bins while on any site, and will be regularly removed from the site (at least on a weekly basis) for proper disposal. All refuse from construction or maintenance activities will be removed from each work site upon completion of work. No raw cement, concrete or washings thereof, asphalt, paint, oil, solvents, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, shall be disposed of on-site or allowed to spill onto soil. Cleanup of any spilled material shall begin immediately.				
	BIO-10: Minimize Standing Water. Water applied to dirt roads and construction areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards, to prevent the formation of puddles, which could attract wildlife to construction sites.				
	BIO-11: Water Storage. All water containers (i.e., tanks or trailers) will be securely covered to prevent wildlife from entering the containers and becoming trapped.				
	BIO-12: Speed Limit. To minimize potential impacts to special-status wildlife, no vehicles will be permitted to exceed 15 mph while traveling on dirt access roads, and vehicle use will be limited to the access routes and parking/trailhead areas. There will be no off-road vehicle use.				
	BIO-13: Operations Monitoring. The Conservancy, in coordination with the BLM, NPS, and USFWS, will identify a series of "photo points" on each trailhead and parking area, for long-term photo documentation of trail condition and resource damage (if any). The photo points will be located at representative sites likely to sustain high use (e.g., parking areas), likely to support listed species, or vulnerable to resource damage (e.g., steep trail segments). Each photo point will be visited and photographed at least annually. Based on the documentation, Conservancy will determine and implement appropriate follow-up action (e.g., trash cleanup, trail or kiosk maintenance, or new signage). In addition, Conservancy will provide annual documentation to the BLM, NPS, and USFWS of the photo-point monitoring and follow-up measures.				
Cultural Resources	CR-1: Assess and Treat Inadvertent Discovery of Human Remains. All human remains discovered are to be treated with respect and dignity. Upon discovery of human remains, all work within 50 feet of the discovery area must cease immediately, nothing is to be disturbed, and the area must be secured. The County Coroner's Office must be notified within 24 hours. The Coroner has two working days to examine the remains after notification. The appropriate land manager or owner of the site is to be called and informed of the discovery. If the remains are located on federal lands, federal land managers, federal law enforcement, and the federal archaeologist must be informed as well, due to complementary jurisdiction issues. It is very important that the human remains, and the area around them, are undisturbed and the proper authorities called to the scene as soon as possible, as it could be a crime scene. The Coroner will determine if the remains are archaeological, historic or are of modern origin, and will determine if there are any criminal or jurisdictional needs to be addressed.				
	If upon examination the Coroner determines that the remains are archaeological or historic-era, the Coroner will make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative. If the Coroner believes the remains to be those of a Native American, he/she shall contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains. The MLD has 48 hours to make recommendations to the landowner for treatment or disposition of the human remains. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in an area of the property secure from further disturbance. If the landowner does not accept the descendant's recommendations, the owner or the descendant may request mediation by the NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains is a felony (Section 7052).				

Table 1-1. Mitigation Measures				
Issue Area	Mitigation Measure			
Tribal Cultural Resources	TCR-1: Monitor Sensitive Areas for Tribal Cultural Resources. A qualified Native American monitor shall be present for any grading work.			
	TCR-2: Assess and Treat Incidental Discovery of Tribal Cultural Resources. If previously unidentified cultural resources and tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist or tribal representative assesses the significance of the resource. The archaeologist, in consultation with the County, SHPO, any interested Tribes, and any other responsible public agency, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be eligible to the NRHP or CRHR, qualify as a unique archaeological resource under CEQA Section 21083.2 or be determined to qualify as a tribal cultural resource as defined in PRC Section 21074.			

A Mitigation Monitoring Plan has been prepared to ensure that the mitigation measures presented above are properly implemented (see Appendix A). The plan describes specific actions required to implement each measure, including information on timing of implementation and monitoring requirements.

Based on the analysis and conclusions of the Initial Study, the impacts of the Project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented herein, which have been incorporated into the proposed Project.

2. Environmental Determination

2.1 Environmental Factors Potentially Affected

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



2.2 Environmental 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.

Jim R. Karpiak, Executive Di ctor

Jim R. Karpiak, Executive Difector Coachella Valley Mountains Conservancy

MND/Initial Study

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3. Introduction to the Initial Study

3.1 Proposed Project Overview

The Coachella Valley Mountains Conservancy (Conservancy), a California state agency established in 1991, proposes to fund improvements to an existing NPS Trail Corridor that runs in a north-south direction in the western portion of JTNP, and establish a new trailhead and parking area at each end of the trail on private lands just outside of JTNP. The new southern trailhead (Lower Trailhead) would be located in the Coachella Valley near Desert Hot Springs in Riverside County, and the northern trailhead (Upper Trailhead) would in Yucca Valley in San Bernardino County. The recreational trail would be 9.1 miles long, the majority of which is within JTNP (See Figure 4-1). The Project is a joint venture among the Conservancy, the FODM, JTNP, the MDLT, the Palm Springs-South Coast Office of the BLM, and the City of Desert Hot Springs.

Minimal work would occur on federal lands, and would consist of minor trail maintenance in a designated Trail Corridor within JTNP and minor road maintenance and trash removal along an existing dirt road on BLM lands near the southern trailhead. Therefore, the NPS and BLM have determined that the Project is not subject to review under NEPA.

3.2 Environmental Analysis

3.2.1 CEQA Process

This IS has been prepared pursuant to CEQA and the amended State CEQA Guidelines (14 CCR 15000 et seq.). The purpose of the IS is to inform the decision-makers, responsible agencies, and the public of the proposed Project, the existing environment that would be affected by the Project, the environmental effects that would occur if the Project is implemented, and proposed mitigation measures that would avoid or reduce environmental effects.

An MND has been prepared based on the assessment of potential environmental impacts identified in the IS. All potentially significant impacts associated with the Project can be mitigated to a level below significance; therefore, an MND can be adopted by the Conservancy in accordance with Section 21080 of the CEQA Public Resources Code.

3.2.2 CEQA Lead Agency

The Conservancy is the lead agency for review of the Project under CEQA because it must make a decision whether to adopt the MND and to approve or deny the Project.

3.2.3 Initial Study

The IS presents an analysis of potential effects of the proposed Project on the environment. The IS is based on information from site visits, data requests, and additional research.

Long Canyon Trail Improvement Project INITIAL STUDY



Construction activities and Project operation could have direct and indirect impacts on the environment. The following environmental parameters are addressed based on the potential effects of the proposed Project and potential growth-inducing or cumulative effects of the Project in combination with other projects:

- Aesthetics
- Agricultural & 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
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire
- Mandatory Findings of Significance

The IS has been organized into the following sections:

- Section 3: Introduction. Provides an introduction and overview describing the proposed Project and the CEQA process, and identifies key areas of environmental concern.
- Section 4: Project Description. Presents the Project objectives and provides an in-depth description of the proposed Project, including construction details and methods.
- Section 5: Environmental Analysis and Mitigation. Includes a description of the existing conditions and analysis of the proposed Project's potential environmental impacts, and identifies mitigation measures to reduce potentially significant impacts to less-than-significant levels.
- Section 6: References. Lists the sources of information used to prepare the IS.
- Section 7: List of Preparers. Lists the preparers and reviewers of the IS.
- Appendix A: Mitigation Monitoring Plan. Includes mitigation measures that must be implemented as part of the Project, actions required to implement these measures, monitoring requirements, and timing of implementation for each measure.
- Appendix B: Biological Resources. Includes supporting information for the analysis of impacts to biological resources.

4. **Project Description**

4.1 Project Title

Long Canyon Trail Improvement Project (Project).

4.2 Lead Agency Name and Address

Coachella Valley Mountains Conservancy 73-710 Fred Waring Dr., Suite 112 Palm Desert, CA 92260

4.3 Lead Agency Contact Person and Phone Number

Jim R. Karpiak, Executive Director 73-710 Fred Waring Dr., Suite 112 Palm Desert, CA 92260 (760) 776-5026

4.4 **Project Location**

Figure 4-1 depicts a map of the vicinity and Figures 4-2 and 4-3 illustrate the Project locations. The following identifies the USGS 7.5-minute quads for each Project component.

Lower Trailhead: Seven Palms Valley

Upper Trailhead: Yucca Valley South

Long Canyon Trail: Seven Palms Valley, Yucca Valley South

4.5 Site Control

The Upper Trailhead and nearby Alternate Parking Sites are on land owned by the MDLT, the Preferred Lower Trailhead site is owned by the Metropolitan Water District (MWD), and the Alternate Parking Sites at the Lower Trailhead are owned by the Coachella Valley Conservation Commission (CVCC). The Conservancy staff has had conversations with those agencies' staffs and believes it can get license agreements authorizing the trailheads or parking areas there. In the event MWD includes conditions for using the preferred Desert Hot Springs trailhead site that the Conservancy cannot meet, the trailhead would be located on the CVCC land as discussed below in Section 4.10.1.

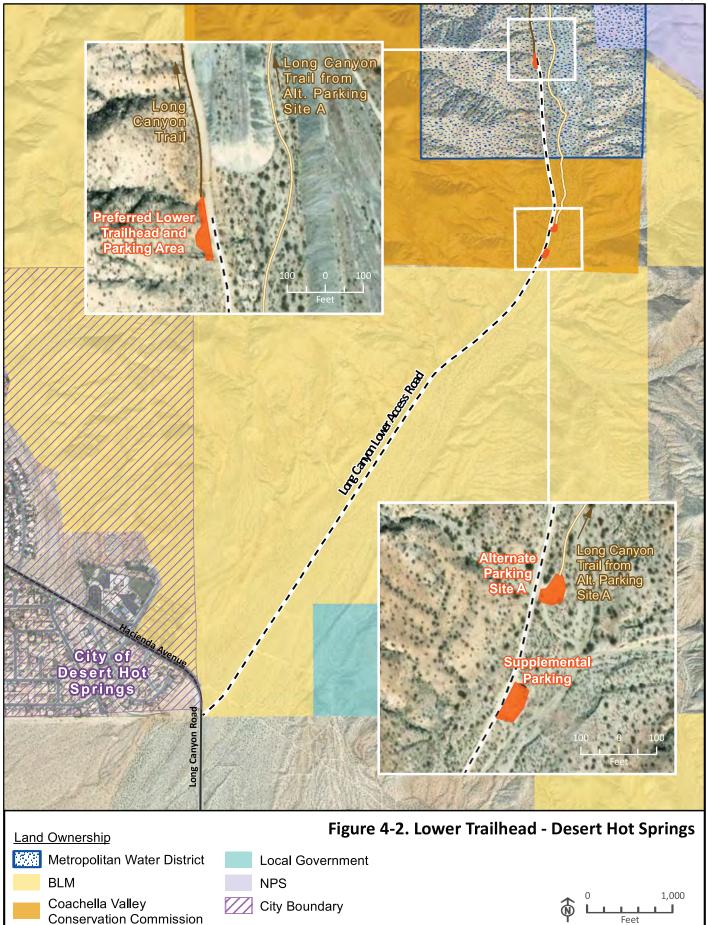
The trail is mostly located within JTNP, where it is already a designated Trail Corridor and open to the public. The existing unpaved road in Long Canyon between Hacienda Drive in Desert Hot Springs and the trailhead is on open BLM land.

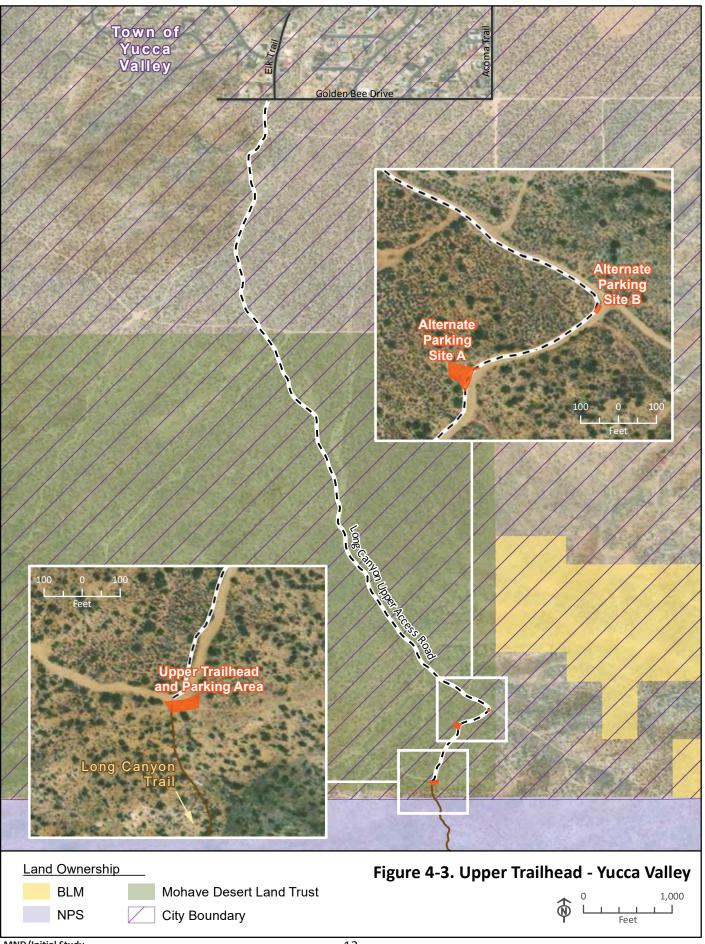
4.6 General Plan Designation

The Project extends across portions of unincorporated Riverside County as well as the Town of Yucca Valley located within San Bernardino County. The Long Canyon Trail segment within the JTNP boundary is under the jurisdiction of a federal agency and therefore is not subject to a county general plan land use designation. The land use designations applicable to the Project area include the following:

- Lower Trailhead and parking area- This segment of the Project travels through unincorporated Riverside County lands designated as Open Space-Conservation Habitat (OS-CH) (County of Riverside, 2017).
- Upper Trailhead and parking area- This segment of the Project that extends from the northern boundary of JTNP to the Upper Trailhead parking lot is designated by the Town of Yucca Valley as Hillside Residential (HR) (Town of Yucca Valley, 2014a)

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4.7 Zoning

Both Riverside County and the Town of Yucca Valley regulate development within each of their land use designations through a zoning ordinance, which identifies permitted uses and development requirements or restrictions. The zoning applicable to the Project area include the following:

- Lower Trailhead and parking area- The entire length of this segment would be located on land zoned by Riverside County as a Controlled Development Area (W-2) (County of Riverside, 2019).
- Upper Trailhead and parking area- This segment of the Project that extends from the northern boundary of JTNP to the Upper Trailhead parking lot is zoned by the Town of Yucca Valley as Residential, Hillside Reserve (R-HR) (Town of Yucca Valley, 2014b).

4.8 Surrounding Land Uses and Setting

The Project is surrounded by open space and wilderness, with residential and commercial development located to the north and south of the Project (Google Earth, 2018). Specific land uses include the following:

- Lower Trailhead. The Lower Trailhead and parking area are located in an undeveloped open space area that is south and adjacent to designated wilderness within JTNP. The Project would utilize existing community and regional trails that are accessed from Hacienda Avenue/Long Canyon Road and extend north into JTNP. The City of Desert Hot Springs is located approximately 0.9 mile southwest of the proposed trailhead/parking area. The nearest land uses to the Project include single- and multi-family residential development located within the City along Hacienda Avenue, approximately 1.5 miles southwest of the trailhead/parking area. An elementary school (Julius Corsini Elementary School) and 2 neighborhood parks (Eastside Neighborhood Park and Corsini Coyote Park) are also located within the City at the intersection of Hacienda Way and Don English Way, approximately 1.5 miles southwest of the trailhead/parking area.
- Long Canyon Trail. The Long Canyon Trail follows an existing trail alignment through designated wilderness within JTNP. There are no developed land uses within this segment of the Project.
- Upper Trailhead. The Upper Trailhead and parking area are located in an undeveloped open space owned by MDLT that is south of rural residential development within the Town of Yucca Valley, and north of and adjacent to designated wilderness within JTNP. The nearest land use is a single-family residence located within a rural area of Yucca Valley along Eagles Nest, approximately 0.8 mile northeast of the trailhead/parking area. Additional residential and commercial development is located further northeast approximately 1.3 miles from the trailhead/parking area.

4.9 Project Objectives

The first objective of the proposed Project is to provide increased access to low-impact, non-motorized, mixed-use outdoor recreation in natural open space lands for the Coachella Valley, Yucca Valley, and surrounding areas. Populations in these areas are expanding rapidly and include underserved communities with ethnic minority groups. Presently this area is lacking in established low-impact recreational opportunities, and the primary objective/purpose of this Project is to provide that service to the community. The Project would provide recreational opportunities for hikers and equestrians.

The second objective of the Project is to reduce the use of informal footpaths and illegal dumping affecting sensitive habitats by designating trails in the area. By increasing appropriate usage and visibility, the

Project is expected to reduce unauthorized off-highway vehicle (OHV) use, illegal dumping, and vandalism at the two Project trailhead sites.

4.10 **Project Components**

The Project consists of three components: The Lower Trailhead just east of Desert Hot Springs, the Upper Trailhead in Yucca Valley, and the existing Long Canyon Trail. The trail corridor lies in the natural wash within Long Canyon, and parts of it are improved with an unpaved road. To facilitate use of the trail by enabling hikers to shuttle back to their starting point rather than hike both directions, the two trailheads with small parking areas would be established at the north and south ends of the trail. Hikers who do not wish to hike the entire trail can make a loop hike from the Lower Trailhead approximately 4.6 miles to the Chuckwalla Bill Ruins and back.

The proposed trailheads and the existing Long Canyon Trail are on both private and public land, under several different jurisdictions. Project implementation would conform to any easements, Memorandums of Understanding (MOUs), or other applicable land use agreements.

4.10.1 Lower Trailhead – Desert Hot Springs

The preferred Lower Trailhead site would be located on the unpaved Long Canyon road approximately 1,200 feet south of the JTNP boundary on land owned by the MWD (See Figure 4-2). The preferred trailhead site would be located just south of an existing MWD gate that prevents vehicles from continuing up Long Canyon Road into JTNP. There is space around the sides of the gate for pedestrian access; however, the path around the east side of the gate may need to be widened slightly to accommodate equestrians. The parking area at the preferred trailhead site is approximately 50 feet by 75 feet in size (3,750 square feet, or 0.09 acre) on the west side of the road, in an area that has previously been disturbed by grading and dumping. This area would provide parking for approximately 10 to 12 automobiles. A supplemental parking area of the same size would be established at a second site approximately 2,200 feet to the south along the east side of the road for horse trailer or overflow parking; this site is owned by the CVCC (Refer to "Supplemental Parking Site" on Figure 4-2).

If MWD approval for use of the Lower Trailhead is not obtained (see Section 4.5, Site Control), the Lower Trailhead and parking area would be located on Alternate Parking Site A, with the horse/overflow parking site remaining on the Supplemental Parking Site (refer to Figures 4-1 and 4-2). Both Alternate Parking Site A and the Supplemental Parking site have been disturbed by dumping and parking.

If Alternate Parking Site A is selected as the site of the Lower Trailhead and main parking area, the trail would begin where the parking area meets the wash and would follow the existing road within the wash north to the boundary of JTNP, where it becomes the Long Canyon Trail (Figure 4-2). No new trail would be developed.

4.10.2 Upper Trailhead – Yucca Valley

The Upper Trailhead would be located on the unpaved Elk Trail road approximately one mile south of Yucca Valley on land owned by the MDLT. (Figure 4-3). The proposed trailhead site would be approximately 25 feet by 25 feet on a naturally flat site at the top of Long Canyon that has been used as the start of the existing trail down into the canyon. Adjacent to the trailhead site is flat land at the edge of the road that has been disturbed by parking use; this area provides parking for three to four automobiles. Additional parking for four to seven cars would be possible along the road on flat land approximately 700 feet to the north. (Refer to "Alternate Parking Sites A and B" on Figure 4-3).

4.11 **Project Construction**

4.11.1 Trailheads and Parking Areas

Construction at each of the parking areas would include minor grading to provide an access driveway to and from the road. The surface at the Lower Trailhead and parking areas would be levelled and covered with crushed rock or gravel but would not be paved. The surfaces at the Upper Trailhead and parking areas would not be covered with any materials; rather, they would be left in their existing state with some minor grading to level the parking surface, if needed. As the areas are all remote, no fencing is contemplated. At each of the Lower and Upper Trailhead sites, a visitor information kiosk would be placed at the beginning of the trail on the edge of the trailhead parking area. The kiosk would include a map of the designated trails, applicable regulations and contact information to report unauthorized activity, notification that the trail is open for hiking and equestrian use only, and information about sensitive resources including the desert tortoise.

Directional signs would be placed along Hacienda Avenue in Desert Hot Springs and along Golden Bee Drive in Yucca Valley to guide visitors to the trail. Signs would also be located at the overflow parking sites to direct hikers to the trailheads. Signs at all parking areas would clearly identify that overnight parking is prohibited.

Prior to construction activities, construction personnel would clean all tools (including wheel barrow and 4-wheel-drive vehicles) in order to reduce the risk of invasive plant introduction within or around the project areas. Following construction, the Conservancy, in coordination with staff from BLM, JTNP, FODM, and other local groups and volunteers would monitor the proposed Project areas, including trailheads, in the first growing season. Any new invasive plant populations observed would be removed and legally disposed of off-site. Operation and maintenance of the Project would include regular inspections and repair as needed, particularly after storms, when surface runoff could erode the trail, trailheads, or parking areas. Section 4.12 describes operation and maintenance activities in detail.

Project construction at the Lower Trailhead would be subject to the avoidance and minimization measures described in Section 4.4 of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), which requires surveys for species for which there is modeled habitat in the Project area. Although not within the CVMSHCP area, the same procedures would be followed at the Upper Trailhead. See Section 5.4, Biological Resources, for further information on surveys that would be carried out before construction at each Project location.

4.11.2 Long Canyon Trail

The trail already exists, and follows the natural wash within Long Canyon, and then it follows the unpaved Long Canyon Road. It has long been used by the public as a social trail, and is a designated trail corridor

within JTNP. Accordingly, minimal construction work would be necessary; only site cleanup (e.g., of litter, small dump sites and occasional shotgun shell debris, etc.) and minor surface clearing (e.g., natural debris that impedes walking) would occur. Outside of JTNP, the trail would be marked with carbonite trail minders. Trail minders may be installed along the trail within JTNP if directed by the NPS. In a few locations, small safety related measures may be added, such as rearranging rocks to stabilize the walking surface. All work on trails would be done with hand tools.

4.11.3 Schedule

All construction work described in Sections 4.11.1 and 4.11.2 is expected to be completed within six weeks of Project commencement.

4.12 **Operations and Maintenance**

The Conservancy would assume primary responsibility for ongoing maintenance and management of the trail and trailheads, working closely with JTNP and BLM for the portions of the trail improvements that are on their respective lands. The Conservancy anticipates entering into cooperative agreements with BLM and JTNP to address jurisdictional issues as they relate to law enforcement, and with FODM, MDLT and the City of Desert Hot Springs to incorporate local residents and other volunteers into the maintenance and management efforts.

Operation and maintenance (O&M) activities would include routine trail inspections and patrols to identify any maintenance needs and unauthorized uses. Inspections would also be conducted following major storms, to assess any damage and to temporarily close the trail and trailheads, if needed, until repair activities are complete. Routine trail maintenance and emergency repairs would be conducted with hand tools, similar to the construction phase. Signs and trail markers would be repaired or replaced as needed.

Trailhead parking areas would be re-graded as needed to maintain a level surface accessible to 2-wheel drive vehicles and repair any erosion that may occur after storms.

O&M activities would also include removing any weeds along the trails and at the trailheads. Weed removal would be done by hand, and no herbicide use is proposed.

The proposed trailhead and the Long Canyon Trail are located in remote areas, where informal footpaths are used by the public. These areas show evidence of vandalism to natural features and illegal dumping; the establishment of formal trail alignments is expected to increase foot traffic and public visibility in these areas and discourage such undesirable activities. The establishment of formal trails is also expected to decrease use of other informal footpaths now located throughout the area, and minimize or reverse damage to the natural environment caused by use of these informal pathways. Information to be provided at the trailheads includes contact numbers for reporting illegal dumping, OHV use, and other unauthorized activities.

4.13 Other Permits and Approvals

Table 4-1 identifies anticipated approvals and permits that may be required for implementation of the proposed Project. Additional authorizations may be required.

Table 4-1. Anticipated Permits, Approvals, and Authorizations							
Agency Permit/Approval Description							
Bureau of Land Management (BLM)	Authorization for improvements to existing road	Authorization to grade existing road as needed to improve access to Lower Trailhead.					
Coachella Valley Mountains Conservancy (Conservancy)Project ApprovalCEQA Lead A		CEQA Lead Agency and Project proponent					
California Regional Water Quality Control Board – Colorado River Region		The Conservancy is required to submit a Notice of Intent to the Regional Water Quality Control Board (RWQCB), Colorado River Basin Region, for coverage under the General Construction Permit if Project disturbance would be over 1 acre. The Storm Water Pollution Prevention Plan (SWPPP) would be developed and implemented throughout the entire Project. The SWPPP would contain the elements required by the General Construction Permit and illustrate the protective measures that would be taken during construction to control stormwater runoff and erosion and siltation on-site.					
California Department of Fish and Wildlife	California Endangered Species Act	Participation in the CVMSHCP will satisfy the requirements of the California Endangered Species Act					
(CDFW)	Streambed Alteration Agreement	Requires California Department of Fish and Wildlife to review project impacts to "waters of the state" (bed, banks, channel, or associated riparian areas of a river, stream, or lake), including impacts to wildlife and vegetation from sediments, diversions, and other disturbances.					
Coachella Valley Conservation Commission (CVCC)	Coachella Valley Multiple Species Habitat Conservation Plan Compliance	Conservancy is a participant under the CVMSHCP, and is required to follow a standardized set of minimization and avoidance measures in addition to the payment of mitigation and administrative fees. Certain projects are required to implement additional measures, as determined by USFWS and CDFW due to the projects' location and anticipated level of impact.					
	Real Estate Authorization	Required to construct the Lower Trailhead supplemental parking (and Alternate Parking Site A, if applicable) on CVCC-owned lands.					
County of Riverside	Construction Permits	Ensures Project construction complies with all County regulations and ordinances					
Town of Yucca Valley	Grading Permit	For Upper Trailhead parking areas.					
	Covered Plant Removal Permit	Required only if construction of the Upper Trailhead facilities would require removal of a covered plant pursuant to Section 89.0107 of the Town's Plant Protection and Management Ordinance (Ordinance No. 140).					
Metropolitan Water District (MWD)	Real Estate Authorization	Required to construct the Lower Trailhead on MWD- controlled lands.					
Mojave Desert Land Trust (MDLT)Real Estate AuthorizationRequired to construct the Upper Trailhead on N property.							

Table 4-1. Anticipated Permits, Approvals, and Authorizations					
Agency	Permit/Approval	Description			
California Native American Tribes	The Conservancy consults with California Native American Tribes about potential tribal cultural resources in the project area, the potential significance of project impacts, the development of project alternatives, and the type of environmental document that should be prepared.	The Conservancy consults with California Native American Tribes in compliance with AB 52.			

4.14 Conformance with Land Use Plans, Laws, Regulations, and Policies

4.14.1 Tribal Consultation

AB 52 establishes a formal role for California Native American tribes in the CEQA process. CEQA lead agencies are required to consult with tribes about potential tribal cultural resources in the project area, the potential significance of project impacts, the development of project alternatives, and the type of environmental document that should be prepared.

- A "Native American tribe located in California that is on the contact list maintained Native American Heritage Commission" (NAHC). This definition does not distinguish between federally recognized and non-federally recognized tribal groups, and is therefore more inclusive than the federal definition of "Indian tribe" (PRC § 21073).
- To qualify as a tribal cultural resource, it must either be 1) listed on or eligible for listing on the California Register of Historical Resources or a local historic register or, 2) or is a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a Tribal Cultural Resource (PRC § 21074). Tribal Cultural Resources include "non-unique archaeological resources" that, instead of being important for "scientific" value as a resource, can also be significant because of the sacred and/or cultural tribal value of the resource. Tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of tribal cultural resources within their traditionally and cultural affiliated geographic area (PRC § 21080.3.1(a)).
- Consultation in the context of AB 52 is the meaningful and timely process of seeking, discussing, and carefully considering the views of others. Meaningful consultation usually consists of face-to-face meetings conducted in such a way that recognizes the cultural values of all parties involved and makes a concerted effort to reach an agreement. Consultation should recognize the tribe's potential need for confidentiality regarding places that hold traditional tribal significance. Consultation with tribes is considered the best way for lead agencies to determine if a project could result in significant environmental impacts to tribal cultural resources (PRC § 21080.3.1(a); GC § 65352.4).

A project that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (PRC § 21084.2). To date, two tribal representatives have responded to the Conservancy's invitation to consult on the Project under AB 52: Lucy Padilla, Tribal Historic Preservation Officer for the Agua Caliente Band of Cahuilla Indians; and

Michael Mirelez, Cultural Resource Coordinator for the Torres-Martinez Desert Cahuilla Indians (see Section 5.18, Tribal Cultural Resources, for details).

4.14.2 Coachella Valley Multiple Species Habitat Conservation Plan

Construction of trail facilities is a covered activity/conditionally compatible public access uses under the CVMSHCP provided they are consistent with the species conservation goals and objectives for the designated conservation areas and consistent with the guidelines for trails and public access. The proposed Project has been designed to comply with applicable requirements in the CVMSHCP. Only the Lower Trailhead is within the CVMSHCP area.

5. Environmental Setting and Environmental Impacts

5.1 Aesthetics

Ex	ESTHETICS cept as provided in Public Resources Code Section 21099, ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?				\boxtimes
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 which would adversely affect day or nighttime views in the area?			\boxtimes	

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project have a substantial adverse effect on a scenic vista?

No IMPACT. The Project would have no impact to a scenic vista. The nearest scenic vista outside of JTNP would be along a Riverside County-eligible scenic highway that includes Dillon Road (as it travels south of and parallel to JTNP), and portions of Palm Drive, Pierson Boulevard, and Indian Canyon Drive as these roadways travel through the City of Desert Hot Springs (County of Riverside, 2017). The Lower Trailhead would be approximately two miles north of the eligible Dillon Road segment. Given that the proposed activities would involve minimal construction (i.e., information kiosk, trailhead signage, minor parking lot grading), none of these activities would adversely affect a scenic vista. Furthermore, the Project intends to discourage unauthorized activities such as vandalism, shooting, and illegal dumping that are known to occur in the Project area, thereby improving the scenic nature of the surrounding open space.

Within JTNP, the Long Canyon Trail would continue to traverse designated wilderness through an established trail corridor. Project activities along this trail would be limited to site cleanup and clearing debris, which would serve to maintain the scenic quality of this wilderness area. No impact would occur under this criterion.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

No IMPACT. The Project would have no impact to scenic resources within a State scenic highway. The nearest scenic highway is State Route 62, which is currently a designated scenic highway in Riverside County and an eligible scenic highway in San Bernardino County (DOT, 2019a and 2019b). State Route 62 is approximately eight miles west of the Lower Trailhead and three miles northwest of the Upper Trailhead. The proposed Project activities would involve minimal construction that is limited to erecting an information kiosk and signage at the Upper and Lower Trailheads, leveling/covering the Lower Trailhead parking lot with crushed gravel, and minor grading at the Upper Trailhead parking lot. None of these activities would damage trees, rock outcroppings, or historic buildings. No impact would occur under this criterion.

c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of the 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?

NO IMPACT. The Project would not adversely affect the existing visual character or quality of public views in the surrounding areas. As stated in Section 5.1 Part (a), the proposed activities would formally establish recreational access to the trail corridor, thereby deterring vandalism and illegal dumping known to occur in the Project area. Routine trail inspections during the operation and maintenance phase of the Project would identify any necessary maintenance and repairs, which would maintain the aesthetic quality of the Project site. Therefore, the Project would not degrade the site's visual character or public views.

The Project would not conflict with applicable zoning or scenic regulations. As described in Section 5.11 Part (b), the Project would be consistent with both Riverside County and Town of Yucca Valley policies and zoning specific to the applicable land use designations. The Project would not conflict with County-and State- eligible or proposed scenic highway designations [see Section 5.1 Parts (a) and (b)]. The Project would also be consistent with the Town of Yucca Valley's Outdoor Lighting and Night Sky Ordinance [Ordinance No. 90, Section 8.70.030, Part (c)], which prohibits the illumination of recreational facilities between the hours of 11 p.m. and sunrise (Town of Yucca Valley, 2018). As the Project would not install temporary or permanent outdoor lighting fixtures [see Section 5.1 Part (d)], there would be no conflict with this Lighting and Night Sky Ordinance. No impact would occur under this criterion.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

LESS-THAN-SIGNIFICANT IMPACT. The Project would not create a new source of light or a substantial source of glare. Construction activities would be short-term and require minimal equipment to grade the proposed parking areas, spread crushed rock/gravel at the Lower Trailhead parking lot, and erect a visitor information kiosk at each trailhead. Construction would occur during daylight hours and would not require a temporary source of light. During operation, any vehicles parked at the Upper and Lower Trailheads may create a temporary source of glare. The proposed parking areas are relatively small, with no more than 12 vehicle spaces at each of the Lower Trailhead's primary and supplemental parking sites, and no more than four vehicle spaces and seven vehicle spaces at the Upper Trailhead's primary and supplemental parking areas, any associated glare would not be substantial. None of the permanent structures associated with the Project (i.e., information kiosks and directional signs) would utilize outdoor lighting, nor are they expected to create an additional source of glare. Impacts associated with light or glare would be less than significant.

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5.2 Agriculture and Forestry Resources

AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?
 c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526),
- or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- d. Result in the loss of forest land or conversion of forest land to non-forest use?
 e. Involve other changes in the existing environment which, due to
- 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?

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project 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?

NO IMPACT. None of the proposed activities would be located on designated Farmland as determined by the California Department of Conservation (DOC). The Lower Trailhead site has been mapped by the DOC's Farmland Mapping and Monitoring Program as "Other Land," which indicates an area of low-density rural development, vacant, and nonagricultural land (DOC, 2017a). The Upper Trailhead site has not been mapped by the DOC; as such, there is no designated Farmland at the northern end of the Project that could be affected by proposed activities (DOC, 2017b). No impact would occur under this criterion.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

NO IMPACT. None of the proposed activities would be located on land enrolled in a Williamson Act contract. The Lower Trailhead and Upper Trailhead sites have been mapped by the DOC as "non-enrolled land," which indicates that these areas are not subject to a Williamson Act contract (DOC, 2016a, 2016b, and 2017c). No impact would occur under this criterion.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No IMPACT. The Lower Trailhead would be located on land zoned as a Controlled Development Area (W-2) by Riverside County, while the Upper Trailhead would be located on land zoned as Residential, Hillside Reserve (R-HR) by the Town of Yucca Valley. None of the proposed activities at the Upper and Lower Trailheads would occur in in an area zoned as forest land or timberland. Although Long Canyon Trail would traverse designated wilderness within JTNP, all work along the trail would be done with hand tools and in coordination with the National Park Service. The Project would not conflict or cause rezoning of forest land or timberland.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No IMPACT. As stated in Section 5.2 Part(c), none of the proposed activities at the Upper and Lower Trailheads would occur in an area zoned as forest land. Within JTNP, Project activities would be limited to site cleanup and debris clearance, which would not conflict with either allowable or restricted uses within wilderness. No impact to forest land would occur.

e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

NO IMPACT. As stated in Section 5.2 Part(a), none of the Project activities would be located on designated Farmland or in proximity to Farmland. All Project activities would occur entirely within the proposed trailhead and parking areas, and along Long Canyon Trial. There would be no impact under this criterion.

5.3 Air Quality

Wh air	R QUALITY here available, the significance criteria established by the applicable quality management district or air pollution control district may be ed upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?			\boxtimes	
C.	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				\boxtimes

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

NO IMPACT. The Lower Trailhead and southern portion of the trail are located within the South Coast Air Quality Management District (SCAQMD), and the Upper Trailhead and northern portion of the trail are located in the Mojave Desert Air Quality Management District (MDAQMD). The Project would produce limited emissions of nonattainment pollutants primarily from diesel-powered sources during temporary construction. The 2016 SCAQMD Air Quality Management Plan (AQMP) proposes emission reduction measures that are designed to bring the South Coast Air Basin into attainment of the National Ambient

Air Quality Standards (NAAQS) and primary California Ambient Air Quality Standards (CAAQS) (SCAQMD, 2016). The attainment strategies in this plan include mobile source control measures and clean fuel programs that are enforced at the federal and State levels on engine manufacturers and petroleum refiners and retailers.

The SCAQMD adopts AQMP control measures into the SCAQMD rules and regulations, which are then used to regulate sources of air pollution in the SCAQMD boundary. The Project would comply with these regulatory requirements. Therefore, the proposed Project's emissions sources would meet or exceed the emissions control forecasts for all approved AQMP control measures.

Since the 2016 AQMP assumes growth that is consistent with the implementation of this Project (which does not induce growth, but is intended to provide recreational uses to serve growth of the area), it would not exceed the future growth projections in the 2016 AQMP, and it would not conflict with or obstruct implementation of the State Implementation Plan. As a result, construction of the proposed Project would conform to the applicable AQMP. No impacts would occur.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

LESS THAN SIGNIFICANT IMPACT. The following discusses potential impacts related to emissions generated during construction and operation of the proposed Project.

Construction Emissions. The Project's construction would involve surface grading for the new trailhead parking areas and adding an aggregate base to the Lower Trailhead parking areas. No soils would need to be hauled off site. Temporary construction emissions would result from the use of construction equipment and trips generated by construction workers and heavy haul trucks, and from earth-moving activities that would cause fugitive dust emissions. Construction activities would generate emissions of criteria air pollutants including Volatile Organic Compounds (VOCs), Nitrogen Oxide (NOx), Carbon Monoxide (CO), Respirable Particulate Matter (PM10), Fine Particulate Matter (PM2.5), and Sulfur Dioxide (SOx).

It is assumed construction activities that generate air emissions are comprised of two days of construction, the first of which would remove vegetation as needed and level the parking areas. The second day of construction would be the application and compaction of a 6-inch layer of aggregate base (gravel) at the Lower Trailhead parking areas, and sign and kiosk placement activities at both trailheads. The specific construction equipment required for each day has been conservatively estimated as follows:

First Day of Construction

- D7 Dozer, 305 hp 6 hours of operation
- Grader, 140 hp 4 hours of operation
- One on-road water truck would be used water site and access roads
- CalEEMod default employee trips
- All trip distances increased to 30 miles due to remoteness of Project sites

Second Day of Construction

■ Grader, 140 hp – 8 hours of operation (half of time would be for grading access road)

- Roller Compactor, 80 hp 4 hours of operation
- Loader, 145 hp 4 hours of operation
- Backhoe, 97 hp 6 hours of operation
- Up to 9 truckloads of aggregate would be imported
- One on-road water truck would be used to water site and access roads
- CalEEMod default employee trips
- All trip distances increased to 30 miles due to remoteness of Project sites

No construction equipment or vehicle emissions mitigation was assumed in the emissions estimate, which was performed using CalEEMod assuming construction in spring of 2020. Fugitive dust emissions reduction measures, in the form of watering the site and unpaved access roads and reduced vehicle speeds on unpaved roads, was assumed to comply with SCAQMD Rule 403.1 and MDAQMD Rule 403.2 Fugitive Dust Control for the Mojave Desert Planning Area. Table 5.3-1 provides the maximum daily temporary emission estimates for construction of the Project for temporary activities occurring at the Lower Trailhead within the SCAQMD (which requires the greatest amount of construction work and therefore would account for the maximum daily emissions generated). Additionally, MDAQMD does not have short-term construction emissions thresholds.

Table 5.3-1. Maximum Daily Construction Emissions (lbs/day)							
	VOC	CO	NOx	SOx	PM10	PM2.5	
First Day of Construction	1.75	12.69	20.61	0.02	10.46	1.83	
Second Day of Construction	1.80	12.65	18.29	0.02	10.52	2.12	
SCAQMD Regional Significance Thresholds	75	550	100	150	150	55	
Exceed Thresholds?	NO	NO	NO	NO	NO	NO	

Source: AEG, 2019; SCAQMD 2019a

As shown in Table 5.3-1, construction of the Project would not result in emissions of criteria pollutants that exceed regional emissions significance thresholds established by the SCAQMD. Impacts would be less than significant.

Operational Emissions. The Project does not include any permanent stationary emission sources. With respect to mobile operations-related emissions, the majority of vehicles accessing the proposed trailheads are expected to come from within the local area. These recreationalists are assumed to already make vehicle trips to access similar designated or undesignated trails in the area. Therefore, any new trips to the proposed facilities are considered to offset existing trips. No new mobile emissions would occur from recreationists accessing the new trailheads. A small amount of routine trail maintenance would be performed with hand tools which would require occasional vehicle access to the trailheads, but no major maintenance events that would require off-road construction equipment would be regularly scheduled. Therefore, normal operation emissions would be negligible.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

LESS THAN SIGNIFICANT IMPACT. A review of satellite imagery shows the nearest sensitive receptors to the proposed Project are:

- Upper Trailhead: Single-family residence located within a rural area of Yucca Valley along Eagles Nest, approximately 0.8 mile northeast of the trailhead/parking area
- Lower Trailhead: 1.5 mile southwest on Hacienda Street (residential use)

MDAQMD does not have short-term construction emissions thresholds. SCAQMD evaluates substantial pollutant concentrations of criteria pollutants (specifically NO_x, CO, PM10, and PM2.5) by assessing the localized maximum daily Project emissions against Localized Significance Thresholds (LSTs) that they have developed for different Source Receptor Areas (SRAs) within their jurisdiction. This Project is within SRA 30 – Coachella Valley. The LST thresholds for NO_x and CO emission are higher than the regional thresholds, and the Project would not exceed those regional thresholds so the NO_x and CO LST thresholds would not be exceeded and are not evaluated further. Table 5.3-2 presents the maximum daily onsite emissions of PM10 and PM2.5 compared to their LST thresholds.

Table 5.3-2. Maximum Daily Onsite Construction Emissions (lbs/day)				
	PM10	PM2.5		
First Day of Construction	0.85	0.75		
Second Day of Construction	1.08	0.93		
SCAQMD LST Significance Thresholds	52	26		
Exceed Thresholds?	NO	NO		

Source: AEG, 2019; SCAQMD 2019b

Notes: One-acre disturbance area with the nearest residential areas being 500 meters away.

As Table 5.3-2 shows, the calculated on-site emissions of PM10 and PM2.5 are below the applicable SCAQMD LSTs. Due to the very short duration of construction emissions and the limited amount of fugitive dust and diesel particulate matter (DPM) emissions, there is a low potential for fugitive dust (including valley fever spores) or DPM emissions to impact sensitive receptors during construction. DPM emissions are not of a magnitude and duration to create significant air toxic risks to the nearest receptors. While MDAQMD does not contain any LST thresholds, air toxics impacts would be similarly less than significant within MDAQMD jurisdiction as the amount of construction work occurring within the MDAQMD (upper trailhead) would be less than that within the SCAQMD (lower trailhead). Impacts would be less than significant.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

NO IMPACT. Some mildly objectionable odors may be temporarily created during construction-related activities, such as from diesel exhaust during grading activities. However, any temporary odor would be short-term and likely confined to within the Project site. Beyond this distance, any construction equipment exhaust would disperse and be unnoticeable. Furthermore, the nearest receptors to the Project include only a small number of rural residences. Therefore, any minor odors from construction equipment operation would not affect a substantial number of people and would only occur proximate to the work area. No impacts related to objectionable odors would occur.

5.4 Biological Resources

BIOLOGICAL RESOURCES Would the project:		Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
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?		\boxtimes		
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?				
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?				
Conflict with any local policies or ordinances protecting biolog- ical resources, such as a tree preservation policy or ordinance?				\boxtimes
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?				
	 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? 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? 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? Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife species or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved 	Potentially Significant Impact Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? 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? 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? 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? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved	Dubbic Net NetSources Potentially Significant Significant With Mitigation Impact Dubbic the project: Significant With Mitigation Impact Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? Impact Impact 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? Impact Impact 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? Impact Impact 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? Impact Impact Conflict with any local policies or ordinances protecting biolog- ical resources, such as a tree preservation policy or ordinance? Impact Impact Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved Impact Impact	Duble the project: Potentially Significant Impact Significant With Mitigation Incorporated Less Than Significant Impact Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? Impact Impact 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? 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Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The proposed Project would affect habitat for special-status species and, without mitigation, could cause take of special-status plants and animals. Potential direct and indirect effects of the proposed trailheads construction include: increased use of the area by the public leading to disturbance to wildlife and habitat, and the spread of invasive weeds. While the increase in public use may cause increased disturbance to wildlife and habitat, the Project would focus visitors into designated areas, reducing the current dispersed disturbance. The proposed Project would also increase visitor awareness of regulations, reduce off-road activity, and reduce littering, dumping, and shooting.

Participation in the CVMSHCP for construction of the Lower Trailhead would mitigate impacts to specialstatus species and their habitat through off-site habitat conservation and management. The CVMSHCP provides long-term conservation and habitat protection for 27 covered species of special-status plants and animals. It provides California Endangered Species Act (ESA) and federal ESA take authorization of these covered species for conforming projects, subject to the Plan's administrative and mitigation requirements and United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) take authorizations. The CVMSHCP is managed by the CVCC, a joint powers authority of elected representatives, and funded through a combination of development impact fees, open space trust funds, and funding from permittees for infrastructure projects. The proposed Project's Lower Trailhead would be subject to CVMSHCP authorization which would effectively offset many of the Project's expected impacts to biological resources through habitat compensation and protection.

The spread of weeds, if any, is expected to be minimal and weed removal would be conducted by hand as part of the Project's O&M activities; no additional weed-specific mitigation is recommended. Mitigation measures listed and described below, including participation in the CVMSHCP for the Lower Trailhead, would reduce these impacts to less than significant. Special-status plants and wildlife in the Project vicinity, and potential Project impacts to them, are discussed below.

Special-Status Plants

The proposed Project could directly or indirectly impact plants identified as special-status species by the CDFW or USFWS. Latimer's woodland-gilia (*Saltugilia latimeri*, BLM Sensitive and California Rare Plant Rank [CRPR] 1B.2) and Joshua tree poppy (*Eschscholzia androuxii*, CRPR 4.3) are present at both the Upper and Lower Trailheads. Triple-ribbed milk-vetch (*Astragalus tricarinatus*), federally listed endangered, has a moderate potential to occur near the Upper Trailhead (but not within the limits of the parking areas, which would be located on disturbed roads and road edges). No other federally or state-listed threatened or endangered plants were located or are expected to occur on either of the proposed trailheads. Three other special-status plants could occur on one or both of the Project sites including: chaparral sand verbena (*Abronia villosa* var. *aurita*), Little San Bernardino Mountains linanthus (*Linanthus maculatus* ssp. *maculatus*), and desert spike-moss (*Selaginella eremophila*). Table B-1 in Appendix B identifies the special-status plants with potential to occur in the Project area.

The proposed Project could adversely impact special-status plants during construction by crushing or removing plants during site preparation or trail improvement. Recreationists may trample plants if they leave the designated trails during the Project's O&M phase. However, the proposed Project would increase visitor awareness of regulations, reduce off-road activity, and reduce littering, dumping, and shooting. Mitigation Measures BIO-1 through BIO-7 would minimize impacts to special-status plants to less-than-significant levels through implementing CVMSHCP avoidance and minimization measures, limiting disturbance areas, assigning a project biologist to conduct or oversee all biological resource mitigation during construction, requiring pre-construction surveys and avoidance for special-status species, monitoring construction to ensure compliance with resource avoidance and other requirements, species-specific avoidance and minimization measures, and worker training.

Federally or State Listed as Threatened or Endangered Wildlife

Without mitigation, the proposed Project could significantly impact federally or state-listed threatened or endangered wildlife species through potential injury or mortality to individual animals. The Mojave Desert tortoise (*Gopherus agassizii*) is state and federally listed as threatened and could occur on either of the proposed trailheads. Mitigation Measures BIO-1 and BIO-13 would reduce these impacts to less than significant by requiring the Project to provide a fee to fund the CVMSHCP and adhere to avoidance and minimization measures described in Section 4.4 of the CVMSHCP, as well as restricting construction activities in the vicinity of desert tortoises, monitoring construction to ensure compliance with resource avoidance and other requirements, species-specific avoidance and minimization measures, and worker training.

Other Special-Status Wildlife Species

BLM sensitive species and other special-status wildlife are present or could occur in the Project area, including Palm Springs pocket mouse, desert bighorn sheep, desert kit fox, Crotch bumble bee (*Bombus*

crotchii), Pallid San Diego pocket mouse, San Diego desert woodrat, American badger, pallid bat, western mastiff bat, western yellow bat, big free-tailed bat, and Townsend's big-eared bat (see Appendix B). Potential impacts to special-status species could include injury or mortality if individual animals enter work areas or are hit on Project access roads, removal of sensitive habitat, and nest and foraging disturbance during construction. Mitigation Measures BIO-1 through BIO-13 would minimize these impacts to to less-than-significant levels through implementing CVMSHCP avoidance and minimization measures, limiting disturbance areas, assigning a project biologist during construction, requiring pre-construction surveys for special-status species, monitoring construction, species-specific avoidance and minimization measures, worker training, proper trash containment during construction, minimizing standing water, avoiding wildlife entrapment, maintaining speed limits of 15 mph, and monitoring during operations.

Special-Status and Protected Birds

Several special-status birds could occur in the Project area. One of these, LeConte's thrasher (*Toxostoma lecontei*), is a covered species under the CVMSHCP with suitable habitat modeled at the southernmost end of the existing Long Canyon access road, but not at the Lower Trailhead site or other parking areas where ground disturbance would occur. Burrowing owl (*Athene cunicularia*) is also a covered species under the CVMSHCP, and has a moderate potential to occur at the Lower Trailhead area. Other special-status birds that may occur in the area, but are not covered under the CVMSHCP, are golden eagle (*Aquila chrysaetos*), prairie falcon (*Falco mexicanus*), and black-tailed gnatcatcher (*Polioptila melanura*). A loggerhead shrike (*Lanius ludovicianus*) was observed near the Lower Trailhead, potentially nesting. The other special-status birds have a low to high potential for foraging or nesting at the proposed trailheads, depending on species (see Appendix B).

The federal Migratory Bird Treaty Act (MBTA) prohibits take of any migratory bird, including active nests, except as permitted by regulation (e.g., waterfowl or upland game bird hunting). The MBTA broadly defines "migratory bird" as "any species or family of birds that live, reproduce or migrate within or across international borders at some point during their annual life cycle" and thus applies to most native bird species. California Fish and Game Code Section 3503 prohibits take, possession, or needless destruction of bird nests or eggs; Section 3503.5 prohibits take or possession of birds of prey or their eggs; and Section 3513 prohibits take or possession of any migratory nongame bird. With the exception of a few non-native birds such as European starling, the take of any birds or active bird nests or young is regulated by these statutes. The proposed Project may disturb nests on or near the proposed trailheads or in adjacent habitats. Foraging during construction activities could also be affected, although any effects would be negligible and temporary and would be less than significant. Mitigation Measures BIO-4 and BIO-5 would reduce impacts to less than significant by requiring preconstruction activities would occur.

Mitigation Measures

MM BIO-1: CVMSHCP Compliance. All applicable avoidance and minimization measures as described in Section 4.4 of the CVMSHCP will be observed during construction and O&M activities at both trailheads, although only the Lower Trailhead is within the CVMSHCP area. For O&M activities, the Conservancy shall ensure that personnel are instructed to be alert for listed wildlife species. If a desert tortoise is spotted at any Project work area, activities adjacent to its location will be halted and the animal will be allowed to move away from the activity area. In addition, consistent with Section 7.3.4.2 of the CVMSHCP, the Lower Trailhead and associated facilities will be designed to be consistent with CVMSHCP conservation Goals and Objectives, to avoid or minimize impacts to habitat occupied by

Covered Species, and to discourage intrusion into environmentally sensitive areas. Interpretive facilities, access control, and signage will encourage proper resource usage, and adverse effects of passive recreation, such as trampling vegetation and erosion, will be minimized.

- **MM BIO-2:** Limit Disturbance Areas. At all work areas, mechanical disturbance of previously undisturbed habitats (including soils) will be limited to the minimum area necessary. Project disturbance areas will be sited on previously disturbed areas to the extent feasible.
- **MM BIO-3:** Assign Project Biologist. The Conservancy will assign one or more acceptable biologists (according to CVMSHCP requirements) as Project Biologist(s) to conduct pre-construction surveys and construction monitoring at all Project work areas where ground disturbance would occur, as described in Mitigation Measures BIO-4 and BIO-5. An "acceptable biologist" means a biologist whose name is on a list, maintained by the Coachella Valley Conservation Commission (CVCC), of biologists who are acceptable to CVCC, CDFW, and USFWS for purposes of conducting surveys for Covered Species. The Project Biologist(s) would also conduct all surveys and monitoring for special-status species at the Upper Trailhead.
- **MM BIO-4: Preconstruction Surveys.** The Project Biologist(s) will conduct pre-activity clearance surveys for desert tortoise and their burrows, burrowing owls (year-round), nesting birds (at Project sites where construction or maintenance activities are scheduled from January 1 to August 31), special-status plants, and other special-status species. Construction or maintenance activities outside of the breeding season for nesting birds would not require nesting bird surveys. Surveys for desert tortoise, burrowing owl, and LeConte's thrasher will be conducted according to the avoidance and minimization measures in Section 4.4 of the CVMSHCP. Pre-activity surveys will be conducted no more than 7 days in advance of any ground- or vegetation-disturbing activities in any location. If any special-status species are found, an appropriate buffer will be allowed to leave on their own and shall not be handled unless otherwise authorized by CDFW and/or USFWS, as applicable.
- **MM BIO-5: Construction Monitoring.** The Project Biologist(s) will monitor ground-disturbing construction and maintenance activities, provide worker education programs, and supervise or perform other related actions. The Project Biologist(s) will be authorized to temporarily halt construction or maintenance activities if needed to prevent potential harm to any special-status species. Project activities may not disturb an active bird nest. If an active bird nest is located on or adjacent to the work site, a Project Biologist will designate and flag an appropriate buffer area around the nest where construction or maintenance activities will not be permitted. The buffer area will be based on the bird species and nature of the construction activity. The work supervisor will coordinate with the Project Biologist on planned or ongoing construction or maintenance activities and any specific pre-activity surveys or monitoring requirements for each activity in those areas.
- MM BIO-6: Special-Status Species Avoidance and Minimization Measures. The Project Biologist(s) and all workers shall regularly observe the work areas for desert tortoise and burrowing owl. The Project will adhere to avoidance and minimization measures for sensitive species as described in Section 4.4 of the CVMSHCP. For desert tortoise,

installing exclusionary fencing per CVMSHCP guidelines for trailhead construction would be infeasible. Instead, if a desert tortoise is observed, it will be left to move away from the work site on its own. Burrowing owl measures include establishing appropriate buffers, depending on the season, where no construction or maintenance activities may occur; and coordinating with Wildlife Agencies on appropriate eviction/passive relocation procedures.

- MM BIO-7: Worker Training. Employees will be trained to ensure that all workers on site (including contractors) are aware of all applicable mitigation measures for biological resources. Specifically, workers will be required to (1) limit all activities to approved work areas; (2) report any desert tortoise, burrowing owl, or other special-status species, or bird nest observation in the work areas and access routes to the supervisor or Project Biologist; (3) avoid contact with any wildlife that may approach a work area, and be aware of potential venomous reptile bites from carelessness or unnecessary harassment; (4) pick up and properly dispose of any food, trash, or construction refuse; and (5) report any spilled materials (oil, fuel, solvent, engine coolant, raw concrete, or other material potentially hazardous to wildlife) to the supervisor or on-site Project Biologist(s). During the training, the instructor will briefly discuss special-status species that may occur in the work areas, their habitats, and requirements to avoid or minimize impacts. In addition, all workers will be informed of civil and criminal penalties for violations of the federal Endangered Species Act, California Endangered Species Act, the Migratory Bird Treaty Act, relevant sections of the California Fish and Game Code, and the Bald and Golden Eagle Protection Act.
- **MM BIO-8:** Wildlife Avoidance. Workers will not be permitted to feed, harm, approach, harass, or handle wildlife at any time, except to move animals out of harm's way, and only as directed by a supervisor. Listed species will not be handled; if a desert tortoise enters a work area, it will not be disturbed and will be allowed to leave on its own. This condition will not exempt workers, including the Project Biologist(s), from any safety policies with regard to venomous reptiles.
- **MM BIO-9: Trash, Refuse, Concrete, and Other Construction Materials.** All trash and food materials will be properly contained within vehicles or closed refuse bins while on any site, and will be regularly removed from the site (at least on a weekly basis) for proper disposal. All refuse from construction or maintenance activities will be removed from each work site upon completion of work. No raw cement, concrete or washings thereof, asphalt, paint, oil, solvents, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, shall be disposed of on-site or allowed to spill onto soil. Cleanup of any spilled material shall begin immediately.
- **MM BIO-10: Minimize Standing Water.** Water applied to dirt roads and construction areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards, to prevent the formation of puddles, which could attract wildlife to construction sites.
- **MM BIO-11:** Water Storage. All water containers (i.e., tanks or trailers) will be securely covered to prevent wildlife from entering the containers and becoming trapped.
- **MM BIO-12: Speed Limit.** To minimize potential impacts to special-status wildlife, no vehicles will be permitted to exceed 15 mph while traveling on dirt access roads, and vehicle use will be

limited to the access routes and parking/trailhead areas. There will be no off-road vehicle use.

MM BIO-13: Operations Monitoring. The Conservancy, in coordination with the BLM, NPS, and USFWS, will identify a series of "photo points" on each trailhead and parking area, for long-term photo documentation of trail condition and resource damage (if any). The photo points will be located at representative sites likely to sustain high use (e.g., parking areas), likely to support listed species, or vulnerable to resource damage (e.g., steep trail segments). Each photo point will be visited and photographed at least annually. Based on the documentation, Conservancy will determine and implement appropriate follow-up action (e.g., trash cleanup, trail or kiosk maintenance, or new signage). In addition, Conservancy will provide annual documentation to the BLM, NPS, and USFWS of the photo-point monitoring and follow-up measures.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Vegetation along the southern half of the Project area is dominated by Sonoran Creosote Bush Scrub. Vegetation along the northern half of the Project area is dominated by Joshua Tree Woodland and Oak Woodland. These vegetation types are described in the following paragraphs.

Creosote bush scrub (*Larrea tridentata***Shrubland Alliance).** Creosote Bush Scrub is the most widespread vegetation community in the Colorado Desert and is the dominant community in the southern half of the Project area. Sonoran creosote bush scrub is characterized by its dominant species creosote bush (*Larrea tridentata*) and develops best on coarse, well-drained soils. Co-dominant species observed include white bur-sage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), and cheesebush (*Ambrosia salsola*). This habitat also supports a diverse assemblage of annuals including desert dandelion (*Malacothrix glabrata*), Fremont pincushion (*Chaenactis fremontii*), sand blazing star (*Mentzelia involucrata*), desert bells (*Phacelia campanularia*), and many others. The dry wash that follows Long Canyon is characterized by the presence of Mojave rabbitbrush (*Ericameria paniculata*) and cheesebush. The existing access road, Lower Trailhead, and parking areas are outside of the wash along its east side. The existing trail enters the wash near the boundary with JTNP and follows the wash through the canyon bottom within the park.

Joshua Tree Woodland (*Yucca brevifolia* **Woodland Alliance).** Joshua tree woodland is a unique desert woodland dominated by Joshua trees (*Yucca brevifolia*) which emerge above lower growing shrubs. Other shrubs present include California juniper (*Juniperus californica*), Parry's jujube (*Ziziphus parryi*), California buckwheat (*Eriogonum fasciculatum*), Anderson thornbush (*Lycium andersonii*), and Nevada ephedra (*Ephedra nevadensis*). Joshua tree woodland is common along the northern half of the Project area, including along the access road to the Upper Trailhead site.

Muller oak chaparral (*Quercus cornelius-mulleri* **Shrubland Alliance).** Muller oak chaparral is an uncommon vegetation type limited to upper slopes and ridgelines in desert transitional habitats. It is dominated by Muller oak (*Quercus cornelius-mulleri*) and co-dominants such as California juniper, black brush (*Coleogyne ramosissima*), Single leaf pinyon (*Pinus monophyla*), and Mohave yucca (*Yucca schidigera*). Muller oak chaparral is present at the summit of Long Canyon near the Upper Trailhead.

The proposed Project would not affect riparian habitat. However, the vegetation communities at the Upper Trailhead, Joshua tree woodland and Muller oak chaparral, are considered sensitive by the CDFW (CDFW, 2018). Direct impacts to these sensitive vegetation types would be avoided with implementation

of Mitigation Measure BIO-2, which would limit mechanical disturbance to previously disturbed habitats (including soils) to the extent practicable to prevent impacts to sensitive communities.

Indirect effects to nearby vegetation could include dust, the spread of weeds, and trampling and degradation if users leave the designated trail and parking areas. the Project would focus visitors into designated areas, reducing the current dispersed disturbance. The proposed Project would also increase visitor awareness of regulations, reduce off-road activity, and reduce littering, dumping, and shooting. The spread of weeds, if any, is expected to be minimal and weed removal would be conducted by hand as part of the Project's O&M activities (see Section 4.12, Operations and Maintenance). No additional weed-specific mitigation is required.

Mitigation Measure

BIO-2: Limit Disturbance Areas. Full text of measure is presented above in Section 5.4(a).

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?

LESS THAN SIGNIFICANT IMPACT. There are no wetlands on or adjacent to any of the proposed Project sites. However, ephemeral channels and desert washes that may meet criteria as waters of the US or waters of the State are on or adjacent to the Project sites. The proposed Lower Trailhead site and existing access road are adjacent to the ephemeral Long Canyon wash. The existing access road, Lower Trailhead, and parking areas are outside of the wash along and above its east side. The existing trail enters the wash near the boundary with JTNP and follows the wash through the canyon bottom within the park. No ground disturbance would occur within the wash. The Upper Trailhead and supplemental parking areas would be along existing dirt access roads and would be outside of any ephemeral drainages.

The access road to the Upper Trailhead would require improvements in some areas where the dirt road has been degraded by winter storms. The improvements may consist of grading and placing rock similar to trailhead preparation, or other means to stabilize the road and allow access into the Upper Trailhead for all passenger vehicles. The jurisdictional limit of any wash features have not been delineated. Depending on the precise location of the jurisdictional limits, grading activities for the road improvement could alter a streambed by placing or removing fill material. This effect, should it occur, would not significantly affect biological resources, but may necessitate authorization from regulatory agencies, as follows:

- CDFW, under Section 1600 of the California Fish and Game Code (Lake and Streambed Alteration Agreement);
- California Regional Water Quality Control Board, under Section 401 of the federal Clean Water Act (CWA); or
- US Army Corps of Engineers, according to Section 404 of the CWA (unlikely because the Upper Trailhead area drains to closed intrastate basins outside of federal jurisdiction).

Impacts to any washes along the access road would be regulated through the permitting processes identified above. These impacts for the road improvements are expected to be 0.3 acre or less and would occur within the existing dirt road.

The Long Canyon Trail follows the Long Canyon Wash for most of its length, and crosses numerous small side washes which may meet jurisdictional criteria as waters of the state or waters of the US. The expected trail work could include streambed alterations such as placement or removal of fill material; however, these alterations (if any) would be minimal, would only be conducted where necessary for safety along the existing recreational trail, and would not be subject to permitting.

d. Would the project 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 wildlife nursery sites?

NO IMPACT. The proposed Project construction and trail usage would not impact wildlife movement or nursery areas. Some wildlife may avoid the area while construction activities are occurring, although this avoidance would be temporary and have a negligible effect due to the availability of surrounding habitat. Trail improvement and trailhead construction does not include barriers that may impede wildlife movement. Therefore, no impacts would occur.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

NO IMPACT. The proposed trailhead construction is a covered activity under the CVMSHCP at the Lower Trailhead. The Upper Trailhead is within the Town of Yucca Valley. The Town's Plant Protection and Management Ordinance regulates the removal of Joshua trees, yuccas, California junipers, pinyon pines, manzanitas, and other native desert plants. A permit is required for removal of any covered plant. However, the Upper Trailhead and associated improvements would be constructed on disturbed roads edges with little to no vegetation removal anticipated. If final engineering determines the need for removal of any protected plant, the Conservancy would obtain the required permits from the Town (see Table 4-1).

The Upper Trailhead is also within a designated Open Space Resource Area and a designated Wildlife Corridor Evaluation Area as identified in the Town's General Plan, Open Space and Conservation Element (Town of Yucca Valley, 2014). The overall goals of the Wildlife Corridor Evaluation and Open Space Resource Areas are to:

- Preserve the natural and scenic character of the Town
- Protect and preserve sensitive biological resources, while allowing land development in accordance with the General Plan Land Use Plan/Map
- Support less intense development in proximity to conservation areas
- Support wildlife movement through identified linkage areas
- Provide outdoor, trail-oriented recreational activities.

The Project directly supports the last goal in the list, and as a low-impact recreational trail project it does not conflict with the other goals. It would not introduce new roads, fences, or other barriers to wildlife movement. Therefore, the Project would not conflict with any local policies or ordinances to protect biological resources.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The Lower Trailhead, Long Canyon access road, and associated supplemental and alternative parking areas are within the CVMSHCP area, and are subject to the CVMSHCP conservation requirements. Specifically, they are within the Upper Mission Creek/Big Morongo Canyon and Long Canyon Conservation Areas, for which sand source and sand transport are identified as essential ecological processes (see Figure 5-1). However, the Project would have no effect on sand source and transport because it would not create barriers to fluvial or aeolian transport or result in development within the wash. Additionally, the portion of the Project within the Sand and Snow National Monument is not on federal lands, and therefore would not affect the Monument (Figure 5-1).

Impacts to CVMSHCP covered species located on private lands (including CVMSHCP conservation lands) are authorized by USFWS and CDFW, and mitigated through the CVMSHCP. With incorporation of Mitigation Measure BIO-1, impacts to CVMSHCP conservation areas would be covered through payment of a fee to fund the CVMSHCP or other appropriate mechanism based on the type of proposed activity. Therefore, the Project would not conflict with the CVMSHCP.

Mitigation Measure

BIO-1: CVMSHCP Compliance. Full text of measure is presented above in Section 5.4(a).

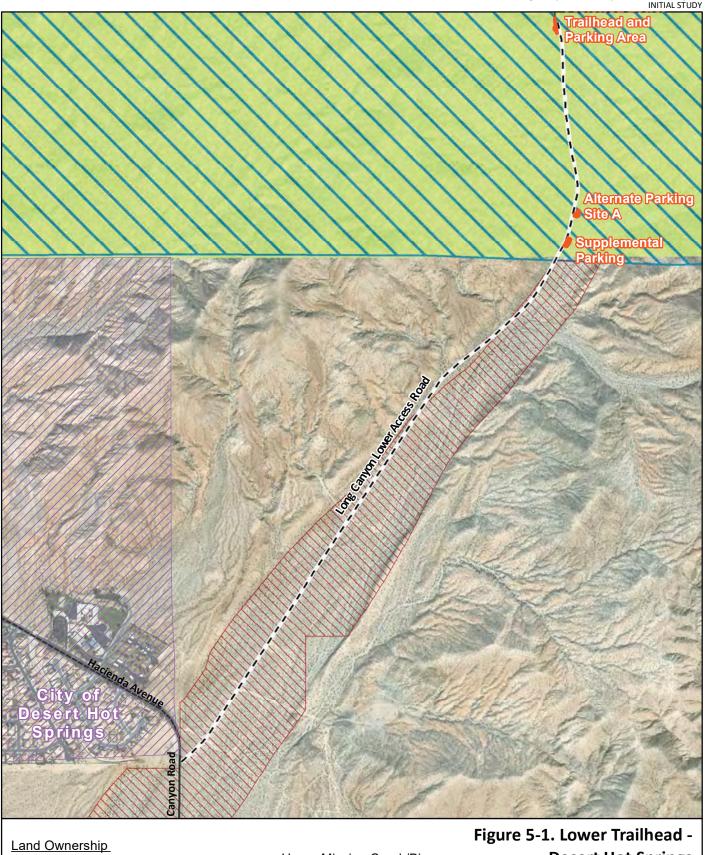
5.5 Cultural Resources

CULTURAL RESOURCES Would the 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 historical resource pursuant to §15064.5?			\square	
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			\square	
C.	Disturb any human remains, including those interred outside of dedicated cemeteries?		\boxtimes		

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5 [§15064.5 generally defines historical resource under CEQA]?

LESS THAN SIGNIFICANT IMPACT. A record search for the Upper Trailhead area was conducted at the South Central Coast Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University, Fullerton, on May 16, 2019. For the Lower Trailhead area, a records search was conducted at the CHRIS facility located in the Eastern Information Center (EIC) at the University of California, Riverside, on April 8, 2019. The results of the SCCIC record search determined that there are no historic properties or historical resources present within one mile of the proposed Upper Trailhead (Macko, 2019a). The results of the EIC record search identified five recorded historical resources within one mile of the proposed Lower Trailhead, which are listed in Table 5.5-1 (Macko, 2019b).





Sand to Snow National Monument Upper Mission Creek/Big Morongo Canyon Conservation Area

City Boundary

gure 5-1. Lower Trailhead -Desert Hot Springs Conservation Areas



Site No.	Resource Description	Cultural/Temporal Affiliation	Construction or Recreation Impact
P-33-12877 CA-RIV-7161H	Extensive tailings piles and structural remains from tunnel construction for the Colorado River Aqueduct (1930s).	Historic	No
P-33-12879 CA-RIV-7162H	Gauging station likely associated with Colorado River Aqueduct (1930s)	Historic	No
P-33-12941 CA-RIV-7190	Historic can dump	Historic	No
P-33-18088 CA-RIV-9290	Historic can dump/shooting range	Historic	No
P-33-18089 CA-RIV-9291	Historic can dump and linear rock feature	Historic	No
Source: Macko, 2019b)		

Table 5.5-1. Previously Recorded Resources within One Mile of Lower Trailhead

On April 23, 2019 Aspen cultural resource Field Director, Albert Knight, conducted a survey of the Upper and Lower Trailheads. An intensive pedestrian survey was conducted by walking systematic transects spaced 3 to 5 meters apart (approximately 10-16 feet) across all accessible areas of the Project trailhead locations and parking areas. The existing Long Canyon Trail was not surveyed for this assessment because it would not be subject to ground disturbance. Documentation included digital photographs and notes with locational reference based on aerial imagery. The entire survey area was accessible by foot, and ground visibility was generally 80 to 100 percent.

No historical resources were located in the project areas. The large historic resource at CA-RIV-7161H was visible at a distance from the Lower Trailhead.

Project activities at the Lower Trailhead would include establishing two 3,750-square foot parking areas. Each of the parking areas would be levelled and covered with crushed rock or gravel, but would not be paved. A visitor information kiosk would be placed on the edge of the primary parking area. In addition, the Project would slightly widen an existing access trail around the east side of the MWD gate to accommodate equestrians. None of the proposed Project activities would involve ground disturbance at or adjacent to a previously recorded cultural resource listed in Table 5.5-1. Further, no ground disturbance would occur on federal lands in JTNP other than minor maintenance of the existing trail and resources such as the Chuckwalla Bill Ruins would not be affected. By confining any actions to the established roads and cleared areas, this Project would have a less-than-significant impact on any known historical resources.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

LESS THAN SIGNIFICANT IMPACT. The SCCIC and EIC records searches included information on Archaeological Determinations of Eligibility for the Project area. According to the SCCIC records search, no archaeological surveys have been performed within one mile of the proposed Upper Trailhead. Although the EIC records search identified five historic cultural resources within one mile of the Lower Trailhead, no archaeological resources were identified. As there are no known archaeological resources in the Project area, impacts to an archaeological resource are anticipated to be less than significant.

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The Upper and Lower Trailhead parking areas would be located in a region that has been used by Native Americans both historically and prehistorically. Thus, the Project area is considered sensitive for encountering human remains. Project-related ground-disturbing activities have the potential to uncover human remains that may be buried below the ground surface. If any human remains are encountered during construction of the Project, Mitigation Measure CR-1 would be implemented, thereby reducing potential impacts to human remains to a less-than-significant level.

Mitigation Measure

CR-1 Assess and Treat Inadvertent Discovery of Human Remains. All human remains discovered are to be treated with respect and dignity. Upon discovery of human remains, all work within 50 feet of the discovery area must cease immediately, nothing is to be disturbed, and the area must be secured. The County Coroner's Office must be notified within 24 hours. The Coroner has two working days to examine the remains after notification. The appropriate land manager or owner of the site is to be called and informed of the discovery. If the remains are located on federal lands, federal land managers, federal law enforcement, and the federal archaeologist must be informed as well, due to complementary jurisdiction issues. It is very important that the human remains, and the area around them, are undisturbed and the proper authorities called to the scene as soon as possible, as it could be a crime scene. The Coroner will determine if the remains are archaeological, historic or are of modern origin, and will determine if there are any criminal or jurisdictional needs to be addressed.

If upon examination the Coroner determines that the remains are archaeological or historic-era, the Coroner will make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative. If the Coroner believes the remains to be those of a Native American, he/she shall contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains. The MLD has 48 hours to make recommendations to the landowner for treatment or disposition of the human remains. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in an area of the property secure from further disturbance. If the landowner does not accept the descendant's recommendations, the owner or the descendant may request mediation by the NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains is a felony (Section 7052).

5.6 Energy

	IERGY ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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?				\boxtimes

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

LESS THAN SIGNIFICANT IMPACT. During construction, the Project would consume energy through fuel used by construction vehicles and equipment and through energy bound in construction materials, such as steel and manufactured or processed materials. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site grading and kiosk construction, and would be temporary in nature. Construction of the proposed Project would require minimal construction materials such as concrete and steel for informational kiosks and signage. However, these materials do require energy to acquire, manufacture, process, and transport.

Given high fuel prices, the Conservancy has a strong financial incentive to use a labor force and recycled materials or products sourced from nearby areas in order to reduce the costs of transporting workers and construction materials. In addition, it is reasonable to assume that the production of the construction materials would employ energy conservation practices in the interest of minimizing the costs of creating the construction materials.

After construction, the Project does not include residential or other development that would consume energy. This would ensure no increase in energy consumption at the Project site would occur. While the Project would increase recreationists at the site, thus increasing drivers utilizing fuel for accessing the trailheads, the Long Canyon Trail is an existing trail frequently used by recreationists. The net increase of recreationists is not expected to use energy in an inefficient, wasteful, or unnecessary manner. Additionally, development of the Project may decrease County services to the trailheads for trash removal and other reasons. Impacts would be less than significant and no mitigation is required.

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No IMPACT. Although the Project would increase recreationists at the trailhead sites, thus increasing drivers utilizing fuel for accessing the trailheads, energy consumption of the Project is considered minimal and the Project would not include any activities or components that would conflict with or obstruct the state or local renewable energy or energy efficiency plans. No impact would occur.

Geology and Soils 5.7

G	EOLOGY AND SOILS	Potentially	Less Than Significant	Less Than	
W	ould the project:	Significant	With Mitigation Incorporated	Significant	No Impact
a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv) Landslides?			\boxtimes	
b.	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
C.	Be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*				\boxtimes
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes
*0	cology and Saile guartian (d) reflects the surrant 2016 California Building Ca	de (CDC) unhie	le te les set se the l	stansational Du	ilding Code

*Geology and Soils question (d) reflects the current 2016 California Building Code (CBC), which is based on the International Building Code (2015), effective January 1, 2017. The CBC is updated every three years. Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project 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? Refer to Division of Mines and Geology Special **Publication 42.**

LESS THAN SIGNIFICANT IMPACT. The Long Canyon Trail crosses the San Andreas Fault (USGS, 2019a). With the exception of informational kiosks and signage, the proposed Project would not include any structures. Trail construction workers or recreational users could be injured or killed by surface rupture of this fault. However, due to the short construction period for the proposed Project and the anticipated sporadic and transitory nature of recreational use during proposed Project operation, the likelihood of injury or death due to fault rupture is very low. This impact would be less than significant and no mitigation is required.

ii) Strong seismic ground shaking?

LESS THAN SIGNIFICANT IMPACT. As discussed under Question 5.7(a).i, the Long Canyon Trail is traversed by the San Andreas Fault and the entire Project area is within an active and seismic area that can be expected

to produce strong ground shaking throughout area during an earthquake. The proposed Project would not include any housing or habitable structures. Therefore, structural damage due to strong ground shaking would not occur. The trailheads and existing trail and access roads are located in areas characterized as open space and would not be subject to hazards from collapsed buildings or falling objects. Strong ground shaking could cause trail workers or recreational users to lose their footing or fall (particularly on steep sections of trail), which could result in injury or death. However, strong ground shaking during past large earthquakes in Southern California has rarely resulted in injury in the absence of structures or falling objects. Informal recreation already occurs in the proposed Project area, and the Long Canyon Trail is an existing designated trail in JTNP. Due to the short construction period for the proposed Project and the anticipated sporadic and transitory nature of recreational use during proposed Project operation, the likelihood of injury or death from strong seismic ground shaking is very low. This impact would be less than significant and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

LESS THAN SIGNIFICANT IMPACT. Most of the proposed Project area is classified by Riverside County as having a moderate potential for liquefaction (County of Riverside, 2015). However, the proposed Project would not include any housing or habitable structures and the potential for injury or death due to liquefaction would be negligible. This impact would be less than significant and no mitigation is required.

iv) Landslides?

LESS THAN SIGNIFICANT IMPACT. Strong ground shaking could result in landslides or rock fall on steep slopes along the Long Canyon Trail. Although seismically induced landslides could result in injury to or death of a recreational user of the improved trail system that would be constructed under the proposed Project, recreation already occurs in the proposed Project area. The likelihood that a recreationist would be injured or killed by seismically induced landslide is very low due to the anticipated sporadic and transitory nature of recreational use of the proposed Project trail improvements. This impact would be less than significant and no mitigation is required.

b. Would the project result in substantial soil erosion or the loss of topsoil?

LESS THAN SIGNIFICANT IMPACT. Construction of the proposed Project would only disturb soil at the two proposed trailhead locations. This disturbed soil could be subsequently eroded during a storm event and result in increased sedimentation of a nearby waterbody. However, the potential for construction of the proposed Project to result in increased erosion and sedimentation is very small due to the small amount of soil disturbance, the generally arid climate, and the generally flat terrain at the trailhead parking areas (the areas where the majority of the soil disturbance would occur). The Long Canyon Trail already exists and follows a natural wash. Accordingly, minimal construction work would be necessary; only site cleanup (e.g., of litter, small dump sites, shotgun shell debris, etc.) and minor surface clearing (e.g., natural debris that impedes walking) would occur.

If the proposed Project disturbs more than 1 acre in total, the Conservancy would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) to comply with Clean Water Act National Pollutant Discharge Elimination System (NPDES) requirements. Compliance with these requirements would include preparation of a Storm Water Pollution Prevention Plan, which would specify Best Management Practices to minimize erosion and to prevent the loss of topsoil. This impact would be less than significant and no mitigation is required.

c. Would the project be located on geologic units 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?

LESS THAN SIGNIFICANT IMPACT. The proposed Project is located in a seismically active area that contains several soil types and geologic formations that could become unstable. The proposed Project is located on fine to coarse sand, badlands, and rock outcrops. Most of these soils are highly susceptible to erosion. The areas of the proposed Project with steeper slopes are susceptible to landslide, especially seismically-induced landslide. The risk of damage from unstable soils or geologic units is low because the proposed Project would not include the construction of any structures (apart from informational kiosks and signage). The total amount of ground disturbance would be minimal, and limited to ground disturbance on flat ground creating parking areas at the two proposed trailhead locations. Therefore, the potential for proposed Project construction to result in unstable geologic units or soil is very low. This impact would be less than significant and no mitigation is required.

d. Would the project located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

NO IMPACT. With the exception of informational kiosks and signage, construction of the proposed Project would not include any structures. No housing or habitable structures would be built. Also, the proposed Project does not contain expansive soils (soils with high clay particle content, typically classified as Vertisols). No impact would occur.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

NO IMPACT. The proposed Project would not include the use of septic tanks or alternative wastewater disposal systems. No wastewater facilities would be constructed as part of the proposed Project. If sanitation facilities are required during the construction period, temporary portable toilets will be provided for the workers by a licensed contractor. No impact would occur.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

NO IMPACT. The proposed Project would not destroy a unique paleontological resource or unique geologic feature. A records search indicated that the Long Canyon Trail has a very low potential for fossils (USGS, 2019b). The main formation consists of plutonic gneiss (gn), a rock that cooled 100 million years ago beneath the earth's crust. The Project itself follows the canyon bottom, which consists of quaternary alluvium (qa) that is bordered on the sides of the Canyon by gravel flood deposits (Qfg). As Project-related ground disturbance would only affect surface alluvium and colluvium that originated from a non-sensitive rock formation, there would be no impact to paleontological resources.

5.8 **Greenhouse Gas Emissions**

GREENHOUSE GAS EMISSIONS Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b.	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				
Sia	inificance criteria established by CEOA Guidelines. Appendix G				

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?

LESS THAN SIGNIFICANT IMPACT. The proposed Project would generate temporary GHG emissions through construction activities. The Project would also create a small amount of indirect GHG emissions from water use for dust suppression, but there is no incremental electricity use associated with this Project. Operation and maintenance of the proposed Project would not include any activities that generate significant amounts of GHG emissions.

Greenhouse gases are gases that trap heat in the atmosphere and are emitted by natural processes and human activities. Examples of GHGs that are produced both by natural processes and industry include CO_2 , methane (CH₄), and nitrous oxide (N₂O). The accumulation of GHGs in the atmosphere regulates the earth's temperature. GHGs have varying amounts of global warming potential (GWP). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. By convention, CO₂ is assigned a GWP of 1. In comparison, CH₄ has a GWP of 25, which means that it has a global warming effect 25 times greater than CO_2 on an equal-mass basis. To account for their GWP, GHG emissions are often reported as CO_2e (CO_2 equivalent). The CO₂e for a source is calculated by multiplying each GHG emission by its GWP, and then adding the results together to produce a single, combined emission rate representing all GHGs.

The SCAQMD has established a GHG significance threshold of 10,000 tons per year of CO₂e. When determining a Project's contribution to CO₂e threshold, project emissions (construction and operation) are amortized over the project life (SCAQMD, 2019). The Project's operation emissions are not known and may or may not cause an increase in GHG emissions due to additional use of the trailheads, or actually decrease GHG emission due to those using these facilities instead of traveling to more distant trails. Regardless, these facilities are not expected to cause a large change to existing GHG emissions from vehicles accessing the proposed trailheads. The total GHG emissions from the Project are conservatively estimated to be a total of 7 metric tons of CO₂e (AEG, 2019), when amortized over the 30-year life of the Project would be a little over 0.2 metric tons per year, which is a very small fraction of the San Bernardino GHG Emissions Reduction Plan review standard threshold of 3,000 MT CO2e per year. Therefore, the Project's GHG emissions would be nominal and well below the SCAQMD significance threshold. Impacts would be less than significant.

b Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

NO IMPACT. The GHG emissions for the proposed Project, as described above, would be minimal during construction and operation. Estimated GHG emissions from the proposed Project would be well below the threshold of the federal and State mandatory reporting regulation and contribute negligibly to the SCAQMD GHG annual threshold. The proposed Project's GHG emissions would not trigger regulatory action under the federal 40 CFR Part 52 and the State Cap-and-Trade regulations, and are found to be consistent with all applicable plans, policies, and regulations. No impact would occur.

5.9 Hazards and Hazardous Materials

	AZARDS AND HAZARDOUS MATERIALS puld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
C.	Emit hazardous emissions or handle hazardous or acutely haz- ardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard 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?				\boxtimes
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			\boxtimes	
0:	unificance oritoria established by CEOA Cuidelines, Appendix C				

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

LESS THAN SIGNIFICANT IMPACT. Construction of the trailhead parking areas would require limited use of heavy machinery and construction equipment, such as a grader, front loader, and dump truck. The operation of these vehicles and machinery could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants. If the proposed Project would disturb more than 1 acre in total, the Conservancy would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) to comply with Clean Water Act NPDES requirements. Compliance with these requirements would include preparation of a Storm Water Pollution Prevention Plan, which would specify Best Management Practices to quickly contain and clean up any accidental spills or leaks. Due to the short construction period and the minimal amount of construction equipment and associated hazardous materials to be used in construction of the proposed Project, the potential for an accidental release of hazardous materials to harm the public or the environment would be minor. This potential would be further reduced through compliance with applicable regulations.

In additional to the potential spill or accidental release of hazardous materials, construction of the proposed Project could encounter or mobilize previously unidentified existing contamination. The potential for existing contamination to be encountered is small due to the small area of ground disturbance and the low risk of contamination associated with past and present land uses, including open space, rural residential development, and aqueduct construction. Any previously unidentified contamination that is encountered during construction of the proposed Project would be properly handled, transported, and disposed of at an appropriate disposal facility in accordance with applicable regulations. This impact would be less than significant, and no mitigation is required.

b. Would the project 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?

LESS THAN SIGNIFICANT IMPACT. Other than the hazardous materials associated with construction equipment that are described above (fuel, engine oil, engine coolant, and lubricants), neither construction nor operation of the proposed Project would involve the storage or use of hazardous materials. There are no reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment other than the potential for accidental spills or leaks from construction equipment. This impact would be less than significant, and no mitigation is required.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

NO IMPACT. There are no schools within 0.25 mile of the proposed Project. The closest schools are Joshua Springs Christian School, which is located 2.2 miles northeast of the proposed Upper Trailhead and Julius Corsini Elementary School, which is located 1.5 mile southwest of the proposed Lower Trailhead.

d. Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No IMPACT. The proposed Project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (also known as the Cortese List). Neither construction nor operation of the proposed Project would create a significant hazard to the public or the environment due to the presence of existing hazardous materials.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No IMPACT. The closest airport to the proposed Project is the Bermuda Dunes Airport, which is located 17.5 miles east-southeast of the of the proposed Lower Trailhead. Construction and operation of the proposed Project would not result in any new lighting or any new tall structures that could result in an air traffic safety hazard or conflict with an airport land use plan.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

NO IMPACT. Construction and operation of the proposed Project would not block ingress or egress on any roadway. Trail improvements, including the construction of three trailhead parking lots, would not impair

implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Would the project expose people or structures, either directly or indirectly, to a significant risk of а. loss, injury, or death involving wildland fires?

LESS THAN SIGNIFICANT IMPACT. The proposed Project would increase recreational use, which could lead to an increase in ignition sources for wildland fires, such as improperly discarded smoking materials or illegal campfires. However, the trailhead locations and Long Canyon Trail are already accessible by the public and would be improved by the proposed Project. It is not expected that increased recreational use on this existing trail would substantially increase the risk of wildland fire. Further, the proposed Project improvements are expected to reduce the use of informal footpaths and illegal dumping affecting sensitive habitats by designating trails in the area. By increasing appropriate usage and visibility, the Project is expected to reduce unauthorized OHV use, shooting, illegal dumping, and vandalism at the two Project trailhead sites. These activities represent a potential source of wildland fire. Therefore, a decrease in unauthorized OHV use, shooting, and illegal dumping would result in a reduction of wildland fire risk (a beneficial impact). Overall, this impact would be less than significant, and no mitigation is required.

Less Than HYDROLOGY AND WATER QUALITY Potentially Significant Less Than Would the project: Significant With Mitigation Significant Impact Incorporated Impact No Impact Violate any water quality standards or waste discharge \boxtimes a. requirements or otherwise substantially degrade surface or ground water quality? \boxtimes Substantially decrease groundwater supplies or interfere \square \square \square h substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? Substantially alter the existing drainage pattern of the site or area, C. including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: \boxtimes \square result in substantial erosion or siltation on- or off-site; \square \square (i) (ii) substantially increase the rate or amount of surface runoff in \square \square a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the \square \square capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows? \boxtimes In flood hazard, tsunami, or seiche zones, risk release of \square \square \square \boxtimes d. pollutants due to project inundation? e. Conflict with or obstruct implementation of a water quality control \boxtimes plan or sustainable groundwater management plan?

5.10 Hydrology and Water Quality

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

LESS THAN SIGNIFICANT IMPACT. Construction of the proposed Project would disturb soil at each trailhead. Disturbed soil could be subsequently eroded during a storm event and result in increased sedimentation of a nearby waterbody. However, the potential for construction of the proposed Project to result in increased erosion and sedimentation is very small due to the small amount of soil disturbance at each trailhead location, the generally arid climate, and the lack of nearby perennial waterbodies. Additionally, parking areas would be compacted to support vehicles, further reducing their erosion potential.

The use of construction equipment to prepare the trailhead sites could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants. These hazardous materials could contaminate a nearby waterbody either directly or indirectly through subsequent transport by stormwater runoff. Contamination of a nearby waterbody by hazardous materials is unlikely due to the short construction period, the minimal amount of construction equipment and associated hazardous materials to be used in construction of the proposed Project, the generally arid climate of the region, and the lack of nearby perennial waterbodies. Because the proposed Project would not disturb more than 1 acre in total, there would be no need for obtaining permits related to discharges of stormwater associated with construction activity. Such an acreage threshold is established by regulatory agencies when projects have such potential, meaning the proposed project is below such a threshold. Construction activities would follow normal practices to minimize erosion and to quickly contain and clean up any accidental spills or leaks. Impacts would be less than significant and no mitigation is required.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

NO IMPACT. The small amount of water that would be required during construction of the proposed Project (mainly for dust suppression) would be obtained from a private water purveyor or through an agreement with a local municipality. No groundwater would be extracted for construction or operation of the proposed Project. No new impermeable surfaces would be created, and neither construction nor operation of the proposed Project would interfere substantially with groundwater recharge.

c. Would the project 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;

LESS THAN SIGNIFICANT IMPACT. Construction of the proposed Project would involve minor alterations to the existing drainage pattern of the area, through the grading of trailhead parking areas. These minor alterations of the existing drainage pattern would not result in substantial erosion or siltation on- or off-site. The climate of the region is generally arid and both streamflow and overland sheet flow occur only briefly following storm events. The drainage alterations would be designed to prevent erosion on-site. Also, the minor drainage alterations would not result in increased runoff nor would they substantially concentrate sheet flow across the proposed Project sites. No substantial increase in off-site erosion or siltation due to the minor drainage pattern alterations is expected. This impact would be less than significant, and no mitigation is required.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

LESS THAN SIGNIFICANT IMPACT. Construction of the proposed Project would involve minor alterations to the existing drainage pattern of the area, through the grading of trailhead parking areas. These minor alterations of the existing drainage pattern would not result in a substantial increase in the rate or amount of surface runoff during a storm event. This impact would be less than significant, and no mitigation is required.

(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

LESS THAN SIGNIFICANT IMPACT. Construction of the proposed Project would involve minor alterations to the existing drainage pattern of the area, through the grading of trailhead parking areas. These minor alterations of the existing drainage pattern would not require new stormwater drainage systems. While the Project would increase recreational use of the area and result in vehicles parking in the new trailhead parking areas (which could leak small amounts of fluids), the Project is not considered to have a high potential or result in the substantial addition of polluted runoff as the proposed trailhead sites are already being used as informal parking areas for recreationists and others using the area. This impact would be less than significant, and no mitigation is required.

(iv) impede or redirect flood flows?

NO IMPACT. The proposed Project would not alter or encroach on any levee or flood control infrastructure and would not substantially alter the flood patterns in the area. No impact would occur.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

NO IMPACT. The proposed Project is not located near to an ocean or enclosed waterbody and would not cause or be subject to inundation by tsunami or seiche. The proposed Project would not alter or encroach on any dam or levee and would not substantially alter the flood patterns in the area. Construction and operation of the proposed Project would encourage increased recreational use in the area, but the area is already used for informal recreation and the current risk of loss, injury, or death involving flooding would not increase as a result of the proposed Project. No impact would occur.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

LESS THAN SIGNIFICANT IMPACT. As described under Question 5.10 (a), the proposed Project would not disturb more than 1 acre in total and there would be no need for obtaining permits related to discharges of stormwater associated with construction activity. Such an acreage threshold is established by regulatory agencies when projects have such potential, meaning the proposed project is below such a threshold. Construction activities would follow normal practices to minimize erosion and to quickly contain and clean up any accidental spills or leaks. Additionally, the small amount of water that would be required during construction of the proposed Project (mainly for dust suppression) would be obtained from a private water purveyor or through an agreement with a local municipality. No groundwater would be extracted for construction or operation of the proposed Project. No new impermeable surfaces would be created, and neither construction nor operation of the proposed Project would conflict or obstruct with any sustainable groundwater management plan. This impact would be less than significant, and no mitigation is required.

5.11 Land Use and Planning

LAND USE PLANNING Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Physically divide an established community?				\boxtimes
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?				
<u>.</u>					

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project physically divide an established community?

No IMPACT. A community may be divided if a project were to introduce a new physical barrier through that community (e.g., a highway or railroad). The proposed Project would utilize an existing trail within a designated trail corridor. Project activities would be limited to minor improvements to public access that include leveling/covering the Lower Trailhead parking lot with crushed gravel, and minor grading at the Upper Trailhead parking lot to provide an access driveway (see Section 4.11). A visitor information kiosk would also be placed at the northern and southern ends of the trail. None of the proposed activities would introduce a new barrier within Riverside County or the Town of Yucca Valley. No impact would occur.

b. Would the project 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

NO IMPACT. The following discussion describes the Project's consistency under each applicable set of policies. The Project would be consistent with all applicable land use plans, policies, and regulations, and there would be no conflict under this criterion.

Riverside County General Plan: Multipurpose Open Space Element

The County of Riverside has developed the following policies specific to developing recreational opportunities that preserve open space and protect environmental resources (County of Riverside, 2015):

- OS 20.1: Preserve and maintain open space that protects County environmental and other nonrenewable resources and maximizes public health and safety in areas where significant environmental hazards and resources exist.
- OS 20.2: Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.
- OS 20.4: Provide for the needs of all people in the system of the County recreation sites and facilities, regardless of their socioeconomic status, ethnicity, physical capabilities or age.
- OS 20.5: Require that development of recreation facilities occurs concurrent with other development in an area.

The purpose of the proposed Project is to facilitate access to an existing trail that will serve the local community and improve opportunities for low-impact recreation. By establishing a designated trailhead and parking area, the Project will reduce the likelihood of impacts to sensitive habitats attributed to ongoing unauthorized OHV use, shooting, dumping, and informal footpaths in the surrounding area. Implementation of the proposed Project will be consistent with the County's policies intended to protect resources and enhance recreation in areas designated for Open Space-Conservation.

Riverside County General Plan: Western Coachella Valley Area Plan

The Western Coachella Valley Area Plan includes policies to protect the visual and biological resources in the Western Coachella Valley. This area plan primarily references the policies established in the Multiple Species Habitat Conservation Plan and the County's Multipurpose Open Space Element (County of Riverside, 2017). As discussed above, the Project would be consistent with applicable policies from the Multipurpose Open Space Element.

Project construction at the Lower Trailhead would be subject to the avoidance and minimization measures described in Section 4.4 of the CVMSHCP. See Initial Study Section 5.4(f) for further discussion of the actions that would be carried out to ensure Project consistency with the CVMSHCP.

Town of Yucca Valley General Plan: Land Use Element, Open Space and Conservation Element

The site for the proposed Upper Trailhead and parking area is designated by the Town of Yucca Valley as Hillside Residential (HR), which indicates that development and use may be restricted by topography and slope, as well as drainage and biological resources. An HR designation allows for private open space preservation (Town of Yucca Valley, 2014).

The proposed Project would require minimal construction activities at the Upper Trailhead site that include erecting a visitor information kiosk and minor grading to provide an access driveway at the parking area. These activities would be consistent with the Town's policies specific to recreation and open space uses within a residential land use designation, as well as with policies to improve access to outdoor recreation (Town of Yucca Valley, 2014).

- Policy LU 1-11: Encourage housing developments to include sites for recreational, open space, or educational uses.
- Policy OSC 1-2: Support regional, state, and federal efforts to evaluate, acquire, and conserve open space areas in and around Yucca Valley.
- Policy OSC 1-6: Encourage the preservation, integrity, function, productivity, and long-term viability of environmentally sensitive habitats, wildlife corridors, and significant geological features within the Town.
- Policy OSC 2-1: Plan, develop, and maintain quality and adequate outdoor recreational and open space areas that utilize and enhance the unique aspects of the desert environment and provide amenities that are responsive to the needs of residents and visitors.
- Policy OSC 3-4: Evaluate the location of existing and proposed trails and trailheads with proposed development and establish the appropriate easements to preserve those facilities.

As a low-impact trail improvement project, the proposed activities would be consistent with the Town of Yucca Valley's policies for hillside residential development, and would further the Town's policies for preserving open space that surrounds the Project site. There would be no impact under this criterion.

5.12 Mineral Resources

	NERAL RESOURCES ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?			\square	
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?				

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

LESS THAN SIGNIFICANT IMPACT. The Project area has been classified as Mineral Resource Zone (MRZ)-2b, where geologic data indicate that significant inferred mineral resources are present (DOC, 2019). Although the Project would be located in an area that is classified as MRZ-2b, neither construction nor operation of the proposed Project would result in the loss of availability of a known mineral resource. Construction of each trailhead would only involve minor grading to level the site. Although recreational use of the area is not compatible with mineral resource extraction, the Project would not significantly impede mineral resource extraction in the area should it occur. This impact would be less than significant and no mitigation is required.

b. Would the project 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?

NO IMPACT. Riverside County does not contain any "locally important mineral recovery sites." (County of Riverside, 2015). No impact would occur.

5.13 Noise

	DISE ould the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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 applicable standards of other agencies?				
b.	Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project result in 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 applicable standards of other agencies?

LESS THAN SIGNIFICANT IMPACT. As discussed in Section 4.11, construction of the Project would result in minimal noise due to the limited work necessary to create both trailheads and clean up the Long Canyon Trail. Construction activities would take place during daylight hours, Monday through Saturday. The Riverside County Municipal Code, Chapter 7.35, General Noise Regulations prohibits construction noise between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between 5:00 p.m. and 8:00 a.m. on Saturdays, and on Sundays and federal holidays if the noise creates a disturbance across a residential or property line or at any time exceeds the maximum permitted noise level for the underlying land use category, except otherwise authorized by variance. The San Bernardino County Development Code that regulates construction noise (Section 83.01.080[g]) exempts noise from temporary construction, maintenance, repair or demolition activities from any thresholds if the activity occurs between 7:00 a.m. and 7:00 p.m., except Sundays and federal holidays. Because proposed Project construction would not occur during the specified hours, the Project would comply with both County's General Noise Regulations. Operation and maintenance of the proposed Project would not create a permanent source of noise of concern. Impacts would be less than significant.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels generation of excessive groundborne vibration or groundborne noise levels?

LESS THAN SIGNIFICANT IMPACT. Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Typically, ground-borne vibrations generated by man-made activities attenuate rapidly with distance from the source. Ground vibrations from construction activities do not often reach the levels that can damage structures, but can achieve the audible and feelable ranges in buildings very close to the source (FTA, 2006).

Heavy equipment use (site grading activities) and loaded heavy trucks have the potential to generate localized groundborne vibration. The nearest sensitive receptors to the proposed Project are:

- Upper Trailhead: 0.8 mile northeast on Eagles Nest (residential use)
- Lower Trailhead: 1.5 mile southwest on Hacienda Street (residential use)

At these distances, any temporary vibration generated during construction would have little to no impact. Heavy equipment use for construction activities at the site would be temporary and of short duration, with an estimated maximum of two days of grading required at each trailhead. Furthermore, heavy truck haul trips would only utilize roads without weight or use restrictions. Therefore, any structures located proximate to those roads are already subject to periodic vibration from heavy truck transit. Project construction would result in less-than-significant vibration impacts.

Once constructed, maintenance activities would not utilize heavy equipment that could generate localized vibration. The proposed Project would result in no operational vibration impacts.

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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

NO IMPACT. The closest airport to the proposed Project is the Bermuda Dunes Airport, which is located 17.5 miles east-southeast of the of the proposed Lower Trailhead. Due to the distance of the proposed Project

to this aviation facility, neither construction nor operation of the Project would subject workers or recreationists to excessive aviation-generated noise levels. No impact would occur.

5.14 Population and Housing

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

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No IMPACT. The Project would expand recreational access and formalize an existing trail corridor near the communities of Desert Hot Springs and Yucca Valley. As a low-impact, non-motorized trail improvement project, the proposed activities would not require new road construction or any extension of infrastructure. The Project would not induce population growth in the surrounding communities.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

NO IMPACT. The proposed activities would be located immediately north and south of JTNP, and along the existing trail corridor that extends through JTNP. Project activities at the Upper Trailhead would be within an undeveloped area of Yucca Valley, with the nearest residence approximately 1.7 miles away along existing roadways. Residential development is restricted in this area due to topography, sensitive resources, and land ownership by MDLT which protects much of the area as open space. Project activities at the Lower Trailhead would be located in designated open space that is not zoned for residential development. None of the Project activities would require the temporary or permanent removal or displacement of housing or persons. No impact would occur under this criterion.

5.15 Public Services

PUBLIC SERVICES

ass me faci me res	uld the project result in substantial adverse physical impacts ociated with the provision of new or physically altered govern- ntal facilities, need for new or physically altered governmental lities, the construction of which could cause significant environ- ntal impacts, in order to maintain acceptable service ratios, ponse times, or other performance objectives for any of the lic services:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Fire protection?				\boxtimes
b.	Police protection?				\boxtimes
C.	Schools?				\boxtimes
d.	Parks?				\boxtimes
e.	Other public facilities?				\boxtimes
Cia	aifiaanaa aritaria aatabliabad bu CEOA Quidalinaa Annandiy C				

Significance criteria established by CEQA Guidelines, Appendix G.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

a) Fire protection?

No IMPACT. Fire suppression and emergency medical services to the Project area are provided by multiple agencies. The Project would be located near the communities of Yucca Valley and Desert Hot Springs. The proposed Project would not increase population levels and does not include any facilities that would require an increase to fire department assets. No new or substantially altered fire facilities would be required to serve the Project. While the Project would likely increase recreational use of the Long Canyon Trail, it would introduce formal trail use and designated trailheads. This is expected to decrease the potential for emergency service calls to the area compared to current informal recreational use occurring along the Long Canyon Trail and access roads. Additionally, construction of the proposed Project would not affect routes used by the Fire Department to respond to emergencies. No impact on fire protection services would occur.

b) Police Protection?

No IMPACT. Police protection services are provided by multiple jurisdictions and the primary station varies depending on the location. The Project would result in an increase in recreationists in the area; however, by increasing appropriate trail usage and visibility, the proposed Project is expected to reduce unauthorized use, illegal dumping, shooting, and vandalism that is currently ongoing especially at the Lower Trailhead. This may result in a beneficial impact on police protection in the proposed Project area by reducing the need for enforcement actions and patrol requirements. New or substantially altered police facilities would not be required to serve the Project. No impact would occur.

c) Schools?

NO IMPACT. The proposed Project would not induce an increase in population levels that could adversely affect local school service levels or require new or expanded school facilities. There would be no impact on schools.

d) Parks?

NO IMPACT. The proposed Project would not induce an increase in population levels. Consequently, the proposed Project would not increase population in a manner that would result in additional demand for new park facilities. There would be no impacts on parks.

e) Other Public Facilities?

No IMPACT. Construction and operations and maintenance of the Project would not require a large number of workers, and would therefore not result in an increase in the local population. Consequently, the Project will neither substantially affect public facilities nor create the need for any new or altered public facilities such as post offices or libraries. No impact would occur.

5.16 Recreation

RE	ECREATION	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Would the project 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?			\square	
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			\boxtimes	

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project 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?

LESS THAN SIGNIFICANT IMPACT. The purpose of the Project is to increase access to an existing designated trail within JTNP, with the goal of providing greater low-impact recreational opportunities to underserved communities in the surrounding area. Although the Project would directly increase public use of JTNP along this trail, the Project would also improve sensitive habitat in the surrounding area by discouraging unauthorized activities through increased visibility from appropriate usage and the establishment of formal recreational facilities (e.g., parking lot, information kiosk). Examples of ongoing unauthorized activities that would be reduced through appropriate public usage include OHV use, illegal dumping, shooting, and vandalism.

The Project would include a visitor information kiosk at both the Upper and Lower Trailheads that would include a map of the designated trails, applicable regulations and contact information to report unauthorized activity, notification that the trail is open for hiking and equestrian use only, and information about sensitive resources including the desert tortoise. Informing the public of its role in protecting the resources within and adjacent to JTNP will facilitate a shift from existing unauthorized activities to authorized recreational use of this trail corridor. Impacts resulting from increased recreational use in the Project area would be less than significant.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

LESS THAN SIGNIFICANT IMPACT. The National Park Service has identified Long Canyon as an existing hiking corridor (NPS, 2019), and Project activities along this trail would be limited to site cleanup and clearing debris. Outside of JTNP, Project facilities would be minimal and would include only an information kiosk, parking area, and signage at the Upper and Lower Trailheads. As stated in Section 4.11.1, all Project construction would adhere to the CVMSHCP's avoidance and minimization measures and required species surveys. The Project is intended to minimize or reverse existing damage to the surrounding natural environment that has occurred from informal footpaths by establishing formal trails. Consequently, the potential for the Project to have an adverse physical effect on the environment would be less than significant.

5.17 Transportation

TRANSPORTATION Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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)?			\boxtimes	
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?				\boxtimes

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

NO IMPACT. While construction and operation of the proposed Project may result in a small number of localized trips to access the trail and trailhead locations, only a nominal number of trips may occur on Interstate 10 (I-10). The segment of I-10 through the Coachella Valley is the only applicable roadway covered by the Riverside County Transportation Commission (RCTC) 2011 Congestion Management Program (RCTC, 2011). However, because the number of trips demonstrable to Project activities would be so nominal on I-10, they would not conflict with any performance standard identified under the 2011 Congestion Management Program (RCTC, 2011).

The Project does not include any temporary or permanent roadway encroachment or alterations that may conflict with existing or planned public transit, bicycle, or pedestrian facilities. No impact would occur.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

LESS THAN SIGNIFICANT IMPACT. As discussed in CEQA Guidelines Section 15064.3(b.3), a qualitative analysis of construction traffic vehicle miles travelled (VMT) may be appropriate for activities such as the proposed Project. Temporary construction worker commute trips are assumed to come from the local area. Due to the short-term nature and relatively low number of vehicle miles traveled during construction, the proposed Project would not result in significant VMT under State CEQA Guidelines section 15064.3,

subdivision (b). The Project would increase low-impact, non-motorized, mixed-use outdoor recreation in natural open space lands within the Coachella Valley, Yucca Valley, and JTNP. Currently, informal recreational use occurs along the proposed Long Canyon Trail. Therefore, the net increase of VMT from new/increased recreational use is not expected to be significant. Additionally, it is expected that the majority of recreationists utilizing the Project would come from the local areas around each trailhead. These recreationists are assumed to already make vehicle trips to access similar designated or undesignated trails in the area. Therefore, any new trips to the proposed Long Canyon Trail are considered to offset existing trips at some level. At this time, no known applicable VMT thresholds of significance that may indicate a significant impact for increased trips associated with a recreational facility are known. Therefore, while the Project is expected to increase VMT from expanded recreational use, the Project would not affect existing transit uses or corridors and it would cause a less-than-significant impact under CEQA Guidelines Section 15064.3(b.3).

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

LESS THAN SIGNIFICANT IMPACT. The Project would construct two new trailheads, both of which would create new vehicle ingress and egress points. At both proposed trailhead locations, the roadways accessing these points are rural with very low traffic volumes. The majority of vehicles travelling along these roadway segments would be accessing the trailheads. Both trailhead locations provide good line-of-sight and do not require roadway improvements and traffic controls. The establishment of these trailheads would not affect roadway conditions, access, and traffic flow. The Conservancy would obtain all applicable permits and authorizations, and compliance with permit conditions would ensure trailhead ingress and egress do not increase roadway hazards or create an incompatible use. Impacts would be less than significant and no mitigation is required.

d. Would the project result in inadequate emergency access?

NO IMPACT. The Project does not include any temporary or permanent roadway encroachment or alterations that may impede emergency vehicle access and flow. No impact would occur.

5.18 Tribal Cultural Resources

TRIBAL CULTURAL RESOURCES		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a.	signi Reso cultu size	Id the project cause a substantial adverse change in the ificance of a tribal cultural resource, defined in Public ources Code section 21074 as either a site, feature, place, ural landscape that is geographically defined in terms of the and scope of the landscape, sacred place, or object with ural value to a California Native American tribe, and that is:				
		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				
		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 Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project 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 (CRHR), or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

LESS THAN SIGNIFICANT IMPACT. As discussed in Section 5.5 (Cultural Resources), the SCCIC and EIC record searches demonstrated that no known National Register of Historic Places (NRHP)- or CRHR-eligible cultural resources would be impacted by Project activities. To further examine potential impacts to cultural resources, Aspen contacted the NAHC by mail on April 9, 2019 to obtain information on known cultural resources and traditional cultural properties in the Project area.

The NAHC maintains two databases to assist cultural resources specialists in identifying cultural resources of concern to California Native Americans, referred to by NAHC staff as tribal cultural resources. The NAHC Sacred Lands File (SLF) database has records for places and objects that Native Americans consider sacred or otherwise important, such as cemeteries and gathering places for traditional foods and materials.

On April 17, 2019, the NAHC responded that the SLF database failed to indicate the presence of sacred sites in the project vicinity. As such, there are no identified sacred lands within the Project area, nor are there tribal cultural resources eligible for listing in the California Register of Historical Resources. Potential impacts to a tribal cultural resource would be less than significant.

 (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 Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code

Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As discussed above in Section 5.18(a)(i), Aspen contacted the NAHC to learn of any concerns Native Americans may have about the proposed Project. The NAHC forwarded a list of 20 Native American groups or individuals interested in development projects in the study area. Three of the listed contacts were previously notified per AB 52.¹ On May 9, 2019, Aspen sent letters to the remaining 17 contacts identified by the NAHC, inviting comments or concerns regarding potential impacts to cultural resources or areas of traditional cultural importance within the vicinity of the proposed Project. As of May 28, 2019, responses were received from the following Native American groups/individuals: (1) Travis Armstrong, Tribal Historic Preservation Officer for the Morongo Band of Mission Indians; (2) Lucy Padilla, Archeologist for the Agua Caliente Band of Cahuilla Indians; (3) Michael Mirelez, Cultural Resource Coordinator for the Torres-Martinez Desert Cahuilla Indians; and (4) Victoria Martin, Tribal Secretary for the Augustine Band of Cahuilla Indians. These Native American groups indicated that although the Project would be outside of their respective reservations, the Project is in a location of cultural concern. Furthermore, both the Agua Caliente Band of Cahuilla Indians and the Torres-Martinez Desert Cahuilla Indians have indicated that the Project sites are within their Tribal Traditional Use Areas. Representatives from the Agua Caliente Band of Cahuilla Indians also expressed concern for the Chuckwalla Bill ruins in JTNP; however, the ruins are accessed from a trail that branches from the main Long Canyon Trail and would not be affected by the proposed Project. Minor trail maintenance activities are only proposed along the existing Long Canyon Trail within JTNP and would not extend to side trails.

Project-related ground-disturbing activities (i.e., leveling the Lower and Upper Trailhead parking areas, installing information kiosks) are unlikely to uncover significant prehistoric or historic period features, artifacts, or other cultural deposits that may be buried within the very shallow soils that may be disturbed by grading below the ground surface. Mitigation Measures TCR-1 and TCR-2 are proposed to minimize impacts to buried tribal cultural resources. With implementation of Mitigation Measures TCR-1 and TCR-2, the potential for an adverse change in the significance of a tribal cultural resource would be less than significant.

Mitigation Measures

- **TCR-1 Monitor Sensitive Areas for Tribal Cultural Resources.** A qualified Native American monitor shall be present for any grading work.
- **TCR-2** Assess and Treat Incidental Discovery of Tribal Cultural Resources. If previously unidentified cultural resources and tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist or tribal representative assesses the significance of the resource. The archaeologist, in consultation with the County, SHPO, any interested Tribes, and any other responsible public agency, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be eligible to the NRHP or CRHR, qualify as a unique archaeological resource under

¹ AB 52 establishes a formal role for Native American tribes in the CEQA process. CEQA lead agencies are required to consult with tribes about potential tribal cultural resources in the study area, the potential significance of project impacts, the development of project alternatives and the type of environmental document that should be prepared.

CEQA Section 21083.2 or be determined to qualify as a tribal cultural resource as defined in PRC Section 21074. Any artifacts discovered will be curated after consultation with the Native American monitor and in accordance with NAHC standards.

5.19 Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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?			\boxtimes	
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?				
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				
Significance criteria established by CEOA Guidelines, Appendix G					

Significance criteria established by CEQA Guidelines, Appendix G.

a. Would the project 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?

No IMPACT. No wastewater would be generated during either construction or operation of the proposed Project. No housing or sanitation facilities would be constructed, and no wastewater would be discharged. If sanitation facilities are required during the construction period, temporary portable toilets would be provided for the workers by a licensed contractor. The Project would not significantly alter stormwater drainage nor require or include the development of new stormwater drainage facilities. Construction of the proposed Project would require a small amount of water for dust suppression and kiosk foundation installation. The small amount of water required during construction, the Project does not include residential or other development that would consume energy. No impacts would occur.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

LESS THAN SIGNIFICANT IMPACT. Construction of the proposed Project would require a small amount of water for dust suppression and structure foundation installation. Site preparation and grading at the trailheads would require water for dust suppression. The total amount of ground disturbance at the two trailheads would require only a small amount of water for dust suppression and concrete mixing to install footings, pads, or other foundation structures for the informational kiosks. The total amount of water required for dust suppression and structure foundation installation is not expected to exceed 2-3 acre-feet. This water would be obtained from a private water purveyor or through an agreement with a local municipality. The

small amount of water required during construction of the proposed Project would not result in a need for new or expanded entitlements. No water would be required during operation of the proposed Project. This impact would be less than significant and no mitigation is required.

c. Would the project 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?

NO IMPACT. No wastewater would be generated during either construction or operation of the proposed Project. No housing or sanitation facilities would be constructed, and no wastewater would be discharged. If sanitation facilities are required during the construction period, temporary portable toilets would be provided for the workers.

d. Would the project 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?

NO IMPACT. Construction of the proposed Project would generate a very small amount of solid waste. Examples of construction waste include packaging for trail signs and kiosk construction materials, and excess soil or rock from grading of the trailhead sites. Excess materials generated by grading of the trailheads would be reused on-site to the extent feasible. Any solid waste that would be generated during construction of the proposed Project would be disposed of at an acceptable solid waste disposal facility, such as the nearby privately-owned Coachella Valley Transfer Station/Materials Recovery Facility (CVTS). The CVTS accepts municipal waste, recycling, construction and demolition waste, and processes an average of 700 tons per day. The amount of waste generated by construction of the proposed Project would not adversely affect operations at the CVTS nor would it exceed the facility's permitted capacity. No solid waste would be generated during operation of the proposed Project. The information kiosks at the trailheads would include a statement that users must pack out all trash brought to the area. No impact would occur.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

NO IMPACT. Excess materials generated by trailhead parking area grading would be reused on-site to the extent feasible. The very small amount of solid waste that would be generated during construction of the proposed Project would be properly disposed of at an appropriate facility, such as the CVTS. Solid waste disposal for the proposed Project would adhere to all federal, state, and local statutes and regulations related to solid waste. No impact would occur.

5.20 Wildfire

WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes
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 infrastruc- ture (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?				
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?				
Sia	nificance criteria established by CEQA Guidelines. Appendix G.				

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

NO IMPACT. Roadways accessing the trailhead sites are not known to be part of an adopted or designated emergency evacuation route or plan. Construction and operation of the proposed Project would not block ingress or egress on any roadway. Trail improvements, including the construction of two parking areas at each of the two trailheads, would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

b. Would the project, 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?

LESS THAN SIGNIFICANT IMPACT. The Upper and Lower Trailhead sites are not located within or adjacent to forested areas nor do they have landscape features that exacerbate fire risks or make the site or adjacent areas more susceptible to wildfire. The Project area is within arid desert lands, containing minimal vegetation. Construction of the proposed trailheads would include the use of motorized vehicles and equipment adjacent to open desert lands. Because the Project includes minimal construction activities, sparks or heat from vehicle and equipment engines are not expected to create a significant potential for fire ignition that could spread outside the immediate work area. The use of handheld tools to improve the Long Canyon Trail would also not be expected to create a significant potential for fire ignition due to the lack of fuel within the desert landscape of the Project area. Additionally, construction and maintenance work would be conducted in accordance with standard safety measures to reduce the potential for fire ignition. While the Project would likely increase recreational use of the Long Canyon Trail, it would introduce formal trail use and designated trailheads. This is expected to decrease the potential for fire ignition compared to current informal recreational use occurring along the proposed Long Canyon Trail and access roads. Finally, the Project would not introduce new development or population increase and would not introduce a significant wildfire risk that could expose persons to pollutant concentrations from a wildfire. Impacts would be less than significant.

c. Would the project 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?

NO IMPACT. The Project would not require new or expanded electrical, water, or natural gas infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Each proposed trailhead site is on existing disturbed land that would be cleared of vegetation (as needed), leveled, and accessed via existing roads. Brush clearance and other improvements to the Long Canyon Trail are considered a beneficial impact with respect to fuels management to the area. No impact would occur.

d. Would the project 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?

LESS THAN SIGNIFICANT IMPACT. The proposed trailheads and Long Canyon Trail are not located adjacent to residential or other development. While the Long Canyon Trail does contain slopes, it does not include landscape features that exacerbate fire risks or make the site or adjacent areas more susceptible to flooding or landslides due to soil instability from a wildfire. Each proposed trailhead site is flat topography, and the Long Canyon Trail is currently utilized informally by recreationists. Brush clearance and other improvements to the trail are considered a beneficial impact with respect to drainage changes to the area. Finally, the Project would not introduce new development or population and would not expose people or structures to flooding or landslide risks due to post-fire instability. Impacts would be less than significant.

5.21 Mandatory Findings of Significance

M	ANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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 that would cause substantial adverse effects on human beings, either directly or indirectly?				

Significance criteria established by CEQA Guidelines, Appendix G.

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?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As discussed in Section 5.4, Biological Resources, the proposed Project could have impacts on sensitive biological resources, including listed species, other special-status plants and animals, and migratory birds, but mitigation has been provided to reduce these impacts to less-than-significant levels. The Project would reduce some currently ongoing impacts to biological resources by focusing recreational use onto designated trails and away from the most biologically sensitive areas. The Project would discourage current practices such as trash dumping and unauthorized OHV use in listed and other special-status species' habitats by increasing the presence of authorized recreational users in appropriate areas, and providing information to report unauthorized uses. Periodic trail patrols would also minimize unauthorized uses that could adversely affect biological resources. After mitigation, the Project would not have the potential to degrade the quality of the environment; would not substantially reduce the habitat of a fish or wildlife species; would not cause a fish or wildlife population to drop below self-sustaining levels; would not threaten to eliminate a plant or animal community; and would not reduce the number or restrict the range of a rare or endangered plants or animals.

As discussed in Section 5.5, Cultural Resources, impacts on human remains would be less than significant with implementation of Mitigation Measure CR-1, which directs the treatment of any inadvertent discovery of human remains. Impacts on archaeological and paleontological resources would be less than significant because the Project sites are not likely to support these resources (see Section 5.5, Cultural Resources, and Section 5.7, Geology and Soils, for detailed discussions). The proposed Project would not eliminate important examples of the major periods of California history or prehistory.

Implementation of the mitigation measures for biological and cultural resources would result in less-thansignificant impacts.

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, effects of other current projects, and the effects of probable future projects.)

LESS THAN SIGNIFICANT. The proposed Project trailheads and the existing Long Canyon Trail are located in generally remote areas, and there are no known planned projects in the vicinity of either of the Project trailhead sites. Therefore, environmental impacts of the Project would not have the potential to combine with those of any planned projects to create a cumulative effect on the environment.

Past and ongoing projects in the vicinity of the trailheads include roads, transmission lines, residential developments, golf courses, and park lands such as Joshua Tree National Park. The impacts of the proposed Project would be limited in both intensity and scope due to the relatively small size, remote locations, and type of trail and trailhead improvements proposed. Since Project impacts would be less than significant after mitigation, impacts associated with the proposed Project are not expected to contribute considerably to cumulative impacts in the vicinity of the trailheads. Cumulative impacts would be less than significant.

c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?

LESS THAN SIGNIFICANT. Project construction and trail use would not have the potential to generate significant adverse impacts on human beings, either directly or indirectly with the implementation of

mitigation measures. Potential impacts related to air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, and utilities and service systems were found to be less than significant and do not warrant mitigation, or would not occur at all from the Project. Potential impacts to traffic and transportation would be avoided or reduced to less than significant levels with compliance with existing regulations. Therefore, potential environmental impacts on human beings, either directly or indirectly, would be less than significant.

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No literature cited

5.21 Mandatory Findings of Significance

No literature cited

7. List of Preparers

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8. Acronyms

AQMP	Air Quality Management Plan
BLM	Bureau of Land Management
CAAQS	California Ambient Air Quality Standards
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CVCC	Coachella Valley Conservation Commission
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVTS	Coachella Valley Transfer Station/Materials Recovery Facility
CWA	Clean Water Act
DOC	California Department of Conservation
DPM	Diesel particulate matter
EIC	Eastern Information Center
EIR	Environmental Impact Report
ESA	Endangered Species Act
FODM	Friends of the Desert Mountains
GHG	Greenhouse gases
GWP	Global warming potential
HR	Hillside Residential
IS	Initial Study
JTNP	Joshua Tree National Park
LST	Localized Significance Thresholds
MBTA	Migratory Bird Treaty Act
MDAQMD	Mojave Desert Air Quality Management District
MDLT	Mojave Desert Land Trust
MLD	Most likely descendant
MM	Mitigation Measure
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MT	Metric tons
MWD	Metropolitan Water District
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
OHV	Off-highway vehicle
RCTC	Riverside County Transportation Commission
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coast Information Center
200.0	

SHPO	State Historic Preservation Officer
SLF	Sacred Lands File
SRA	Source Receptor Areas
SWPPP	Storm Water Pollution Prevention Plan
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	Vehicle miles travelled
VOC	Volatile Organic Compounds

Appendix A

Mitigation Monitoring Plan

Appendix A: Mitigation Monitoring Plan

The Coachella Valley Mountains Conservancy (Conservancy), in coordination with the Friends of the Desert Mountains (FODM), proposes to construct and operate the Long Canyon Trail Improvement Project ("proposed Project"). An Initial Study was prepared to assess the proposed Project's potential environmental effects. The Initial Study was prepared based on information obtained from project field surveys and supplemental research.

The purpose of this Mitigation Monitoring Plan is to ensure effective implementation of mitigation measures identified by the Initial Study and imposed by the Conservancy as part of Project approval.

This Mitigation Monitoring Plan includes:

- The mitigation measures that the Conservancy and FODM must implement as part of the proposed Project;
- The actions required to implement these measures;
- The monitoring requirements; and
- The timing of implementation for each measure.

Minor Project Refinements

The Conservancy along with its environmental monitors will ensure that any project variance or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no project variance will be approved by the Conservancy if it creates new significant impacts. A variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. If a proposed change to the project has the potential for creating significant environmental effects, it will be evaluated to determine whether supplemental CEQA review is required. In some cases, a variance may also require approval by a CEQA responsible agency.

	N 101	Timber of A stress
	wirigation measure	I IMING OT ACTION
Biological Resources	rces	
5.4(a) – Special- Status Plants and Wildlife	BIO-1: CVMSHCP Compliance. All applicable avoidance and minimization measures as described in Section 4.4 of the CVMSHCP will be observed during construction and O&M activities. For O&M activities the Conservancy shall ensure that personnel are instructed to be alert for listed wildlife species. If a desert tortoise is spotted at any Project work area, activities and Conservance of the Co	 During construction During O&M
5.4(f) – Habitat Conservation Plans	agracent to its rocauon win be naried and the animal win be allowed to move away norm the activity area. In addition, consistent with Section 7.3.4.2 of the CVMSHCP, the Lower Trailhead and associated facilities will be designed to be consistent with CVMSHCP Conservation Goals and Objectives, to avoid or minimize impacts to habitat occupied by Covered Species, and to discourage intrusion into environmentally sensitive areas. Interpretive facilities, access control, and signage will encourage proper resource usage, and adverse effects of passive recreation, such as trampling vegetation and erosion, will be minimized.	
5.4(a) – Special- Status Plants and Wildlife	BIO-2: Limit Disturbance Areas. At all work areas, mechanical disturbance of previously undisturbed habitats (including soils) will be limited to the minimum area necessary. Project disturbance areas will be sited on previously disturbed areas to the extent feasible.	 During construction
5.4(b) – Sensitive Vegetation		
5.4(a) – Special- Status Plants and Wildlife	BIO-3: Assign Project Biologist. The Conservancy will assign one or more acceptable biologists (according to CVMSHCP requirements) to conduct pre-construction surveys and construction monitoring at all Project work areas where ground disturbance would occur, as described in Mitigation Measures BIO-4 and BIO-5. An "acceptable biologist" means a biologist whose name is on a list, maintained by the Coachella Valley Conservation Commission (CVCC), of biologists who are acceptable to CVCC, CDFW, and USFWS for purposes of conducting surveys for Covered Species. The Project Biologist(s) would also conduct all surveys and monitoring for species at the Upper Trailhead.	 Prior to construction
5.4(a) – Special- Status Plants and Wildlife	BIO-4: Preconstruction Surveys. The Project Biologist(s) will conduct pre-activity clearance surveys for desert tortoise and their burrows, burrowing owls (year-round), nesting birds (at Project sites where construction or maintenance activities are scheduled from January 1 to August 31), special-status plants, and other special-status species. Construction or maintenance activities outside of the breeding season for nesting birds would not require nesting bird surveys. Surveys for desert tortoise, burrowing owl, and LeConte's thrasher will be conducted according to the avoidance and minimization measures in Section 4.4 of the CVMSHCP. Pre-activity surveys will be conducted no more than 7 days in advance of any ground- or vegetation-disturbing activities in any location.	 Within 7 days of initiating ground- disturbing or vegetation-clearing construction activities Within 7 days of initiating ground- disturbing or vegetation-clearing maintenance activities

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Table 6-1. Mitig	l able 6-1. Ivitigation Monitoring Plan Misimitian Manusa	Timina of Antion
Impact		liming of Action
5.4(a) – Special- Status Plants and Wildlife	BIO-5: Construction Monitoring. The Project Biologist(s) will monitor ground-disturbing construction and maintenance activities, provide worker education programs, and supervise or perform other related actions. The Project Biologist(s) will be authorized to temporarily halt construction or maintenance activities if needed to prevent potential harm to any special-status species. Project activities may not disturb an active bird nest. If an active bird nest is located on or adjacent to the work site, a Project Biologist will designate and flag an appropriate buffer area around the nest where construction or maintenance activities will not be permitted. The buffer area will be based on the bird species and nature of the construction activities and any specific pre-activity surveys or monitoring requirements for each activity in those areas.	 During construction During ground- disturbing or vegetation-clearing maintenance activities
5.4(a) – Special- Status Plants and Wildlife	BIO-6: Special-Status Species Avoidance and Minimization Measures. The Project Biologist(s) and all workers shall regularly observe the work areas for desert tortoise and burrowing owl. The Project will adhere to avoidance and minimization measures for sensitive species as described in Section 4.4 of the CVMSHCP. For desert tortoise, installing exclusionary fencing per CVMSHCP guidelines for trailhead construction would be infeasible. Instead, if a desert tortoise is observed, it will be left to move away from the work site on its own. Burrowing owl measures include establishing appropriate buffers, depending on the season, where no construction or maintenance activities may occur; and coordinating with Wildlife Agencies on appropriate eviction/passive relocation procedures.	 During construction During ground- disturbing or vegetation-clearing maintenance activities
5.4(a) – Special- Status Plants and Wildlife	BIO-7: Worker Training. Employees will be trained to ensure that all workers on site (including contractors) are aware of all applicable mitigation measures for biological resources. Specifically, workers will be required to (1) limit all activities to approved work areas; (2) report any desert tortoise, burrowing owl, or other special-status species, or bird nest observation in the work areas and access routes to the supervisor or Project Biologist; (3) avoid contact with any wildlife that may approach a work area, and be aware of potential venomous reptile bites from carelessness or unnecessary harassment; (4) pick up and properly dispose of any food, trash, or construction refuse; and (5) report any spilled materials (oil, fuel, solvent, engine coolant, raw concrete, or other material potentially hazardous to wildlife) to the supervisor or on-site Project Biologist(s). During the training, the instructor will briefly discuss special-status species that may occur in the work areas, their habitats, and requirements to avoid or minimize impacts. In addition, all workers will be informed of civil and criminal penalties for violations of the federal Endangered Species Act, the Migratory Bird Treaty Act, relevant sections of the California Fish and Game Code, and the Bald and Golden Eagle Protection Act.	 During construction During ground- disturbing or vegetation-clearing maintenance activities
5.4(a) – Special- Status Plants and Wildlife	BIO-8: Wildlife Avoidance. Workers will not be permitted to feed, harm, approach, harass, or handle wildlife at any time, except to move animals out of harm's way, and only as directed by a supervisor. Listed species will not be handled; if a desert tortoise enters a work area, it will not be disturbed and will be allowed to leave on its own. This condition will not exempt workers, including the Project Biologist(s), from any safety policies with regard to venomous reptiles.	 During construction During ground- disturbing or vegetation-clearing maintenance activities
5.4(a) – Special- Status Plants and Wildlife	BIO-9: Trash, Refuse, Concrete, and Other Construction Materials. All trash and food materials will be properly contained within vehicles or closed refuse bins while on any site, and will be regularly removed from the site (at least on a weekly basis) for proper disposal. All refuse from construction or maintenance activities will be removed from the site (at least on a weekly basis) for work. No raw cement, concrete or washings thereof, asphalt, paint, oil, solvents, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, shall be disposed of on-site or allowed to spill onto soil. Cleanup of any spilled material shall begin immediately.	 During construction During maintenance

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Long Canyon Trail Improvement Project Appendix A: MirtiGation Monitoring Plan

Table 6-1. Mitig	Table 6-1. Mitigation Monitoring Plan	
Impact	Mitigation Measure	Timing of Action
5.4(a) – Special- Status Plants and Wildlife	BIO-10: Minimize Standing Water. Water applied to dirt roads and construction areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards, to prevent the formation of puddles, which could attract wildlife to construction sites.	During constructionDuring maintenance
5.4(a) – Special- Status Plants and Wildlife	BIO-11: Water Storage. All water containers (i.e., tanks or trailers) will be securely covered to prevent wildlife from entering the containers and becoming trapped.	During constructionDuring maintenance
5.4(a) – Special- Status Plants and Wildlife	BIO-12: Speed Limit. To minimize potential impacts to special-status wildlife, no vehicles will be permitted to exceed 15 mph while traveling on dirt access roads, and vehicle use will be limited to the access routes and parking/trailhead areas. There will be no off-road vehicle use.	 During construction During maintenance
5.4(a) – Special- Status Plants and Wildlife	BIO-13: Operations Monitoring. The Conservancy, in coordination with the BLM, NPS, and USFWS, will identify a series of "photo points" on each trailhead and parking area, for long-term photo documentation of trail condition and resource damage (if "photo points" on each trailhead and parking area, for long-term photo bocumentation of trail condition and resource damage (if any). The photo points will be located at representative sites likely to sustain high use (e.g., parking areas), likely to support listed species, or vulnerable to resource damage (e.g., steep trail segments). Each photo point will be visited and photographed at least annually. Based on the documentation, Conservancy will determine and implement appropriate follow-up action (e.g., trash cleanup, trail or kiosk maintenance, or new signage). In addition, Conservancy will provide annual documentation to the BLM, NPS, and USFWS of the photo-point monitoring and follow-up measures.	 During operation
Cultural Resources	es	
5.5(c) – Human Remains	CR-1: Assess and Treat Inadvertent Discovery of Human Remains . All human remains discovered are to be treated with respect and dignity. Upon discovery of human remains, all work within 50 feet of the discovery area must cease immediately, nothing is to be disturbed, and the area must be secured. The County Coroner's Office must be notified within 24 hours. The Coroner has two working days to examine the remains after notification. The appropriate land manager or owner of the site is to be called and informed of the discovery. If the remains after notification. The appropriate land manager or owner of the site is to be called and informed of the discovery. If the remains are located on federal lands, federal land managers, federal law enforcement, and the fuman remains, and them, are undisturbed and the proper authorities called to the scene as soon as possible, as it could be a crime scene. The Coroner will determine if the remains are archaeological, historic or are of modern origin, and will determine if there are any criminal or jurisdictional needs to be addressed.	During construction
	If upon examination the Coroner determines that the remains are archaeological or historic-era, the Coroner will make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative. If the Coroner believes the remains to be those of a Native American, he/she shall contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains. The MLD has 48 hours to make recommendations to the landowner for treatment or disposition of the human remains. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in an area of the property secure from further disturbance. If the landowner does not accept the descendant's recommendations, the owner or the descendant may request mediation by the NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains is a felony (Section 7052).	

A-4

Table 6-1. Mitiga	Table 6-1. Mitigation Monitoring Plan	
Impact	Mitigation Measure	Timing of Action
Tribal Cultural Resources	esources	
5.18(a)(ii) – Tribal Cultural Resources	TCR-1: Monitor Sensitive Areas for Tribal Cultural Resources. A qualified Native American monitor shall be present for any grading work.	 During construction
5.18(a)(ii) – Tribal Cultural Resources	TCR-2: Assess and Treat Incidental Discovery of Tribal Cultural Resources. If previously unidentified cultural resources and tribal cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist or tribal representative assesses the significance of the resource. The archaeologist, in consultation with the County, SHPO, any interested Tribes, and any other responsible public agency, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitgation of impacts if the finds are found to be eligible to the NRHP or CRHR, qualify as a unique archaeological resource under CEQA Section 21083.2 or be determined to qualify as a tribal cultural resource as defined in PRC Section 21074. Any artifacts atlandards.	During construction

Appendix B

Biological Resources

Appendix B: Biological Resources

This Appendix includes:

- Special-status species potentially occurring in the Project area (Table B-1);
- Species not carried forward for further analysis (Table B-2);
- Species observed or detected during surveys (Table B-3); and
- The California Natural Diversity Database results for the following 7.5-minute USGS quads: : Rimrock, Yucca Valley North, Joshua Tree North, Morongo Valley, Yucca Valley South, Joshua Tree South, Desert Hot Springs, Seven Palms Valley, East Deception Canyon, Palm Springs, Cathedral City, and Myoma.

Species Name	Habitat Requirements	Blooming/	Conservation	Occurrence Potential	
		Activity Season	Status	Lower Trailhead	Upper Trailhead
		PLANT	S		
Abronia villosa var. aurita Chaparral sand-verbena	Annual or perennial herb; sand, about 250- 5300 ft. elev.; San Jacinto Mtns, Inland Empire, adj. Colorado Des, Orange & San Diego cos; mostly alluvial fans and benches in w Riverside Co; dunes in deserts.	Jan–Sep	Fed: none BLM: Sensitive CA: S2 CRPR: 1B.1 MSHCP: none	High ; Likely to be present in years with average rainfall.	Minimal; no suitable habitat present.

Species Name	Species Name Habitat Requirements Blooming/ Conservation Activity Status Season	Blooming/		Occurrence Potential	
		Status	Lower Trailhead	Upper Trailhead	
Ambrosia monogyra	Shrub or small tree;	Aug–Nov	Fed: none	Minimal: some	Minimal; no
Singlewhorl burrobrush	desert and inland cismontane flats, washes, alluvial fans; below about 1700 ft. elev.; San Bernardino Valley; San Diego Co., east to Texas and mainland Mexico.		BLM: none CA: S2 CRPR: 2B.2 MSHCP: none	suitable habitat; known from one historic record in Palm Springs, likely extirpated.	suitable habitat present.

Astragalus bernardinus	Perennial herb; granite	Apr-Jun	Fed: none	Minimal; no	Low; suitable
San Bernardino milk- vetch	or carbonate soils in Joshua tree and pinyon and juniper woodland; desert mtns in CA.		BLM: Sensitive CA: S3 CRPR: 1B.2 MSHCP: none	suitable habitat present.	habitat present, not detected during a focused plant survey.

Species Name	Habitat Requirements	Blooming/	Conservation	Occurrence	e Potential
		Activity Season	Status	Lower Trailhead	Upper Trailhead
Astragalus lentiginosus var. coachellae Coachella Valley milk- vetch	Annual/perennial herb; desert dunes, Sonoran desert scrub; sandy areas; from 130 to 2200 ft. elev.	Feb-May	Fed: END BLM: none CA: S1 CRPR: 1B.2 MSHCP: covered	Minimal; no suitable habitat present.	Minimal; no suitable habitat present.
Astragalus tricarinatus	Perennial herb; exposed	Feb–May	Fed: END	Low; Marginally	Moderate;
Triple-ribbed milk-vetch	rocky slopes, canyon walls, alluvial fans; Whitewater Canyon, Mission Creek, and Morongo Canyon areas; ±1500 to 5000 ft. elev.		BLM: none CA: S1 CRPR: 1B.2 MSHCP: covered	suitable habitat present, low potential for wash-down waifs.	Marginally suitable habitat present, known from collection in upper Long Canyon, not observed during focused survey.
Berberis fremontii	Evergreen shrub; rocky areas in Joshua tree and	Mar-May	Fed: none	Minimal; no suitable habitat	Low; Marginally suitable habitat
Fremont barberry	pinyon and juniper woodland; western US.		BLM: none CA: S3 CRPR: 2B.3 MSHCP: none	present.	present, not observed during focused survey.
Boechera dispar	Perennial herb; granitic soils in Joshua tree and	Mar-Jun	Fed: none	Minimal; no suitable habitat	Low; suitable
Pinyon rockcress	pinyon and juniper woodland; western US.		BLM: none CA: S3 CRPR: 2B.3 MSHCP: none	present.	habitat present, not detected during a focused plant survey.
Eremothera boothii ssp. boothii	Annual herb; washes in Joshua tree woodland,	Apr-Sept	Fed: none BLM: none	Low; suitable habitat present,	Minimal; no suitable sandy
Booth's evening- primrose	pinyon and juniper woodland; and desert scrub; 2700-7900 ft. elev.; San Bernardino Co. north into Inyo Co. and east into NV.		CA: S3 CRPR: 2B.3 MSHCP: none	nearest record approx. 5 miles to the east.	wash habitat.
Erigeron parishii	Perennial herb;	May-Aug	Fed: THR	Minimal; no suitable	Minimal; no suitable
Parish's daisy	mountain slopes, upper bajadas, washes; carbonate soils; 2600- 6500 ft. elev.; San Bern Mts. and Joshua Tree Nat Park.		BLM: Sensitive CA: S2 CRPR: 1B.1 MSHCP: none	carbonate habitat present, not observed during survey.	carbonate habitat present, not observed during survey.

Species Name	Habitat Requirements	Blooming/	Conservation	Occurrence Potential	
		Activity Season	Status	Lower Trailhead	Upper Trailhead
Eschscholzia androuxii Joshua tree poppy	Annual; desert washes, flats, and slopes; sandy, gravelly, or rocky soils in Joshua tree woodland, Mojave desert scrub; 1900–5500 ft. elev.; Joshua Tree Nat Park and surrounding areas.	Feb-Jun	Fed: none BLM: none CA: S3 CRPR: 4.3 MSHCP: none	Present; numerous plants observed along the trail near the JTNP boundary.	Present; numerous plants observed along the access road and near the trailhead.
Grusonia parishii	Perennial stem	May-Jun	Fed: none	Minimal;	Minimal;
Parish's club-cholla	succulent. Occurs in Joshua tree woodland, Mojave desert scrub, and Sonoran desert scrub on sandy and rocky soils; 1000-5000 ft. elev.; Calif. deserts E into AZ and TX.		BLM: none CA: S2 CRPR: 2B.2 MSHCP: none	marginally suitable habitat present, not observed during survey.	marginally suitable habitat present, not observed during survey.
Linanthus bernardinus	Annual; Joshua tree	Mar-May	Fed: none	Minimal; no	Low; marginally
Pioneertown linanthus	woodland and pinyon/juniper woodland; 3900-4400 ft. elev. M. Restricted to the Pioneertown area of San Bern Co.		BLM: Sensitive CA: S1 CRPR: 1B.2 MSHCP: none	suitable habitat present, not observed during survey.	suitable habitat present, not observed during survey.
Linanthus maculatus ssp. maculatus	Annual; sandy washes or dunes in desert	Mar - May	Fed: none BLM: sensitive	Moderate; Suitable habitat	Low; marginally suitable habitat
Little San Bernardino Mtns. linanthus	shrubland habitats; Joshua Tree woodlands; about 600 - 6800 ft. elev.		CA: S2 CRPR: 1B.2 MSHCP: covered	present, known from within about 1 mile, not observed during survey.	present and within elevation range, not observed.
Monardella robisonii	Perennial rhizomatous	Feb-Oct	Fed: none	Minimal; no	Low; suitable
Robison's monardella	herb; pinyon-juniper woodland; 2000-4900 ft. elev.; Riverside and San Bernardino Cos.		BLM: Sensitive CA: S3 CRPR: 1B.3 MSHCP: none	suitable habitat present.	habitat present, not detected during a focused plant survey.
Saltugilia latimeri	Annual; desert	Mar-Jun	Fed: none	Present; several	Present;
Latimer's woodland-gilia	shrubland, chaparral; arid mountains and foothills; about 1300- 6200 ft. elev.; desert margins, Riv. Co to Inyo Co.		BLM: Sensitive CA: S3 CRPR: 1B.2 MSHCP: none	plants observed along the trail near the JTNP boundary.	several plants observed along the trail just south of the trailhead.

Species Name	Habitat Requirements	Blooming/	Conservation	Occurrence	e Potential
		Activity Season	Status	Lower Trailhead	Upper Trailhead
Selaginella eremophila Desert spike-moss	Rhizomatous fern; chaparral and Sonoran desert scrub on mountainous or hillside rock outcrops and crevices, about 600 - 3000 ft. elev.; lower desert-facing slopes of San Jacinto Mtns and adj. desert, to Texas and Baja	n/a	Fed: none BLM: none CA: S2S3 CRPR:2B.2 MSHCP: none	Minimal; no suitable habitat present.	Moderate; suitable habitat present, known from within about 2 miles.
		INVERTEBR	ATES		
Bombus crotchii Crotch bumble bee	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Year- round	Fed: none BLM: none CA: S1S2 MSHCP: covered	Moderate; suitable habitat and food plants present.	Moderate; suitable habitat and food plants present.
Eremarionta morongoana Morongo (=Colorado) desertsnail	Known only from a gulch on the north side of Morongo Pass (type locality), San Bernardino county, near Riverside County line. Found under rocks.	Year- round	Fed: none BLM: none CA: S1 MSHCP: covered	Minimal; only known population is over 9 miles west of either trailhead.	
		REPTILI	ES		
Anniella stebbinsi Southern California legless lizard	Santa Barbara Co. south to Baja CA; loose soils in chaparral, coastal scrub, dunes, and upland forest.	Year- round	Fed: none BLM: none CA: SC, S3 MSHCP: none	Minimal; no suitable habitat.	Low: marginally suitable habitat present, recent record from within about 3 miles.
Gopherus agassizii (Xerobates agassizi) Mojave desert tortoise	Colorado River west through California and Nevada; desert shrublands where soil is suitable for burrows.	Spring - summer	Fed: THR BLM: none CA: THR , S2 MSHCP: covered	Moderate; suitable habitat present; no sign observed during surveys; very low	High; suitable habitat, no sign observed during surveys, recent observations in
				densities in area.	area.
<i>Aquila chrysaetos</i> Golden eagle	Nests in remote trees and cliffs; forages over shrublands and grass- lands; breeds throughout W N America, winters to E coast.	BIRDS Year- round	Fed: BGEPA BLM: Sensitive CA: FP, S3 MSHCP: none	High (foraging); suitable foraging habitat present. Minimal (nesting), no nesting habitat present.	

Species Name	Habitat Requirements	Blooming/	Conservation	Occurrenc	e Potential
		Activity Season	Status	Lower Trailhead	Upper Trailhead
Athene cunicularia Burrowing owl	Nests mainly in rodent burrows, usually in open grassland or shrubland; forages in open habitat; increasingly uncommon in S Calif.; through W US and Mexico.	Year- round	Fed: none BLM: Sensitive CA: SC, S3 MSHCP: covered	Moderate; suitable foraging and nesting habitat present.	Low; minimally suitable foraging and nesting habitat present.
Falco mexicanus Prairie falcon	Nests on high cliffs, forages primarily over open lands; occurs throughout arid western	Year- round	Fed: none BLM: none CA: WL, S4 MSHCP: none	High (Foraging): s habitat present. Moderate (Nesting	
	US and Mexico.			present in JTNP.	g). Hooting habitat
<i>Lanius ludovicianus</i> Loggerhead shrike	Woodlands, shrublands, open areas with scattered perch sites; widespread in N America; valley floors to about 7000 ft. elev.	Year- round	Fed: none BLM: none CA: SC, S4 MSHCP: none	Present. One individual observed in April 2019, possibly nesting.	High; suitable foraging and nesting habitat present.
Polioptila melanura Black-tailed gnatcatcher	Desert shrublands, gen. nests in shrub thickets along washes; occas. in open scrub (esp. in winter); Calif. Deserts, to W Texas, Baja, and central Mexico.	Year- round	Fed: none BLM: none CA: WL, S3S4 MSHCP: none	High ; suitable nesting and foraging habitat present, observed in 2019 near the access road.	Moderate; suitable nesting and foraging habitat present, nearest record within 2 miles.
<i>Toxostoma crissale</i> Crissal thrasher	Nests in dense brushy thickets of mesquite or other desert riparian	Year- round	Fed ESA: none BLM: none CA: SC, S3	Low (Foraging); no habitat present.	o suitable nesting
	shrubs; foraging in surrounding area; E Calif. To Texas, W mainland Mexico.		MSHCP: covered	Minimal (nesting); nesting or foraging	
<i>Toxostoma lecontei</i> LeConte's thrasher	Calif. Deserts, SW Central Val. & Owens Val., east to Utah, Arizona; open shrubland, often sandy or alkaline flats.	Year- round	Fed ESA: none BLM: none CA: SC, S3 MSHCP: covered	Moderate; suitable habitat present, known from the area.	Moderate ; suitable habitat present, known from the area.

Species Name	Habitat Requirements	Blooming/	Conservation	Occurrence	e Potential
		Activity Season	Status	Lower Trailhead	Upper Trailhead
		MAMMA	LS		
<i>Antrozous pallidus</i> Pallid bat	Rock outcrops of shrublands, mostly below about 6000 ft. elev.; Calif, SW N Amer through interior Oregon and Washington; hibernates in winter. Have also been found in rodent burrows. Routinely forages for terrestrial invertebrates.	Warm season	Fed: none BLM: Sensitive CA: SC, S3 MSHCP: none	Moderate; suitable foraging habitat pre observed.	
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	Open shrublands and sandy areas; deserts and desert-facing foothills, LA Co. south to N Baja Calif.	Spring and Fall	Fed: none BLM: none CA: SC, S3S4 MSHCP: none	Moderate ; suitable habitat present, known from the region.	Moderate ; suitable habitat present, known from the region.
Corynorhinus (Plecotus) townsendii Townsend's big-eared bat	Many habitats throughout Calif. And W N America, scattered populations in E; day roosts in caves, tunnels, mines; feed primarily on moths.	Year- round	Fed: none BLM: Sensitive CA: Candidate, S2 MSHCP: none	Minimal (roosting) tunnels, or mines p Moderate (foraging	resent.
Eumops perotis californicus Western mastiff bat	Lowlands (with rare exceptions); cent. and S Calif., S Ariz., NM, SW Tex., N Mexico; roost in deep rock crevices on high cliffs, forage over wide area	Year- round	Fed: none BLM: Sensitive CA: SC, S3? MSHCP: none	Minimal (roosting); no high cliffs present Moderate (foraging).	Minimal ; likely above elevation range.
<i>Lasiurus xanthinus</i> Western yellow bat	Mexico and Cent. Amer., to S AZ; Riv., Imperial and San Diego Cos.; desert riparian and wash habitats; roosts in trees; evidently migrates from Calif. During winter.	Spring- summer	Fed: none BLM: none CA: SC, S3 MSHCP: covered	Minimal (roosting) riparian habitats pr Moderate (foraging	esent
Neotoma lepida intermedia San Diego desert woodrat	Arid shrublands, esp. around rocky outctops & crevices; cismontane Calif from San Luis Obispo to San Diego Co, and NW Baja Calif.	Year- around	Fed: none BLM: none CA: SC, S3S4 MSHCP: none	High; likely to be present, no middens observed.	Present; middens observed along trail.

Species Name	Habitat Requirements	Blooming/	Conservation	Occurrence	e Potential
		Activity Season	Status	Lower Trailhead	Upper Trailhead
Nyctinomops femorosaccus Pocketed free-tailed bat	Deserts and arid lowlands, SW US, Baja Calif., mainland Mexico; Roost mainly in crevices of high cliffs; forage over water and open shrubland.	Year- round	Fed: none BLM: none CA: SC, S3 MSHCP: none	Minimal (roosting); present. High (foraging).	no high cliffs
<i>Nyctinomops macrotis</i> Big free-tailed bat	Roosts in crevices of rocky cliffs, scattered localities in W N. Amer. Through Cent. Amer.; ranges widely from roost sites; often forages over water.	Year- round (?)	Fed: none BLM: none CA: SC, S3 MSHCP: none	Minimal (roosting); cliffs present in imm Moderate (foraging	nediate vicinity.
Ovis canadensis nelsoni Desert bighorn sheep	Open shrublands and conifer forest, remote mountains; scattered populations in desert mountains and surrounding ranges, incl. San Bernardino Mtns. To the north.	Year- round	Fed: none BLM: Sensitive CA: FP, S3 MSHCP: none	High; suitable habi access site from JT	
Perognathus longimembris bangsi Palm Springs pocket mouse	Desert shrubland; Coachella Valley, Joshua Tree NM, to Borrego Valley.	Year- round	Fed: none BLM: Sensitive CA: SC, S2S3 MSHCP: covered	Moderate; marginal habitat present, species prefers sandy soils which are absent.	Minimal; no suitable habitat present; likely outside geographic range.
<i>Taxidea taxus</i> American badger	Mountains, deserts, interior valleys where burrowing animals are avail as prey and soil allows digging; throughout cent and W N America.	Year- round	Fed ESA: none BLM: none CA: SC, S3 MSHCP: none	Moderate; suitable no potential badger observed.	
<i>Vulpes macrotis</i> Desert kit fox	Widespread, open desert lands; constructs below-ground dens; requires soil suitable for burrowing; primarily nocturnal; preys on small mammals.	Year- round	Fed: none BLM: none CA: FP MSHCP: none	Moderate: suitable no kit fox burrow co observed.	
Xerospermophilus tereticaudus chlorus Palm Springs round- tailed ground squirrel	Wind-blown sand and stabilized sand flats in Coachella Valley lowlands.	Year- round	Fed: none BLM: Sensitive CA: SC, S1S2 MSHCP: covered	Low; no suitable habitat present in trailhead or other parking areas.	Minimal; no suitable habitat present; outside geographic range.

Latin Name	Common Name	Reason for Exclusion
PLANTS		
Acmispon haydonii	Pygmy lotus	Well outside of geographic range.
Almutaster pauciflorus	Alkali marsh aster	No suitable wetland habitat.
Ayenia compacta	California ayenia	Well outside of geographic range.
Atriplex parishii	Parish's brittlescale	No vernal pool or playa habitat present.
Boechera lincolnensis	Lincoln rockcress	No suitable carbonate habitat present.
Boechera shockleyi	Shockley's rockcress	Well outside of geographic range.
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	No suitable meadow habitat present.
Caulanthus simulans	Payson's jewelflower	No suitable habitat present.
Chorizanthe parryi var. parryi	Parry's spineflower	No suitable habitat present.
Chorizanthe xanti var. leucotheca	White-bracted spineflower	No alluvial scrub habitat present.
Dodecahema leptoceras	Slender-horned spineflower	No suitable alluvial sage scrub habitat present.
Eriastrum harwoodii	Harwood's eriastrum	No suitable wind-blown sand habitat present.
Euphorbia abramsiana	Abrams' spurge	No records within 5 miles, no suitable habitat present.
Euphorbia arizonica	Arizona spurge	Outside known geographic range.
Euphorbia misera	Cliff spurge	No suitable rocky, coastal bluff scrub habitat present.
Euphorbia platysperma	Flat-seeded spurge	Outside known geographic range.
Heuchera hirsutissima	Shaggy-haired alumroot	Well below elevational range.
Imperata brevifolia	California satintail	No suitable wetland habitat present.
Lilium parryi	Lemon lily	No suitable meadow habitat present, outside of geographic range.
Linanthus jaegeri	San Jacinto linanthus	Well outside of elevation range, above 7000 ft
Mentzelia tricuspis	Spiny-hair blazing star	No records within 5 miles, minimally suitable habitat present.
Nemacaulis denudata var. gracilis	Slender cottonheads	No suitable wind-blown sand habitat present.
Petalonyx linearis	Narrow-leaf sandpaper-plant	Outside known geographic range.
Stemodia durantifolia	Purple stemodia	No suitable mesic habitat present, outside of geographic range.
Streptanthus campestris	Southern jewelflower	Outside known geographic range.
Thelypteris puberula var. sonorensis	Sonoran maiden fern	No meadows or seeps present.
Xylorhiza cognata	Mecca-aster	Outside known geographic range.
IVERTEBRATES		
Calileptoneta oasa	Andreas Canyon leptonetid spider	Locally endemic to Andreas Canyon.
Dinacoma caseyi	Casey's June beetle	Outside known geographic range, locally endemic to Santa Rosa mountain bajadas.
Macrobaenetes valgum	Coachella giant sand treader cricket	No suitable wind-blown sand present.
Oliarces clara	Cheeseweed owlfly (cheeseweed moth lacewing)	No suitable streams or open water sources present.
Stenopelmatus cahuilaensis	Coachella Valley Jerusalem cricket	No suitable wind-blown sand present.

Latin Name	Common Name	Reason for Exclusion
Cyprinodon macularius	Desert pupfish	No streams or springs present.
AMPHIBIANS		
Rana draytonii	California red-legged frog	Outside of geographic range.
Rana muscosa	Southern mountain yellow-legged frog	Outside of geographic range.
REPTILES		
Crotalus ruber	Red-diamond rattlesnake	No suitable chaparral, oak and pine woodlands, or rocky grassland habitat present, outside of geographic range.
Phyrnosoma blainvillii	Coast horned lizard	Outside of geographic range.
Phrynosoma mcallii	Flat-tailed horned lizard	No suitable habitat present, extirpated from much of the Coachella valley.
Uma inornata	Coachella Valley fringe-toed lizard	No suitable wind-blown sand present.
BIRDS		
Accipiter cooperii	Cooper's hawk	No riparian habitat present.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	No chaparral or coastal sage scrub present.
Asio otus	Long-eared owl	No cottonwood-willow riparian habitat present.
Cypseloides niger	Black swift	No cliffs or waterfalls present.
Empidonax traillii extimus	Southwestern willow flycatcher	No dense riparian willow habitat present.
lcteria virens	Yellow-breasted chat	No dense riparian willow habitat present.
Myiarchus tyrannulus	Brown-crested flycatcher	No riparian habitat present.
Piranga rubra	Summer tanager	No cottonwood-willow riparian habitat present.
Polioptila californica californica	Coastal California gnatcatcher	No coastal sage scrub present; outside geographic range.
Pyrocephalus rubinus	Vermilion flycatcher	No riparian habitat present.
Setophaga petechia	Yellow warbler	No riparian habitat present.
Toxostoma bendirei	Bendire's thrasher	Outside of geographic range.
Vireo bellii pusillus	Least Bell's vireo	No dense riparian willow habitat present.
MAMMALS		
Dipodomys merriami collinus	Earthquake Merriam's kangaroo rat	No Riversidean sage scrub, chaparral, or non- native grassland habitat; outside geographic range.
Lasiurus cinereus	Hoary bat	No suitable riparian habitat for roosting or open water for foraging.
Ovis canadensis nelsoni pop. 2	Peninsular bighorn sheep DPS	Outside of geographic range.

¹ Special-status species reported from the region but not addressed in this report due to habitat or geographic range.

		Trail	head
Latin Name	Common Name	Lower	Upper
VASCULAR PLANTS	•	·	•
Dicotyledons			
EPHEDRACEAE	EPHEDRA FAMILY		
Ephedra californica	Desert tea	Х	Х
CUPRESSACEAE	CYPRESS FAMILY		
Juniperus californica	California juniper		Х
PINACEAE	PINE FAMILY		
Pinus monophylla	Single leaf pinyon pine		Х
ASTERACEAE	ASTER FAMILY		
Ambrosia dumosa	White bur-sage	Х	Х
Ambrosia salsola	Cheesebush	Х	
Anisocoma acaulis	Scale bud		Х
Bahiopsis parishii	Parish viguiera	Х	
Bebbia juncea	Sweetbush	Х	
Calycoseris parryi	Yellow tackstem	Х	
Chaenactis fremontii	Fremont pincushion	Х	Х
Chaenactis stevioides	Esteve pincushion		Х
Dicoria canescens	Desert dicoria	Х	
Encelia farinosa	Brittlebush	Х	
Ericameria paniculata	Black-banded rabbitbrush	Х	
Geraea canescens	Desert-sunflower	Х	
Layia glandulosa	White layia		Х
Malacothrix glabrata	Desert dandelion	Х	
Monoptilon bellioides	Mojave desert star	Х	
Palafoxia arida	Spanish needles	Х	
Perityle emoryi	Emory's rock daisy	Х	
Peucephyllum schottii	Pygmy-cedar	Х	
Pleurocoronis pluriseta	Arrowleaf	Х	
Psathyrotes ramosissima	Turtleback	Х	
Rafinesquia neomexicana	Desert chicory	Х	
Tetradymia axillaris var. longispina	Catclaw horsebrush		Х
BORAGINACEAE	BORAGE OR WATERLEAF FAMILY		
Amsinckia tessellata	Devil's lettuce		Х
Cryptantha angustifolia	Narrow-leaved cryptantha	Х	
Cryptantha micrantha	Purpleroot cryptantha	Х	Х
Cryptantha nevadensis	Nevada cryptantha	Х	
Emmenanthe penduliflora	Whispering bells	Х	Х
Pectocarya sp.	Unid. comb-bur		Х
Phacelia campanularia	Desert bells	Х	

		Traill	head
Latin Name	Common Name	Lower	Upper
Phacelia crenulata	Heliotrope phacelia	Х	
Phacelia distans	Common phacelia	Х	Х
BRASSICACEAE	MUSTARD FAMILY		
Boechera pulchra	Beautiful rockcress		Х
* Brassica tournefortii	Sahara mustard, wild turnip	Х	
Caulanthus lasiophyllus	California mustard		Х
Lepidium lasiocarpum	Shaggyfruit pepperweed	Х	
* Sisymbrium orientale	Indian hedge mustard		Х
CACTACEAE	CACTUS FAMILY		
Cylindropuntia echinocarpa	Silver cholla	Х	Х
Opuntia basilaris var. basilaris	Beavertail cactus	Х	Х
CLEOMACEAE	CAPER FAMILY		
Peritoma arborea	Bladderpod	Х	Х
CONVOLVULACEAE	MORNING-GLORY FAMILY		
Cuscuta denticulata	Small-tooth dodder	Х	
CUCURBITACEAE	CUCUMBER FAMILY		
Marah macrocarpa	Chilicothe		Х
EUPHROBIACEAE	SPURGE FAMILY		
Euphorbia polycarpa	Smallseed sandmat	Х	
FABACEAE	LEGUME FAMILY, PEA FAMILY		
Acmispon strigosus	Desert lotus	Х	Х
Dalea mollis	Silk dalea	Х	
Lupinus arizonicus	Arizona lupine	Х	
Lupinus concinnus	Bajada lupine		Х
Psorothamnus schottii	Indigo-bush	Х	
Senegalia greggii	Catclaw acacia	Х	Х
FAGACEAE	OAK FAMILY		
Quercus cornelius-mulleri	Desert scrub (Muller) oak		Х
GERANIACEAE	GERANIUM FAMILY		
* Erodium cicutarium	Redstem filaree		Х
LAMIACEAE	STICK-LEAF FAMILY		
Salvia columbariae	Chia	Х	Х
Scutellaria mexicana	Mexican bladder sage		Х
LOASACEAE	STICK-LEAF FAMILY		
Mentzelia affinis	Yellow comet		Х
Mentzelia involucrata	Sand blazing star	Х	
MALVACEAE	MALLOW FAMILY		
Sphaeralcea ambigua	Desert mallow		Х
NYCTAGINACEAE	FOUR O'CLOCK FAMILY		

		Traill	head
Latin Name	Common Name	Lower	Upper
Abronia villosa var. villosa	Sand verbena	Х	
Mirabilis laevis	Desert wishbone bush	Х	
ONAGRACEAE	PRIMROSE FAMILY		
Camissoniopsis pallida	Pale yellow sun cup		Х
Chylismia claviformis	Clavate evening primrose	Х	
Eulobus californicus	California primrose	Х	
Eremothera boothii ssp. condensata	Booth's sun cup	Х	
PAPAVERACEAE	POPPY FAMILY		
** Eschscholzia androuxii	Joshua tree poppy	Х	Х
Eschscholzia minutiflora	Small-flowered poppy	Х	
PLANTAGINACEAE	PLANTAIN FAMILY		
Plantago ovata	Desert plantain	Х	
POLEMONIACEAE	PHLOX FAMILY		
Eriastrum eremicum	Desert woollystar	Х	
Gilia brecciarum	Nevada gilia		Х
Gilia latiflora	Broad flowered gilia		Х
Linanthus jonesii	Jones linanthus	Х	
** Saltugilia latimeri	Latimer's woodland gilia	Х	Х
POLYGONACEAE	BUCKWHEAT FAMILY		
Chorizanthe brevicornu	Brittle spineflower	Х	
Eriogonum fasciculatum	California buckwheat		Х
Eriogonum inflatum	Desert trumpet	Х	
Eriogonum thomasii	Thomas' wild buckwheat	Х	
PORTULACEAE	PURSLANE FAMILY		
Calyptridium monandrum	Common pussypaws	Х	Х
RANUNCULACEAE	BUTTERCUP FAMILY		
Delphinium parishii	Parish's larkspur		Х
ROSACEAE	ROSE FAMILY		
Coleogyne ramosissima	Black brush		Х
SOLANACEAE	NIGHTSHADE FAMILY		
Lycium andersonii	Anderson box-thorn		Х
Physalis crassifolia	Thick leaved ground cherry	Х	
VISCACEAE	MISTLETOE FAMILY		
Phoradendron californicum	Desert mistletoe	Х	
ZYGOPHYLLACEAE	CALTROP FAMILY		
Fagonia laevis	Small flowered fagonia	Х	
Larrea tridentata	Creosote bush	Х	Х
Monocotyledons			

		Traill	nead
Latin Name	Common Name	Lower	Upper
AGAVEACEAE	AGAVE FAMILY		
Yucca brevifolia	Joshua tree	Х	
Yucca schidigera	Mohave yucca		Х
POACEAE	GRASS FAMILY		
* Bromus berteroanus	Chilean chess		Х
* Bromus diandrus	Ripgut brome		Х
* Bromus madritensis ssp. rubens	Foxtail brome	Х	Х
Bromus tectorum	Downy chess		Х
* Hordeum murinum	Foxtail	Х	
* Schismus barbatus	Mediterranean schismus	Х	Х
Stipa hymenoides	Indian rice grass		Х
Stipa speciosa	Desert needle grass		Х
RUSCACEAE	BUTCHER'S BROOM FAMILY		
Nolina parryi	Parry's nolina		Х
VERTEBRATE ANIMALS		-	
AVES	BIRD CLASS	·	·
ACCIPITRIDAE	HAWKS		
Buteo jamaicensis	Red-tailed hawk	Х	
COLUMBIDAE	PIGEON AND DOVE FAMILY		
Zenaida macroura	Mourning dove		Х
CORVIDAE	JAYS, MAGPIES, AND CROWS		
Corvus corax	Common Raven	Х	Х
EMBERIZIDAE	SPARROWS, WARBLERS, TANAGERS		
Amphispiza bilineata	Black-throated sparrow	Х	Х
LANIIDAE	SHRIKE FAMILY		
** Lanius Iudovicianus	Loggerhead shrike	Х	
MIMIDAE	MOCKINGBIRD AND THRASHER FAMILY		
Mimus polyglottos	Northern mockingbird	Х	Х
ODONTOPHORIDAE	QUAIL FAMILY		
Callipepla gambelii	Gambel's quail	Х	Х
POLIOPTILIDAE	GNATCATCHER FAMILY		
Polioptila caerulea	Blue gray gnatcathcer		Х
REPTILIA	REPTILE CLASS	•	
PHRYNOSOMATIDAE	SPINY LIZARDS AND RELATIVES		
Uta stansburiana	Common side-blotched lizard		Х
MAMMALIA	MAMMAL CLASS		
CANIDAE	FOXES AND WOLVES FAMILY		
Canis latrans	Coyote (tracks and scat)	Х	Х
CRICETIDAE	MICE AND RAT FAMILY		

Table B-3. Species Compendium		Traill	head
Latin Name	Common Name	Lower	Upper
Neotoma lepida	Desert woodrat	Х	Х
includes only species observed within the season. Plants were identified using keys	ated by an asterisk. Special-status species are india survey area. Other species may have been overlo , descriptions, and illustrations in Baldwin et al (201 ure generally follow Stebbins (2003) for amphibians nmals.	oked or unidentifia 12) and Jepson Flo	ble due to ora Project



Query Criteria:

Summary Table Report

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Quad-span style='color:Red'> IS (Rimrock (3411625) OR Yucca Valley North (3411624) OR Yucca Valley South (3411614)
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				Elev.		ш	eme	Element Occ. Ranks	c. Ra	inks	-	Population Status	n Status		Presence	
Name (Scientific/Common)	CNDDB Ranks	LlstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	٨	В	с	D	×	т 	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
Abronia villosa var. aurita	G5T2?	None	Rare Plant Rank - 1B.1	150	98	0	-	0	2	0	5	3	5	8	0	0
chaparral sand-verbena	S2	None	BLM_S-Sensitive USFS_S-Sensitive	1,100	S:0											
Accipiter cooperii	G5	None	CDFW_WL-Watch List	2,600	117	0	0	0	0	0	-	-	0	-	0	0
Cooper's hawk	S4	None	IUCN_LC-Least Concern	2,600	S:1											
Acmispon haydonii	G3	None	Rare Plant Rank - 1B.3		32	0	0	0	0	0	-	~	0	-	0	0
pygmy lotus	S3	None	SB_USDA-US Dept of Agriculture		S:1											
Aimophila ruficeps canescens	G5T3	None	CDFW_WL-Watch List	1,801	228	0	-	0	0	0	0	0	~	~	0	0
southern California rufous-crowned sparrow	S3	None		1,801	S:1											
Almutaster pauciflorus	G4	None	Rare Plant Rank - 2B.2	800	7	0	0	0	0	0	-	-	0	-	0	0
alkali marsh aster	S1S2	None		800	0:1											
Ambrosia monogyra	G5	None	Rare Plant Rank - 2B.2		30	0	0	0	0	0	-	-	0	-	0	0
singlewhorl burrobrush	S2	None			S:1											
Anniella stebbinsi	G3	None	CDFW_SSC-Species	2,523	417	0	2	0	0	0	-	-	7	ю	0	0
southern California legless lizard	S3	None	of Special Concern USFS_Sensitive	4,700	S:3											
Antrozous pallidus	G5	None	BLM_S-Sensitive	2,550	416	0	0	0	0	0	-	-	0	1	0	0
pallid bat	S3	None	CDFW_SSC-Species of Special Concern	2,550	S:1											
			IUCN_LC-Least													
			Concern													
			Priority													
					-		-	-	_	_	_	-				



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				Elev.		Elei	nent	.; 0 0	Element Occ. Ranks	s	Population Status	on Status	-	Presence	
Name (Sclentific/Common)	CNDDB Ranks	LIstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	A E	C B		×	U	HIstoric > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
Aquila chrysaetos golden eagle		None None	** * ~ ~ ~	1,300 3,480	321 S.2 .2	0	0	0	0	5	0	0	N	0	0
Asio otus long-eared owl	G5 S3?	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,600 2,600	46 S:1	0	0	0	0	-	~	0	~	0	0
Astragalus bernardinus San Bernardino milk-vetch	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-sensitive	3,800 5,500	42 S:10	0	0	0	0	10	7	Э	10	0	0
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	G5T1 S1	Endangered None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	130 2,150	56 S:47	0	8	11 00	0	18	12	35	46	0	~
Astragalus tricarinatus triple-ribbed milk-vetch	G2 S2	Endangered None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	1,700 5,000	43 S:26	0	б	5	8	10	5	21	26	0	0
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	60 2,737	1984 S:47	5	17	0 8	-	21	0	47	46	~	0
<i>Atriplex parishii</i> Parish's brittlescale	G1G2 S1	None None	Rare Plant Rank - 1B.1 USFS_S-Sensitive	500 500	15 S:1	0	0	0	0	-	-	0	1	0	0
Ayen<i>ia compacta</i> California ayenia	G4 S3	None None	Rare Plant Rank - 2B.3	1,000 2,500	74 S:4	0	0	0	0	4	4	0	4	0	0
Berberis fremontii Fremont barberry	G5 S3	None None	Rare Plant Rank - 2B.3 SB_RSABG-Rancho Santa Ana Botanic Garden	4,100 4,100	17 S:1	0	0	0	0	~	0	~	-	0	0





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				Elow			men	Element Occ. Ranks	Rank	, vi	Population Status	n Status		Presence	
Name (Sclentific/Common)	CNDDB Ranks	LlstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	<	<u> </u>		×	>	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
Boechera dispar pinyon rockcress	G3 S3	None None	Rare Plant Rank - 2B.3 SB_RSABG-Rancho Santa Ana Botanic Garden	4,000 4,800	68 S:4	0	0	0	0	4	m	-	4	0	0
Boechera lincolnensis Lincoln rockcress	G4G5 S3	None None	Rare Plant Rank - 2B.3 BLM_S-Sensitive	2,900 2,900	4 1. 1. 2.	0	0	0	0	-	-	0	-	0	0
Boechera shockleyi Shockley's rockcress	G3 S2	None None	Rare Plant Rank - 2B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	4,200 4,200	S: 1 S: 1 S: 1	0	0	0	0	-	-	0	-	0	0
Bombus crotchii Crotch bumble bee	G3G4 S1S2	None None		500 2,500	234 S:2	0	0	0	0	2	7	0	7	0	0
Calileptoneta oasa Andreas Canyon leptonetid spider	G1 S1	None None		1,850 1,850	s:1 1	0	0	0	0	-	-	0	-	0	0
Calochortus palmeri var. palmeri Palmer's mariposa-lily	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	5,000	111 S:1	0	0	0	0	-	.	0	.	0	0
Caulanthus simulans Payson's jewelflower	G4 S4	None None	Rare Plant Rank - 4.2 USFS_S-sensitive		31 S:1	0	0	0	0	-	-	0	.	0	0
Chaetodipus fallax pallidus pallid San Diego pocket mouse	G5T34 S3S4	None None	CDFW_SSC-Species of Special Concern	475 4,900	79 S:21	0	~	0	0	20	17	4	21	0	0
Chorizanthe parryi var. parryi Parry's spineflower	G3T2 S2	None None	Rare Plant Rank - 1B.1 BLM S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive		150 S:1	0	0	0	0	-	-	0	←	0	0
Chorizanthe xanti var. leucotheca white-bracted spineflower	G4T3 S3	None None	Rare Plant Rank - 1B.2 BLM S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive	1,200 4,000	59 S:7	0	0	0	0	~	~	0	2	0	0

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						Ele	ment	000	Element Occ. Ranks	ſ	Population Status	n Status		Presence	
Name (Sclentific/Common)	CNDDB Ranks	LlstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	_ <			×	_	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
Corynorhinus townsendii Townsend's big-eared bat	6364 S2	None None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	1,360 1,360	028 	0	0	0	0	-	~	0	~	0	0
Crotalus ruber red-diamond rattlesnake	G4 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	920 4,200	190 S:8	0	2	0	0	9	ນ	ς Γ	ω	0	0
Cyprinodon macularius desert pupfish	G1 S1	Endangered Endangered	AFS_EN-Endangered IUCN_VU-Vulnerable	440 440	74 S:1	0	-	0	0	0	-	0	~	0	0
Cypseloides niger black swift	G4 S2	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	3,480 3,480	46 S:1	0	~	0	0	0	+	0	-	0	0
Desert Fan Palm Oasis Woodland Desert Fan Palm Oasis Woodland	G3 S3.2	None None		400 2,600	80 S:20	0	2	0	1	17	20	0	19	0	~
<i>Dinacoma caseyi</i> Casey's June beetle	G1 S1	Endangered None		332 539	9 S:7	0	-	` O	-	5	-	9	2	0	0
Dipodomys merriami collinus Earthquake Merriam's kangaroo rat	G5T2? S1S2	None None		110 140	23 S:2	0	7	0	0	0	0	2	5	0	0
Dodecahema leptoceras slender-horned spineflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden		41 S:1	0	0	0	0	1	L	0	1	0	0
Empidonax trailli extimus southwestern willow flycatcher	G5T2 S1	Endangered Endangered	NABCI_RWL-Red Watch List	600 600	70 S:1	0	0	0	0	-	0	-	-	0	0
Eremarionta morongoana Morongo (=Colorado) desertsnail	G1G3 S1	None None	IUCN_NT-Near Threatened	2,400 2,400	S:1	0	0	0	0	-	-	0	-	0	0
Eremothera boothii ssp. boothii Booth's evening-primrose	G5T4 S3	None None	Rare Plant Rank - 2B.3	1,200	35 S:1	0	0	0	0	-	-	0	-	0	0

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				Elev.		Ele	ment	с; ОС	Element Occ. Ranks	s	Population Status	n Status	ш	Presence	
Name (Scientific/Common)	CNDDB Ranks	LlstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	A	е В	C C	×	N	HIstorlc > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
Eriastrum harwoodii Harwood's eriastrum	G2 S2	None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture		80 S:1	0	0	0	0	-		0	~	0	0
Erigeron parishii Parish's daisy	G2 S2	Threatened None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	3,450 5,935	50 S:7	N	0	0	0	Ω	-	ω	~	0	0
Euphorbia abramsiana Abrams' spurge	G4 S2	None None	Rare Plant Rank - 2B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	200 200	109 S:1	0	0	0	0	-	-	0	-	0	0
Euphorbia arizonica Arizona spurge	G5 S3	None None	Rare Plant Rank - 2B.3	500 1,400	11 S:3	0	0	0	0	ę	8	0	3	0	0
Euphorbia misera cliff spurge	G5 S2	None None	Rare Plant Rank - 2B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	1,400 1,400	40 S:1	0	0	-	0	0	٢	0	-	0	0
Euphorbia platysperma fiat-seeded spurge	G3 S1	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	210 210	S: 33	0	0	0	0	~	-	0	-	0	0
Falco mexicanus prairie falcon	G5 S4	None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	800 2,800	460 S:6	0	0	0	0	۵	Q	0	ω	0	0
Gopherus agassizii desert tortoise	G3 S2S3	Threatened Threatened	IUCN_VU-Vulnerable	1,520 4,045	963 S:11	~	5	-	0	с	ى ك	9	1	0	0
Grusonia parishii Parish's club-cholla	G3G4 S2	None None	Rare Plant Rank - 2B.2	3,000 3,000	45 S:1	0	0	0	0	-	-	0	-	0	0
Heuchera hirsutissima shaggy-haired alumroot	G3 S3	None None	Rare Plant Rank - 1B.3 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	6,525 6,525	23 S:2	0	0	0	0	7	0	5	0	0	0



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				Elev.		Eler	nent (Element Occ. Ranks	Sanks		Population Status	n Status	д	Presence	
Name (Scientific/Common)	CNDDB Ranks	LlstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	AB	C T	D	×	D	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
<i>Icteria virens</i> yellow-breasted chat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,600 2,600	97 S:1	0	0	0 0	0	-	-	0	~	0	0
<i>Imperata brevifolia</i> California satintail	G4 S3	None None	Rare Plant Rank - 2B.1 SB_SBBG-Santa Barbara Botanic Garden USFS_S-Sensitive	860	32 S:3	0	0	0	0	ε	N	~	m	0	0
<i>Lanius Iudovicianus</i> loggerhead shrike	G4 S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	133	109 S:1	0	0	0	0	0	0	~	~	0	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	4,700 4,700	238 S:1	0	0	0	0	~	~	0	-	0	0
Lasiurus xanthinus western yellow bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	250 3,350	58 S.3	0	0	0	0	<i>м</i>	n	0	n	0	0
Lifium parryi Iemon lily	8 8	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	8,000 8,000	160 S:1	0	-	0	0	0	0	-	-	0	0
L <i>inanthus bernardinus</i> Pioneertown linanthus	G1 S1	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	3,690 4,404	10 S:10	0	- 0	0	0	o	~	6	10	0	0
L <i>inanthus jaegeri</i> San Jacinto linanthus	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-sensitive	6,525 6,525	7 S:1	0	0	0 0	0	-	0	+	-	0	0
Linanthus maculatus ssp. maculatus Little San Bernardino Mtns. linanthus	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	450 4,000	53 S:23	m	с С	2	5	12	14	J	2	~	~
Macrobaenetes valgum Coachella giant sand treader cricket	G1G2 S1S2	None None	IUCN_VU-Vulnerable	60 350	5 S:2 S	0	0	0 0	0	2	2	0	2	0	0

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				Elev.		Ele	ment	t Occ.	Element Occ. Ranks	s	Population Status	n Status		Presence	
Name (Scientific/Common)	CNDDB Ranks	LlstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	٩	8	ت د	× 0	D	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
<i>Mentzelia tricuspis</i> spiny-hair blazing star	G4 S2	None None	Rare Plant Rank - 2B.1		16 S:1	0	0	0	0	~	1	0	-	0	0
Mesquite Bosque Mesquite Bosque	G3 S2.1	None None		1,800 1,800	47 S:1	0	0	0	0	~	-	0	~	0	0
Mojave Riparian Forest Mojave Riparian Forest	G1 S1.1	None None		2,600 2,600	19 S:1	~	0	0	0	0	-	0	~	0	0
<i>Monardella robisonii</i> Robison's monardella	G3 S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive	3,707 4,800	37 S:9	~	-	~	-	2 2	m	Q	6	0	0
<i>Myiarchus tyrannulus</i> brown-crested flycatcher	G5 S3	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	2,600 2,600	18 S:1	0	0	0	0	~	-	0	-	0	0
Nemacaulis denudata var. gracilis slender cottonheads	G3G4T3? S2	None None	Rare Plant Rank - 2B.2	600 1,000	24 S:3	0	0	0	1	2	ε	0	2	-	0
Neotoma lepida intermedia San Diego desert woodrat	G5T3T4 S3S4	None None	CDFW_SSC-Species of Special Concern	320 2,170	118 S:24	0	0	~	0	23	24	0	24	0	0
Nyctinomops femorosaccus pocketed free-tailed bat	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_M-Medium Priority		90 .:1	0	0	0	0	~	~	0	~	0	0
Nyctinomops macrotis big free-tailed bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_MH-Medium- High Priority	500	32 S:1	0	0	0	0	~	~	0	~	0	0
Oliarces clara cheeseweed owlfly (cheeseweed moth lacewing)	G1G3 S2	None None		560 560	11 S	0	0	0	0	-	1	0	~	0	0
<i>Ovis canadensis nelsoni</i> desert bighorn sheep	G4T4 S3	None None	BLM_S-Sensitive CDFW_FP-Fully Protected USFS_S-Sensitive		46 S:1	0	0	0	0	-	-	0	-	0	0
Ovis canadensis nelsoni pop. 2 Peninsular bighorn sheep DPS	G4T3Q S1	Endangered Threatened	CDFW_FP-Fully Protected	2,000 2,000	7 S:1	0	0	0	0	~	-	0	-	0	0

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				Flov		Ele	ment	Element Occ. Ranks	Rank	s	Population Status	n Status	_ d	Presence	
Name (Sclentific/Common)	CNDDB Ranks	LIstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's				×	_	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
<i>Paranomada californica</i> California cuckoo bee	G1 S1	None None		3,350 5,700	S:2 2	0	0	0	0	2	2	0	7	0	0
<i>Parnopes borregoensis</i> Borrego parnopes cuckoo wasp	G1G2 S1S2	None None		2,550 2,550	S:14	0	0	0	0	-	~	0	-	0	0
Perognathus longimembris bangsi Palm Springs pocket mouse	G5T2 S2		BLM_S-Sensitive CDFW_SSC-Species of Special Concern	133 1,920	18 S:4	-	0				2	5	4	0	0
<i>Petalonyx linearis</i> narrow-leaf sandpaper-plant	G4 S3?	None None	Rare Plant Rank - 2B.3	1,000 2,260	26 S:3	0	0	0	0	3	2	~	33	0	0
<i>Phrynosoma blainvillii</i> coast horned lizard	G3G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	560 4,520	775 S:7	0	0	0	1	6	2	0	9	-	0
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	G3 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	180 1,616	335 S:13	~	0	1	1	10	11	2	12	-	0
<i>Piranga rubra</i> summer tanager	G5 S1	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,600 2,600	21 S:1	0	0	0	0	-	٢	0	~	0	0
Polioptila californica californica coastal California gnatcatcher	G4G5T2Q S2	Threatened None	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List	440 440	833 S:1	0	0	0	0	-	-	0	-	0	0
Polioptila melanura black-tailed gnatcatcher	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	500 500	34 S:1	0	0	0	1	0	-	0	0	~	0
Pyrocephalus rubinus vermilion flycatcher	G5 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,600 2,600	25 S:1	0	0	0	0	-	L L	0	-	0	0
Rana draytonii California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	1,080 1,080	1516 S:1	0	0	0	0 0	~	-	0	-	0	0
Rana muscosa southern mountain yellow-legged frog	G1 S1	Endangered Endangered	CDFW_WL-Watch List IUCN_EN-Endangered USFS_S-Sensitive	800 2,000	186 S:3	0	0	0	ю 0	0	ε	0	0	2	-





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				Flev		Ĕ	men	t Occ	Element Occ. Ranks	s	Population Status	n Status		Presence	
Name (Sclentific/Common)	CNDDB Ranks	LIstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	<	8	- -	×	>	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
Saltugilia latimeri Latimer's woodland-glila	83 G	None None	Rare Plant Rank - 1B.2 BLM S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive	400 4,460	8 20 8 20 8	ν	2	0	-	14	4	φ	20	0	0
Selaginella eremophila desert spike-moss	G4 S2S3	None None	Rare Plant Rank - 2B.2	745 2,818	75 S:10	0	0	0	0	0 10	Ø	4	10	0	0
Setophaga petechia yellow warbler	G5 S3S4	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	2,550 4,500	72 S:3	0	0	0	0	3	°	0	ε	0	0
Southern Riparian Forest Southern Riparian Forest	G4 S4	None None		2,200 2,200	20 S:1	0	-	0	0	0	L	0	1	0	0
Stemodia durantifolia purple stemodia	G5 S2	None None	Rare Plant Rank - 2B.1	600 880	21 S:2	0	0	0	0	0	N	0	2	0	0
Stenopelmatus cahuilaensis Coachella Valley jerusalem cricket	G1G2 S1S2	None None	IUCN_VU-Vulnerable	230 1,500	11 S:5	0	0	0	.	۳ ۲	4	-	7	N	-
Streptanthus campestris southern jeweiflower	G3 S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive USFS_S-Sensitive	6,000 6,000	65 S:2	0	0	0	0	0	2	0	5	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	4,300 4,300	588 S:1	0	0	0	0	1	۲	0	L	0	0
Thelypteris puberula var. sonorensis Sonoran maiden fern	G5T3 S2	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive	1,500 1,500	27 S:1	0	0	0	0	0	-	0	1	0	0
<i>Toxostoma crissal</i> e Crissal thrasher	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	500	67 S:1	0	0	0	0	1	4	0	L	0	0



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				Elev.		ш	emei	Element Occ. Ranks	: Rai	Jks	Populat	Population Status		Presence	
Name (Sclentific/Common)	CNDDB Ranks	LlstIng Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	۷	В	c	D	×	Historic U > 20 yr	r <= 20 yr	Extant	Poss. Extlrp.	Extlrp.
<i>Toxostoma lecontei</i> Le Conte's thrasher	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	320 4,080	238 S:16	0	~	N	0	0	13 12	4	16	0	0
Uma inormata Coachella Valley fringe-toed lizard	G1Q S1	Threatened Endangered	IUCN_EN-Endangered	60 1,580	162 S:92	~	2	4	4	21 5	55 86	9	12	14	7
Vireo bellii pusillus least Bell's vireo	G5T2 S2	Endangered Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	680 3,200	497 S:7	0	m	0	0	.	e e	4	9	0	~
Xerospermophilus tereticaudus chlorus Palm Springs round-tailed ground squirrel	G5T2Q S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	260 1,100	11 S:3	0	0	0	0	0	е е	0 8	3	0	0
Xylorhiza cognata Mecca-aster	G2 S2	None None	Rare Plant Rank - 1B.2 BLM S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	600	36 S:2	0	0	0	0	0	N	-	2	0	0