



**Irvine Ranch Open Space 2014  
Donation Interim Recreation and  
Resource Management Plan  
Project IP 19-044**

Initial Study/Mitigated Negative Declaration



September 5, 2019 Report Date

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IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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Abbreviations

## Abbreviations

ADA	Americans with Disabilities Act
amsl	feet above mean sea level
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
BSA	Biological Study Areas
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalFire	California Department of Forestry and Fire Protection
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH <sub>4</sub>	methane
CHRIS	California Historic Resources Information System
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> equivalent
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DAMP	Drainage Area Management Plan
dB	decibel
DNL	Day/Night Average Sound Level
EO	<i>Executive Orders</i>
EOI	East Orange I
EOII	East Orange II
ESA	Federal Endangered Species Act
GHG	greenhouse gas
H <sub>2</sub> S	hydrogen sulfide
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
IOP	Interim Operations Plan
IROS	Irvine Ranch Open Space
IRRMP	Interim Resource and Recreation Management Plan
IS/MND	Initial Study/Mitigated Negative Declaration
IVC	Irvine Valencia Growers
LID	Low Impact Development
LRA	Local Responsibility Area
LSTs	localized significance thresholds
MBTA	Migratory Bird Treaty Act
MMT	million metric tons



**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
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Abbreviations

MOU	Memorandum of Understanding
MP	Mountain Park
MPO	metropolitan planning organizations
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NNLs	National Natural Landmarks
NO <sub>2</sub>	nitrogen dioxide
NOI	Notice of Intent
NOX	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
O <sub>3</sub>	ozone
OC	County of Orange
OC Parks	Orange County Parks
OCFC	Orange County Fire Control
OCSD	Orange County Sheriff's Department
Pb	lead
PFC	perfluorocarbon
PM <sub>10</sub>	respirable particulate matter with an aerodynamic diameter of less than 10 microns
PM <sub>2.5</sub>	fine particulate matter with an aerodynamic diameter of less than 2.5 microns
PRMMP	paleontological resource monitoring and mitigation plan
RMP	Resource Management Plan
RPS	Renewable Portfolio Standard
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SF <sub>6</sub>	sulfur hexafluoride
SO <sub>2</sub>	sulfur dioxide
SR	State Route
SRA	State Responsibility Area
SWPPP	Stormwater Pollution Prevention Plan
TNC	The Nature Conservancy
USACE	United States Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish & Wildlife Service
VHFHSZ	Very High Fire Hazard Severity Zone
VOCs	volatile organic compounds
WDID	Waste Discharge Identification
WDR	waste discharge requirements
WQMP	Water Quality Management Plan



# IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

## Introduction

## 1.0 INTRODUCTION

### 1.1 OVERVIEW

In 2014, the Irvine Company donated permanently protected open space to the County of Orange (OC). Four parcels consisting of East Orange I, East Orange II, Mountain Park, and Irvine Park Addition (collectively referred to as the 2014 IROS), have been donated for a total land area of nearly 2,300 acres, adding to the 20,000-acre Irvine Ranch Open Space (IROS) previously donated by The Irvine Company. These parcel areas are adjacent to Irvine Lake and near the junction of State Route (SR) 91 and SR 241. The properties are located near existing Orange County Regional Parks and Open Space and add further acreage to the previous inventory of nearly 60,000 acres. Orange County Parks (OC Parks) is responsible for the management of the property.

Recreational improvements and general park maintenance are proposed for three of the four parcels. Irvine Park Addition will not have improvements and is fenced off from access. The improvements are intended to identify and improve trails that currently exist and have existed in the past (historical) for permitted recreational uses including hiking, mountain biking, and horseback riding. Existing gravel lots and historical parking areas will be used for public staging areas. They would be improved to provide Americans with Disabilities Act parking, portable toilets, and picnic areas. Signage indicating relative information or regulation, access, park boundaries, and public health and safety will be replaced and/or added to the site. Existing and historical trails will be cleared of overgrown vegetation. In addition, the Project includes minimal vegetation restoration, such as planting of native plants, as well as non-native plant removal.

### 1.2 PURPOSE

The purpose of the Interim Recreation and Resource Management Plan (IRRMP; "Project") is to improve and identify recreational opportunities within the 2014 IROS area. Studies, monitoring, and research shall be conducted in the 2014 IROS to inform management activities. Such studies are designed to generate information directly related to the management of the 2014 IROS and for the development of the long-term Recreation and Resource Management Plan (RRMP). Trails identified in the IRRMP are not officially adopted trails, but rather are provisional trails accepted on a trial basis. The provisional trails and the immediately surrounding habitat will be monitored and surveyed during the period of the IRRMP to inform and affirm which trails should be officially designated in the RRMP. Trail impacts, user satisfaction, and habitat impacts will be monitored with respect to each trail. The IRRMP will:

- Identify appropriate resource management strategies that maintain the Conservation Values identified in the 2014 IROS conservation easement documents, while providing opportunities for interim public access for recreational and educational purposes.

### 1.3 PROJECT TITLE

Interim Recreation and Resource Management Plan, 2014 Irvine Ranch Open Space Donation (Project).



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## **1.4 LEAD AGENCY**

County of Orange

OC Parks – Planning & Design Division  
300N. Flower St.  
Santa Ana, California 92703

## **1.5 PROPONENT**

County of Orange  
Orange County Parks  
Planning and Design Division  
13042 Old Myford Road  
Irvine, California 92602

OC Parks is responsible for the management of the 2014 IROS and will utilize a number of park staff to patrol the property and perform day-to-day management. Additionally, OC Parks will be responsible for heavy or large-scale maintenance, and for repair of damage resulting from unauthorized use or from events such as storms, fire, earthquake, or vandalism.

## **1.6 AGENCIES INVOLVED AND PERMIT, CONSULTATION, AND ENVIRONMENTAL REVIEW REQUIREMENTS**

The public agency that has the principal responsibility for carrying out or approving a project is designated as the “Lead Agency” under California Environmental Quality Act (CEQA). The County of Orange is the Lead Agency responsible for preparation of this Initial Study/Mitigated Negative Declaration (IS/MND) and therefore has the principal responsibility for approving and implementing the Project.

This IS/MND is intended to be used as the CEQA document for all local and state approvals required for the Project; including approvals by responsible agencies, and any approvals required from trustee agencies. “Responsible Agency” means a public agency that proposes to carry out or approve a project for which the Lead Agency is preparing the CEQA document for. For purposes of CEQA, the term “Responsible Agency” includes all public agencies other than the Lead Agency having discretionary approval authority over the Project. “Trustee Agency” means a State agency having jurisdiction by law over project-affected natural resources that are held in trust for the people of the State of California.

Responsible agencies that may have discretionary approval authority over the Project, and trustee agencies having jurisdiction over natural resources affected by the Project which are held in trust for the people of the State of California, will have the opportunity to review and provide comments during the review period. Other agencies and the public may also provide comments.

The agencies involved, and permit, consultation, are summarized below in Table 1.



**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
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**Table 1 Agency Permits**

<b>Agency</b>	<b>Permits and Other Approvals</b>
<b>FEDERAL</b>	
U.S. Fish and Wildlife Service	<ul style="list-style-type: none"> <li>• Consultation with U.S. Army Corps of Engineers</li> </ul>
U.S. Army Corps of Engineers	<ul style="list-style-type: none"> <li>• Clean Water Act Section 404 Permit</li> </ul>
<b>STATE</b>	
California Department of Fish and Wildlife	<ul style="list-style-type: none"> <li>• Streambed Alteration Agreement if final Project design indicates alteration of jurisdictional streambed or bank</li> </ul>
Santa Ana Regional Water Quality Control Board (Region 8)	<ul style="list-style-type: none"> <li>• General Permits for Stormwater Discharges Associated with Construction and Land Disturbance Activities and Municipal Sewer Discharges</li> <li>• Stormwater Pollution Prevention Plan approval and discharge compliance oversight</li> <li>• issuance of U.S. Clean Water Act Section 401 Water Quality Certification or Waste Discharge Requirements if final Project design and implementation would not avoid discharge of dredge or fill materials to Waters of the U.S. and/or State.</li> </ul>
<b>LOCAL</b>	
County of Orange	<ul style="list-style-type: none"> <li>• Issuance of permits.</li> <li>• Review and approval of Water Quality Management Plan.</li> </ul>

## **1.7 INTENDED USES OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

This Initial Study/Mitigated Negative Declaration (IS/MND) is an informational document intended to inform the lead agency, other responsible or interested agencies, and the public of potential environmental effects of the Project. The environmental review process has been established to enable public agencies to evaluate potential environmental consequences and to examine and implement methods of eliminating or reducing any potential significant adverse impacts.

## **1.8 ORGANIZATION OF THE IS/MND**

To meet the requirements of CEQA, the IS/MND must inform members of the general public, decision makers, and technically oriented reviewers of the physical impacts associated with the Project.

The content and organization of this IS/MND are designed to meet the requirements of CEQA, the State CEQA Guidelines, the County's local guidelines, as well as to present issues, analyses, mitigation, and other information in a logical and understandable way. A description of the organization of this Draft IS/MND and the content of each section is provided in the following.

**Section 1.0, Introduction**, provides information and a brief overview of the Project, the environmental review process, and the organization of the IS/MND.



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## Introduction

**Section 2.0: Project Description**, presents a description of the Project, which identifies the location of the Project site, the objectives of the Project, and the characteristics of the Project.

**Section 3.0: Environmental Impact Analysis**, contains a detailed environmental analysis of the potential for the Project to result in significant environmental effects with respect to the topics evaluated in this IS/MND.

**Section 4.0: Mitigation Monitoring and Report Plan**, lists the mitigation measures included in the IS/MND, actions required, responsibility, and required time of compliance.

**Section 5.0: Proposed Finding**, presents the environmental determination to prepare an MND based on the findings of the IS.

**Section 6.0: List of Preparers**, lists persons involved in the preparation of this IS/MND.

**Section 7.0: References**, lists the principal documents, reports, maps, and other information sources referenced in this IS/MND.

**Appendices**: provide information and technical studies that support the environmental analysis contained within the IS/MND.





# IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

## Project Description

## 2.0 PROJECT DESCRIPTION

The Project proposes recreational improvements and general park maintenance for East Orange I and II and Mountain Park. These are intended to improve and expand permitted recreational uses including hiking, mountain biking, and horseback riding. Selected existing and historical trails are proposed for recreation to create a sustainably designed trail systems and will be inclusive of a variety of trail characteristics in order to appeal to a wide spectrum of public user-group types and experience levels. The design of this trail system may be impacted by, among other things, soil conditions, topographical detail, presence of protected habitat, and opportunities for scenic viewpoints, and will adhere to the conservation easement conditions<sup>1</sup> established by OC Parks Foundation when the land was donated in 2014. Public use shall be restricted to existing dirt roads and suitable trails. Due to rugged terrain, not all trails are practical for all users. This shall be indicated when and where possible.

Existing gravel lots and historical parking areas will be used for public staging areas. They would be improved to provide Americans with Disabilities Act parking, public access, portable toilets, and picnic areas. If trash containers are provided, they will be emptied on a schedule that eliminates any contact by or disturbance to wildlife. In general, there is a “pack-it-in/pack-it-out” policy on the property.

Signage indicating relative information or regulation, access, park boundaries, and public health and safety will be replaced and/or added to the site. All signs shall be prepared, installed and maintained by OC Parks staff or contracted third party. Signs shall be brief and shall utilize graphic icons and simple language in accordance to the OC Parks Signage and Graphics Master Plan. Signs shall contain the contact information for access and emergencies as appropriate. Trail signs may indicate trail mileage if appropriate, and, in some cases, degree of difficulty. Trail mileage may also be included on maps of the property. An information/regulation sign shall be installed at each of the major access locations. This sign shall display the particular canyon or area the public is about to enter. A brief explanation of the “do’s and don’ts” of low impact wilderness access shall be standard on all signs. Individual signs may also contain interpretive information pertaining to the highlighted area and a brief explanation of the IROS. The 2014 IROS is a wilderness area subject to certain inherent public dangers including mountain lions, snakes, poisonous insects, and rugged terrain. The public shall be informed of these dangers by posting standard “Mountain Lion” and “Wilderness Warning” signs and/or other public safety signs at all public areas and trailheads. Additionally, an informational flyer regarding mountain lion sightings shall be made available to all park visitors.

Access signs shall be posted at access gates and trespass points around the perimeter of the land. These signs shall state the areas are protected wildlands, access to the land is restricted, and information on gaining access is available by contacting OC Parks. Existing perimeter fencing shall be maintained and repaired as needed. Internal barbed wire fencing directly adjacent to trails may be removed as needed. Gates required for vehicular access/control shall be upgraded to OC Parks’ standards and shall respect the rural characteristics of the area. A uniform lock control and inventory system shall be developed and implemented.

<sup>1</sup> These conditions can be viewed in Easement Documentation Report for The Irvine Company’s East Orange Area I Conservation Easement – dated October 30, 2014, Easement Documentation Report for The Irvine Company’s East Orange Area II Conservation Easement – dated October 30, 2014, Easement Documentation Report for The Irvine Company’s Mountain Park Conservation Easement – dated October 30, 2014



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If any water troughs and wells currently exist on the property, they shall be identified as they are found on the property. If the wells are determined to be a danger, they shall be capped to prevent entry. If a water trough or well is determined to be safe, it may be considered as a resource for wildlife and maintained as such.

Public programs may be offered by OC Parks staff, qualified volunteers through the OC Parks Volunteer program, and/or third-party services. Types of programs offered would be consistent with conditions established in the Conservation Easements for the area, and may include interpretive, educational, and recreational activities including hiking, mountain biking, and equestrian use. Public access will be staff-led or qualified volunteer led managed access similar to the current model for the IROS. There is no open access to the trails except for a segment in Mountain Park that runs adjacent to the housing development. Subject to vehicle parking space constraints, OC Parks may also implement Wilderness Access Days to make self-guided passive recreational activities such as hiking, mountain biking, and equestrian use available to the public. This self-guided access could expand to a regular frequency if determined suitable by available research and adaptive management approval. Wilderness Access Days are only for a limited number of hours during the day and preregistration is required.

## 2.1 PROJECT LOCATION

The properties that make up the proposed Project (East Orange I, East Orange II, Mountain Park, and Irvine Park Addition) are located within the northern portion of the Central Sub-Area of the Orange County Central/Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). This area is adjacent to Irvine Lake and near the junction of SR 91 and SR 241. Irvine Lake is a reservoir in Orange County, California, situated east of the City of Irvine and close to Irvine Regional Park. Refer to **Figures 1 and 2** for Project location map.

Each property description and location are provided below.

### 2.1.1 East Orange I

#### 2.1.1.1 Existing Conditions

East Orange I is located in the foothills of the Santa Ana Mountains, bordered to the north and east by OC Parks open space. It lies west of Irvine Lake and the Santiago Landfill, east of the SR 241, and north of Santiago Canyon Road, within unincorporated Orange County. A small portion of the East Orange I property is located west of the 241 toll-road. The East Orange I parcel is protected by the OC Parks Foundation Conservation Easement with overlapping NCCP Reserve. Nearby are other OC Parks' IROS facilities: Fremont Canyon Management Unit to the north, Black Star Canyon Management Unit to the east, and Loma Ridge and Limestone Canyon Management Units to the south.

East Orange I is approximately 430 acres. Large portions of East Orange I were formerly part of Saddleback Park, an off-road motorcycle racing facility that was phased out in 1984. In the decades since, patchy native and non-native vegetation has filled in where the course once was. Some remnant routes from the raceway are still evident. There is an existing paved road which provides access to the property and the former Santiago Canyon Landfill; a second paved road in the southeast corner allows access to the property from Santiago Canyon Road via a locked gate. Fencing (standard 5-strand barbed-wire) is placed throughout the property, primarily along road areas.



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Project Description

### **2.1.1.2 Initial Operating Tasks**

Interim improvements are designated for East Orange I. **Figure 3** provides details for East Orange I. In East Orange I, 10 historical trails will be reestablished, totally approximately 2.22 miles. Access to the site is from Santiago Canyon Road via the Santiago Landfill Access road. An operating agreement or Memorandum of Understanding (MOU) with OC Waste & Recycling and OC Public Works will need to be established for the short portion of shared road. An existing graded area that was used for parking by the previous motorcross operations would be improved to establish a staging area for managed, public access to the site. The site of the Staging Area is a non-vegetated, disturbed soil and includes a weathered concrete slab that supported previously existing structures. The concrete slab will accommodate Americans with Disabilities Act (ADA) parking and two portable restrooms. Additional improvements include a picnic area, a trailhead, signage, and an entry gate. The parking lot will accommodate approximately 50 personal vehicles and six-horse trailers. Parking space quantities of each type can be adjusted to accommodate the needs of the programmed event.

OC Parks will provide signage at all access points consistent with other OC Parks wilderness and nature preserve facilities. An OC Park standard vehicle access gate will replace a deteriorated chain link gate at the access point off of the Santiago Landfill Access road.

Historical trails will continue to be maintained in its current condition. The provisional trails will be used for managed access events. Trail conditions, habitat impacts, and public satisfaction for the provisional trails will be regularly evaluated/surveyed during the term of the IRRMP. Based on the Conservation Easements, research findings, potential for future restoration, and habitat types, official trails will be designated in the RRMP.

## **2.1.2 East Orange II**

### **2.1.2.1 Existing Conditions**

East Orange II is located in the foothills of the Santa Ana Mountains, north, south and east of Irvine Lake near Santiago Canyon Road, within unincorporated Orange County. East Orange II is approximately 819 acres distributed across multiple parcels. There are four existing paved access roads, which provide access to the property and adjacent areas, as well as several maintained dirt roads. Fencing (standard five-strand barbed-wire) is placed throughout the property, primarily along road areas. A chain link fence is installed in one parcel, adjacent to an access gate.

The largest 673-acre area to the southeast of the lake includes the majority of the area's natural habitat, wildlife connectivity, scenic viewshed value, and public recreation opportunities.

The 96-acre parcel on the east side of Irvine Lake is largely devoid of native vegetation other than weeds due to previous uses and impacts. This parcel contains a radio-controlled airfield including a paved landing strip, helicopter landing zone, fencing, parking areas, picnic tables, portable bathrooms, and message boards. The location currently utilized by the radio-controlled airfield will also be used as a staging area as a key starting point to access multiple adjacent OC Parks properties.

Bordering the north side of the Irvine Lake dam, there is a 45-acre parcel that contains habitats important for wildlife movement and the existing Fremont Staging Area, which provides high recreational and educational value as a starting point for animal tracking programs, long-distance hiking, biking, and equestrian programs. Existing asphalt



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access roads and concrete Arizona crossing maintained by water districts provide vehicle access across Santiago Creek.

There is also a small, undeveloped 5-acre parcel west of Santiago Canyon Road contiguous with the Limestone Canyon Management Unit. This parcel has minimal to no recreation/educational opportunity due to small size and location. Most value exists in preserving the area's natural aesthetic and viewshed. One existing old ranch style gate and a grown over section of ranch road remain. There is also a drainpipe to collect and funnel water off Santiago Canyon Road and into the property.

### 2.1.2.2 Initial Operating Tasks

The existing Augustine Staging Area in the adjacent Limestone Canyon Nature Preserve will provide an immediate access point for public programs to the southern portion of East Orange II. **Figure 4** provided details for East Orange II. In East Orange II, 7 historical trails will be reestablished, totaling approximately 3.39 miles. The public will be able to park in Augustine Staging Area and proceed via Blue Diamond Haul Road across the Blue Diamond Haul Road Bridge (commonly known as Bat Bridge). Use of the bridge may be subject to coordination with OC Public Works as the bridge itself is managed within the OCPW Road Right-of-Way portfolio. This staging area will continue to be maintained by IRC per existing Land Management agreement for OC Parks IROS.

OC Parks will provide immediate signage along perimeter and access points, consistent with other OC Parks wilderness areas and managed open space. Staff will also improve and/or replace vehicle gates as necessary as determined by OC Parks IROS staff.

Provisional trails will be opened to managed access events in the Large Natural Open Space Area. An existing dirt road that runs the length of the large parcel will be utilized as a multi-use trail. This trail follows the ascending ridge to the highest point on the property presenting visitors with panoramic views of Black Star's red rock formation, Irvine Lake, and the greater Santiago Canyon area. Other previously existing dirt roads and trails connect to the dirt road to form loops accessible to multiple user-groups. Existing trails will be maintained in their current condition. Trail conditions, habitat impacts, and public satisfaction for the provisional trails will be regularly evaluated during the term of the IRRMP. Official trails will be identified in the RRMP, based on the Conservation Easements, research findings, potential for future restoration, and habitat types.

### 2.1.3 Mountain Park

#### 2.1.3.1 Existing Conditions

Mountain Park is located in the northwestern extent of the Santa Ana Mountains approximately where the SR 241 meets the 91 Freeway, within the City of Anaheim. The property totals approximately 1,040 acres. It is bordered to the east and south by OC Parks IROS (Weir Canyon and Gypsum Canyon Management Units), to the north by the SR 91 and to the west by existing residential development. The SR 241 bisects the property. The property is comprised of multiple parcels. **Figure 5** provided details for Mountain Park.

- **Parcel 1** is bordered by Santa Ana Canyon Road and SR 91 to the north, SR 241 to the west, Chino Hills State Park to the east and OC Parks Gypsum Canyon Management Unit to the south. The parcel shows occasional evidence of previous impacts from former ranching and former mining operations.. The main remnants from previous uses include a largely unmaintained ranch road infrastructure, capped water wells,



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non-active water/gas lines, miscellaneous dumped concrete and debris, and significant areas of non-native vegetation. Parcel 1 also contains a graveled area near the parcel entry gates.

- **Parcel 2** is an empty graveled lot with perimeter wire fencing and is devoid of vegetation aside from sporadic weeds and is surrounded by roadways including SR 91, Santa Ana Canyon Road and Gypsum Canyon Road.
- **Parcel 3** is a mostly weed-filled parcel dotted with a few native and non-native trees. It is bordered on the south and east by a small parcel that is part of OC Parks IROS Gypsum Canyon Management Unit, on the west by a community church and on the north by Santa Ana Canyon Road.
- **Parcel 4** borders a residential Anaheim Hills community. There are pre-existing dirt roads and trails from ranching operations in varying condition. This parcel is bisected by a corridor set aside for the potential future extension of Weir Canyon Road to SR 241. The northwest edge of the parcel contains a series of V-ditches installed for the protection of the adjacent residential development. Maintenance for these V-ditches are the responsibility of the adjacent Homeowners Association. Parcel 4 is bordered by Blue Sky Road to the north, the SR 241 to the east, and OC Parks Weir Canyon Management Unit to the south and west.
- **“Unencumbered Parcel”** Parcels 1 through 4 are all governed by a conservation easement. Mountain Park also contains an additional 283-acre parcel that is not encumbered by a conservation easement. This parcel, known as the Unencumbered Parcel, contains little native habitat due to the area’s previous use as a quarry operation. This area ranges from large flat gravel areas to rolling hills to steep rocky terrain. The “Unencumbered Parcel” is bordered by SR 91 on the north, Chino Hills State Park to the east, Parcel 1 to the south, and Gypsum Canyon Road to the east.

### **2.1.3.2 Initial Operating Tasks**

OC Parks will provide immediate signage along perimeter and access points, consistent with other OC Parks wilderness areas and managed open space. Staff will also improve and/or replace vehicle gates as determined by OC Parks IROS staff. In Mountain Park, 10 historical trails will be reestablished, totaling approximately 4.44 miles.

The existing gravel lot near the entrance of Mountain Park shall receive basic improvements to provide parking for public access, including portable restrooms, signage, and ADA parking stalls. Trash and debris shall be removed from the area nearest to SR 91 as well as scattered around previously impacted areas.

Due to previous quarry operations within a parcel that is not encumbered by any conservation easement, (the unencumbered portion of Mountain Park), many erosion control devices are present to prevent runoff issues in Gypsum Creek. OC Parks staff shall evaluate these erosion control Best Management Practices (BMPs) and establish a site plan to stay compliant with National Pollutant Discharge Elimination System (NPDES) regulations.

A current social trail along the residential development in the eastern portion of the parcel bordering the Anaheim Hills community may be evaluated for consideration as an authorized trail, connecting Oak Canyon Drive to S Weir Canyon Road. The trail shall be opened for public access during daylight hours, seven days a week. Closure of the trail for a period of time may occur following heavy rains of more than 0.25 inch (usually 48 to 72 hours) and during periods of high fire danger such as official Red Flag Warnings or after extended periods without precipitation and high fuel buildup.



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## 2.2 GENERAL PLAN LAND USE DESIGNATION

Project Component	General Plan Land Use Designation
East Orange I	General Agriculture (County of Orange), Low/Medium Density Residential (City of Orange)
East Orange II	General Agriculture (County of Orange), Open Space, Low/Medium Density Residential (City of Orange Sphere of Influence)
Mountain Park	Estate Density (City of Anaheim)
Oak Canyon	Open Space, Estate Density, Low/Medium Density (City of Anaheim)

Permitted recreational uses within OC Parks designated wilderness park lands include:

- **Hiking, Mountain Biking, and Horseback Riding (Equestrian).** Tours and Wilderness Access Days shall be conducted within areas of the property where the activity does not conflict with preservation of the conservation and resource values of the property. Hiking, biking, and horseback riding where permitted, shall be on established trails consisting of dirt roads and single-track trails. Based on the study results, season restrictions may be applied predicated on trail/soil conditions.

### 2.2.1 East Orange I and II

The East Orange I property is topographically complex and is comprised of low rolling hills, steep canyons with intervening scrub- and chaparral-covered ridges and alluvial terraces with deeply incised watercourses. Elevations on site range from approximately 750- to 1,600-feet above sea level [Glen Lukos, 2004].

The East Orange II property contains similar habitat to that described above for the East Orange I property. This area, however, has experienced much less disturbance and remains in a more natural state.

### 2.2.2 Mountain Park

The properties containing the proposed Mountain Park and Oak Canyon areas lie within the City of Anaheim and are designated by the City as Open Space. It is bordered to the east and south by OC Parks IROS (Weir Canyon and Gypsum Canyon Management Units), to the north by the SR 91 and to the west by existing residential development. SR 241 bisects the property.

Similar to the East Orange properties, the overall site is topographically complex and is comprised of low rolling hills, steep canyons, and alluvial terraces, bordering both sides of the 241. Elevations across the four parcels that make up Mountain Park range from approximately 450- to 950-feet above sea level.

## 2.3 ZONING

Project Component	Zoning (Jurisdiction)
East Orange I	P-C: Planned Community (City of Orange)
East Orange II	P-C: Planned Community (City of Orange)
Mountain Park	SP 90-4: Mountain Park (City of Anaheim)
Oak Canyon	SP 90-4: Mountain Park (City of Anaheim)



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## **2.4 SURROUNDING LAND USES AND SETTING**

Orange County is located along the Pacific Ocean between Los Angeles County to the north and northwest, San Bernardino County to the northeast, Riverside County to the east, and San Diego County to the south. Orange County stretches approximately 40 miles along the Pacific Coast and extends inland approximately 20 miles, covering 789 square miles. Regionally, the area encompassing the Project is in open space (OC Parks Open Space and NCCP Reserve).

The Project surrounding area consists of a series of low-lying hills and valleys along the Santa Ana Mountains. Residential, commercial and industrial developments exist in the general Project area. As noted, the Project is located within the northern portion of the Central Sub-Area of the Central/Coastal NCCP/HCP and contains a variety of sensitive species and wildlife. The NCCP planning process, completed in 1996, resulted in the creation of the Natural Reserve, which includes natural open space in its central and subregional reserves.

The surrounding land uses and setting associated with each property are described below.

### **2.4.1 East Orange I and II**

Much of the land surrounding East Orange I and II is in OC Parks Open Space and NCCP Reserve. Southern California maintains an electric powerline easement and PAC Bell maintains a telephone line easement along the paved access road to Santiago Canyon Landfill (East Orange I) and the airport (East Orange II).

The East Orange I property is topographically complex and is comprised of low rolling hills, steep canyons with intervening scrub- and chaparral-covered ridges and alluvial terraces with deeply incised watercourses. Elevations on site range from approximately 750- to 1,600-feet above sea level [Glen Lukos, 2004].

The East Orange II property contains similar habitat to that described above for the East Orange I property. This area, however, has experienced much less disturbance and remains in a more natural state.

### **2.4.2 Mountain Park**

Much of the land surrounding Mountain Park is in OC Parks Open Space and NCCP Reserve; remaining areas are bounded by existing residential development and the SR 91 freeway. In the north-central portion of the property, Questar maintains a gas pipeline easement and Southern California Edison maintains an electric power line easement. Irvine Valencia Growers (IVC) currently leases two small areas, approximately five acres total, to Orange County Fire Control (OCFC) for use as a storage yard.

The Summit Association performs landscaping maintenance activities northeast of Oak Canyon Road in the northwestern portion of the property.

## **2.5 PROJECT ACTIVITIES AND SCHEDULE**

Pending regulatory approval, Project construction activities (including clearing) are anticipated to occur over a one-month period.





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### **2.5.1 Construction**

Construction activities will be planned to minimize vegetation removal and replacement; however, some vegetation removal is anticipated. Existing and historical trails will be cleared of overgrown vegetation. In addition, the Project includes minimal vegetation restoration, such as planting of native plants, as well as non-native plant removal. The Project will require various earthmoving equipment (e.g., compact excavators, ride-on earthmovers) for development of staging areas, reestablishment of existing trails, and parking lot areas. Specialized tools (e.g., power wheelbarrows, brush mowers, rock drills, chainsaws) will also be utilized for tree and vegetation removal (if necessary), as well as removal of other debris.

Operation of on-road vehicles will be required for crew transportation to/from the Project site as well as conventional off-road construction equipment.

### **2.5.2 Operations and Maintenance**

Maintenance of IROS property acquired by the County in 2010 is divided into six Management Units. The Property parcels will be added to two existing Management Units and establish two new Management Units, Red Rock and Saddleback, with the exception of Irvine Park Addition, which will be managed by Irvine Regional Park. Gypsum Canyon will be divided into North Gypsum Canyon and South Gypsum Canyon. Five acres from East Orange II will be added to Limestone Canyon. Operation of on-road vehicles will be required for staff transportation to/from the site. During operations, the Project will require light routine park maintenance activities, such as:

- Litter removal from trails and staging areas;
- Trail service and minor erosion remediation and prevention including:
  - mowing of trail centerline annually on an as-needed basis;
  - installation of water bars and erosion prevention features as required;
  - identification and remediation of acute and/or small-scale erosion problems on roads and trails as required;
  - grading and/or drainage modification on ranch roads or trails to resolve emergency or acute small-scale problems and to ensure effective function;
  - maintenance of single-track trails;
  - removal of invasive plant species on trail alignments including single-track trails;
- Minor and emergency repairs on signs, fences and gates including change-outs, touch-ups and rapid response fence repairs;
- Installation and maintenance service of signage, kiosks, benches, shade structures, and similar trail facilities;
- Open and close gates and restrooms associated with scheduled public access program activities; and
- Oversight and maintenance of staging area operations, including litter removal and weed abatement.

Potentially, large-scale maintenance activities will be required, such as:

- Storm or fire damage cleanup and major trail rehabilitation and repair;
- Major trail erosion and damage remediation/reconstruction;
- Large-scale refuse removal, maintenance and repair of permanent restrooms, if any;
- Removal of trash from permanent receptacles (if any);
- Remediation and cleanup of illegal dumping;
- Installation and maintenance of trail head kiosks, booths and similar facilities;
- Replacement/repainting/repair of fences, locks, and gates;
- Seasonal mowing of trail centerlines;





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- Fuel modification;
- Firebreak maintenance;
- Patching and repair of paved surfaces associated with staging areas and gateways;
- Pumping, maintenance and supply of portable restroom facilities on a routine schedule.





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Environmental Impact Analysis

### 3.0 ENVIRONMENTAL IMPACT ANALYSIS

This Project is evaluated based upon its effect on twenty-one (21) major categories of environmental factors. The environmental factors checked below would be potentially affected by the proposed Project, as indicated by the resource checklists in this IS/MND.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Mineral Resources
<input type="checkbox"/> Agriculture and Forest Services	<input checked="" type="checkbox"/> Noise
<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Population and Housing
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Public Services
<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Recreation
<input type="checkbox"/> Energy	<input type="checkbox"/> Transportation and Traffic
<input checked="" type="checkbox"/> Geology and Soils	<input type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Utilities and Service Systems
<input type="checkbox"/> Hazards and Hazardous Materials	<input checked="" type="checkbox"/> Wildfire
<input checked="" type="checkbox"/> Hydrology and Water Quality	<input checked="" type="checkbox"/> Mandatory Findings of Significance
<input checked="" type="checkbox"/> Land Use and Planning	

A detailed analysis of environmental impacts will be presented for each resource area (listed above) utilizing the model Environmental Checklist Form found in Appendix G of the CEQA Guidelines Section 15063(f). Impacts to the environment for construction and operation of the Project will be assessed and described, and the level of significance of impacts will be measured against criteria that have been established by regulation, accepted standards, or other definable criteria. The use of an MND is only permissible if all potentially significant environmental impacts assessed in the IS are rendered Less than Significant with incorporation of mitigation measures.

Each environmental resource area is reviewed by analyzing a series of questions (i.e., Initial Study Checklist) regarding level of impact posed by the Project. Substantiation is provided to justify each determination. One of four following conclusions is then provided as a determination of the analysis for each of the major environmental factors.

**No Impact.** A finding of no impact is made when it is clear from the analysis that the Project would not affect the environment.

**Less than Significant Impact.** A finding of a Less than Significant impact is made when it is clear from the analysis that the Project would cause no substantial adverse change in the environment and no mitigation is required.

**Less than Significant Impact with Mitigation Incorporated.** A finding of a Less than Significant impact with mitigation incorporated is made when it is clear from the analysis that a project would cause no substantial adverse change in the environment when mitigation measures are successfully implemented by the Project's proponent.

**Potentially Significant Impact.** A finding of a potentially significant impact is made when the analysis concludes that the Proposed Project could have a substantially adverse change in the environment for one or more of the environmental resources assessed in the checklist. In this case, typically preparation of an Environmental Impact Report (EIR) would be required.





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**3.1 AESTHETICS**
**3.1.1 Setting**

The Project surrounding area consists of a series of low-lying hills and valleys along the Santa Ana Mountains. Residential, commercial and industrial developments exist in the general project area. Much of the land surrounding the three properties (East Orange I and II and Mountain Park) is in OC Parks Open Space and NCCP Reserve, including various OC Parks' Irvine Ranch Open Space facilities (e.g., Fremont Canyon Management Unit, Black Star Canyon Management Unit, and Loma Ridge and Limestone Canyon Management Units), as well as Irvine Lake. Based on the geological and ecological significance, nearly 40,000 acres of open space on the historic Irvine Ranch, including the 20,000 of the Irvine Ranch Open Space, have been designated a Natural Landmark by both the State of California and the U.S. Department of the Interior in 2006 (OC Parks 2018). A California Natural Landmark is a natural area that is designated as one of the best examples of California's natural heritage. This honor recognizes the exceptional value of these lands to California and the entire nation. "Irvine Ranch" was designated in 2006 and contains a remarkably complete stratigraphic succession ranging in age from late Cretaceous (80 million years ago) to the present. The primary biological features at the site include coastal sage scrub and chaparral communities, including rare Tecate cypress woodlands. National Natural Landmarks (NNLs) are not national parks. NNLs are owned by a variety of public and/or private entities and allowing visitation is at their discretion. All three properties include areas that have been previously disturbed and are designated as P-R (Parks and Recreation) and zoned as P-L (Public Lands). There is one State designated scenic highway (highway 91) located adjacent to the Project site(s).

**3.1.2 Impact Analysis**

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 or other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



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- a) *Have a substantial adverse effect on a scenic vista?*

**Less than Significant Impact.** A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The Project site is not listed as a scenic vista; and as noted, much of the land surrounding the Project is in OC Parks Open Space and NCCP Reserve. Project construction activities (e.g., development of staging areas, reestablishing existing trails, and improving parking lot areas) will primarily occur in previously disturbed areas and will be short-term (approximate 1 month). Once operational, the Project would continue to allow for a variety of public recreational uses during managed programs and Wilderness Access Days, as well as routine maintenance of trails, signage, parking areas, etc. Trails would only be available for public access during Wilderness Access Days. Furthermore, the primary objective of the Project is to improve existing recreational facilities while preserving the area's natural aesthetic and viewshed. Therefore, implementation of the proposed Project would result in a Less than Significant impact on scenic vistas.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**Less than Significant impact.** The State Scenic Highway System is a list of highways, mainly state highways, that have been designated by the California Department of Transportation (Caltrans) as scenic highways. The Project site(s) are located nearest to the junction of SR 91 and SR 241. According to the California Scenic Highway Mapping System, Route 91, located adjacent to the Mountain Park property, is a designated scenic highway (Caltrans, 2018). The Project is intended to improve existing recreational facilities with the development of staging areas, restore historic trails, and parking lot areas. However, as stated in 3.1.2(a) above, construction activities will primarily occur in previously disturbed areas, will be short-term. The visibility of the nearest Project site (Mountain Park, at approximately quarter of a mile) from SR 91 is limited. Therefore, the project would result in a Less than Significant impact to scenic resources.

- c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?*

**Less than Significant Impact.** As stated in 3.1.2(a) above, Project -related construction activities would result in changes to the existing visual character of the Project site(s); however, these activities would primarily occur in previously disturbed areas, and would be temporary. Post-construction activities (e.g., revegetation; planting of trees) would be implemented to improve the long-term visual character and quality of the site. Therefore, implementation of the Project would result in a Less than Significant impact to the existing visual quality of the Project site.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**No impact.** Construction activities would occur during, and be limited to, daytime hours, Monday – Friday, 8:00 AM - 7:00 PM. During operations, any park maintenance activities would also occur during daytime hours and are not anticipated to affect nearby residences. The Project does not include installation of lights or use of materials with the potential to introduce glare. As such, the Project would result in no impact due to light or glare.



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## 3.2 AGRICULTURE AND FORESTRY RESOURCES

### 3.2.1 Setting

Orange County was once a rural county supported primarily by an agricultural economy. The County's agricultural communities have experienced tremendous growth and decline over time and are presently experiencing urban growth (Orange County, 2005). Residential, commercial and industrial developments exist in the general Project area. Much of the land surrounding the Project area is in OC Parks Open Space and NCCP Reserve.

### 3.2.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>AGRICULTURE AND FORESTRY RESOURCES: Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 Protection (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

**No Impact.** According to the Farmland Mapping and Monitoring Program of the California Resources Agency as well as the *Prime Farmland in Orange County Map* depicted in the Resources Element of the County of Orange General



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Plan (2005), there is no farmland considered Prime, Unique, or of Statewide Importance within or adjacent to the Project area. Surrounding land consists of open space, grazing land, and urban and built-up land. In addition, no agricultural use zone currently exists within or near the Project, nor are any agricultural zones proposed. Therefore, no impacts related to the conversion of farmland to non-agricultural use would occur.

*b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**No Impact.** The Williamson Act restricts land development of contract lands typically to agriculture, recreation, and open space, unless otherwise stated in the contract. According to California Department of Conservation, land within and adjacent to the Project area is considered either urban and built-up land or land not enrolled in a Williamson Act contract. In addition, no agricultural use zone currently exists within or near the Project, nor are any agricultural zones proposed. Therefore, the Project would not conflict with existing zoning for agricultural use and no impacts related to existing agricultural zone use or Williamson Act contracts would occur.

*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 Protection (as defined by Government Code section 51104(g))?*

**No Impact.** The Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Protection because none of the lands within or adjacent to the Project area are identified as “forest land,” “timberland,” or “Timberland Protection” as defined in the Public Resources Code Section 12220(g) and Section 4526, or Government Code Section 51104 (g). Additionally, land within and adjacent to the Project area is designated as either developed or non-forest (USDA, 2016). Therefore, no impacts related to zoning of forest land, timberland, or Timberland Protection would occur.

*d) Result in the loss of forest land or conversion of forest land to non-forest use?*

**No Impact.** The Project would not result in the loss of forest land or conversion of forest land to non-forest use because none of the lands within and adjacent to the Project are identified as forest land as defined in the Public Code Section 12220(g). Therefore, no impacts related to loss or conversion of forest land would occur.

*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?*

**No Impact.** The Project would not involve other changes in the existing environment that could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use because there is no farmland or forest land within or adjacent to the Project area. The Project proposal to maintain existing permitted recreational uses (such as hiking, mountain biking, and horseback riding) through general park maintenance activities; therefore, no impacts related to conversion of farmland to non-agricultural use or conversion of forest land to non-forest use would occur.





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### 3.3 AIR QUALITY

#### 3.3.1 Setting

The three properties that make up the proposed Project are located adjacent to Irvine Lake in Orange County, within the South Coast Air Basin (SCAB). Regulatory oversight authority regarding air quality rests at the local, State, and federal levels with the South Coast Air Quality Management District (SCAQMD), California Air Resources Board (CARB), and U.S. Environmental Protection Agency (USEPA), respectively.

Ambient air quality is determined by comparing pollutant levels in ambient air samples to national and State standards. These standards are established by the USEPA and CARB at levels determined to be protective of public health and welfare, with an adequate margin of safety. California Ambient Air Quality Standards (CAAQS) were established in 1967, whereas National Ambient Air Quality Standards (NAAQS) were first established by the federal Clean Air Act of 1970. California standards are generally more stringent than national standards.

Air quality standards specify the upper limits of pollutant concentrations, over defined durations, in ambient air, consistent with the management goal of preventing specific harmful effects. There are national and state standards for the six “criteria pollutants”: ozone (O<sub>3</sub>); carbon monoxide (CO); nitrogen dioxide (NO<sub>2</sub>); suspended particulate matters including fine particulate matter with an aerodynamic diameter of less than 2.5 microns (PM<sub>2.5</sub>), and respirable particulate matter with an aerodynamic diameter of less than 10 microns (PM<sub>10</sub>); sulfur dioxide (SO<sub>2</sub>); lead (Pb). Nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) are of particular interest as they are precursors to ozone formation. California has established ambient air quality standards for criteria pollutants, as well as visibility reducing particles; sulfates, hydrogen sulfide (H<sub>2</sub>S); and vinyl chloride.

The USEPA and CARB determine the air quality attainment status relative to the level of pollutants in designated areas by comparing local ambient air quality measurements from State or local ambient air monitoring stations with the NAAQS and CAAQS. Non-attainment status indicates that ambient measurements for a given pollutant in that area exceed the NAAQS and/or CAAQS. Consistent with federal requirements, an unclassifiable designation is treated as an attainment designation. Table 2 presents the federal and State attainment status for the project area which is in Orange County within the SCAB.

**Table 2 Attainment Status of Orange County within South Coast Air Basin**

Pollutant	Federal Designation	State Designation
Ozone (O <sub>3</sub> )	Non-Attainment (Extreme)	Non-Attainment
Particulate Matter (PM <sub>10</sub> )	Attainment/Maintenance	Non-Attainment
Particulate Matter (PM <sub>2.5</sub> )	Non-Attainment (Moderate)	Non-Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Hydrogen Sulfide (H <sub>2</sub> S)	*	Unclassified
Sulfates	*	Attainment
Visibility Reducing Particles	*	Unclassified
Source: SCAQMD, 2017a		
Notes: (*) = Not Applicable/ No Federal Standards.		

As shown in Table 2, the Project is in an area designated non-attainment for both the federal and State standards for O<sub>3</sub> and PM<sub>2.5</sub>, and for the State standard for PM<sub>10</sub>. Because Orange County (within SCAB) currently exceeds these



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State and federal ambient air quality standards, the SCAQMD is required to implement strategies to reduce pollutant levels to recognized acceptable standards.

The SCAQMD in conjunction with the Southern California Association of Governments (SCAG), CARB, and USEPA recently prepared the 2016 Air Quality Management Plan (AQMP) (SCAQMD, 2017b). The purpose of the 2016 AQMP is to provide a comprehensive and integrated program to lead the SCAB into compliance with the federal ozone and particulate matter standards.

The 2016 AQMP accounts for projected population growth, predicted future emissions in energy and transportation demand, and determined control strategies for the eventual achievement of NAAQS attainment designation. These control strategies are either organized into the SCAQMD rules and regulations, or otherwise set forth as formal SCAQMD recommendations to other agencies.

The 2016 AQMP includes policies that are consistent with the SCAQMD and specify review according to the recommendations of SCAQMD guidelines. Other policies are aimed at reducing transportation emissions and emissions from major stationary sources.

The Project would be subject to the following general SCAQMD rules and regulations, also as required by the Orange County Grading and Excavation Codes:

Regulatory IV – Prohibitions

- . Rule 401 – Visible Emissions: prohibits discharges of visible air contaminants that occlude the air beyond certain thresholds;
- a. Rule 402 – Nuisance: prohibits discharges of air contaminants that cause “injury, detriment, nuisance, or annoyance” to the public; and
- b. Rule 403 – Fugitive Dust: prohibits discharges of fugitive dust that exceed certain thresholds.

The SCAQMD has adopted regional and localized significance thresholds (LSTs) to determine the significance of a project’s potential air quality impacts. Separate thresholds of significance have been adopted for the construction and operation phases of projects. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where people stay in extended amount of time during the day. Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for shorter periods of time, such as eight hours per day. The LSTs were developed by the SCAQMD to assist lead agencies in analyzing localized air quality impacts from projects. LSTs look-up tables for one-, two-, and five-acre proposed projects emitting CO, NOx, PM2.5 or PM10 were prepared for easy reference according to source receptor area. The LSTs methodology and associated mass rates are not applicable to mobile sources travelling over the roadways.

SCAQMD does not mandate impact determination based on LSTs; more importantly, LSTs are a voluntary approach to be implemented at the discretion of local agencies (SCAQMD, 2008). Because the proposed Project is limited to minor construction activities and non-motorized use of recreational trails during operation, it is not a project with a high potential to result in substantial air pollutant emissions. The limited sources of air pollutants associated with the proposed Project that could affect local sensitive receptors would be generated from sources such as construction or maintenance landscaping equipment. These sources would be operated in a linear manner along the trails (proceeding from one end to another) and would be operated in close proximity to any sensitive receptor for only short-periods of time. Additionally, the limited sources of air pollutants would occur over an approximate 4.5-acre area



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interspersed within a larger 2,300-acre open space area. As a result, the LSTs have been determined not to be applicable to the proposed Project and are not considered further in this analysis.

Table 3, below, presents the regional thresholds applicable to the Project. These daily emission thresholds are used in this analysis for purposes of determining the air quality impacts from project construction and operation.

**Table 3 SCAQMD Significance Thresholds for Mass Daily Emissions of Criteria Air Pollutants**

Regional Thresholds (lbs/day)	VOC	NO <sub>x</sub>	SO <sub>x</sub>	CO	PM10	PM2.5	Pb
Construction	75	100	150	550	150	55	3
Operation	55	55	150	550	150	55	3
SOURCES: SCAQMD Air Quality Significance (Mass Daily) Thresholds, 2015							

### 3.3.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>AIR QUALITY: Would the project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

**Less than Significant Impact.** The Project is limited to minor improvements to existing parking facilities and re-establishment of existing recreation trails on open space land. The Project would generate emissions during construction primarily from off-road equipment and on-road vehicle exhaust from worker vehicles and materials delivery. Operation phase emissions would occur from on-road vehicles associated with trail users travel to adjacent parking and trail access facilities as well as from maintenance trail/landscaping equipment periodically used during operation.



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Emissions below the SCAQMD mass emissions thresholds of significance presented in Table 4 would not be expected to conflict with or obstruct implementation of the applicable air quality plan. Project construction and operation emissions were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planning, and environmental professionals to quantify potential criteria air pollutant emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations including vehicle use, off-road equipment, fugitive dust, off-gas from asphalt and landscaping maintenance. Default data (i.e., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is an accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California.

Estimated unmitigated Project construction and operation emissions are summarized below in Tables 4 and 5, respectively. Detailed emission estimates and assumptions are provided in **Appendix A** (Project Emissions Estimates). The proposed Project does not include a source of lead emissions.

**Table 4 SCAQMD Unmitigated Project Construction Emissions in Comparison to SCAQMD Significance Criteria**

Peak Daily Emissions (lbs/day)							
Component	VOC	NO <sub>x</sub>	SO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	Lead (Pb)
Construction Emissions	4.19	43.15	0.04	22.45	20.58	12.04	--
Regional Thresholds Construction	75	100	150	550	150	55	3
Exceeds Thresholds?	No	No	No	No	No	No	n/a

**Table 5 Unmitigated Project Operation Emissions in Comparison to SCAQMD Significance Criteria**

Peak Daily Emissions (lbs/day)							
Component	VOC	NO <sub>x</sub>	SO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	Lead (Pb)
Project Operation Emissions	0.19	0.72	0.01	2.4	0.81	0.22	--
Regional Thresholds Operation	55	55	150	55	55	150	55
Exceeds Thresholds?	No	No	No	No	No	No	n/a

As shown in Tables 4 and 5, Project construction and operation emissions are below the applicable SCAQMD mass emissions thresholds of significance. Project construction and operation emissions would therefore not conflict with or obstruct implementation of the AQMP and impacts would be Less than Significant.

- 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

**Less than Significant Impact.** In accordance with SCAQMD methodology, projects that do not exceed or can be mitigated to less than the daily threshold values do not add significantly to a cumulative impact. As discussed above in response a), estimated Project emissions are below the applicable SCAQMD regional mass emissions thresholds of



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significance. The proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant and would have a Less than Significant impact.

*c) Expose sensitive receptors to substantial pollutant concentrations?*

**Less than Significant Impact with Mitigation Incorporated.** Because the proposed Project is limited to minor construction activities and non-motorized use of recreational trails during operation, it is not a project with a high potential to result in substantial air pollutant emissions. The limited sources of air pollutants associated with the proposed Project that could affect local sensitive receptors such as construction or maintenance landscaping equipment would be operated in a linear manner along the trails and would be operated in close proximity to any sensitive receptor for only short-periods of time. Additionally, the limited sources of air pollutants would occur over an approximate 4.5-acre area interspersed within a larger 2,300-acre open space area. However, these types of activities have the potential to result in fugitive dust emissions from surface disturbing activities that could expose sensitive receptors to substantial pollutant concentrations and result in a potentially significant impact. The closest sensitive receptors to the project would be the residences located between S Weir Canyon and Oak Canyon Drive (part of Mountain Park), located approximately 200 feet away from the Mountain Park alignment. All other residences would be geographically separated from the proposed work areas by existing roadways.

Mitigation Measures AQ-1 through AQ-5 below would be implemented to reduce fugitive dust emissions.

**Mitigation Measures**

Applicable to All Project Activities

**AQ-1:** Vehicle travel on unpaved roadways shall be limited to 15 miles per hour or less.

Applicable to Project Activities Involving Excavations

**AQ-2:** A gravel apron, 25 feet long by road width, shall be used to reduce mud/dirt trackout from unpaved truck/vehicle exit routes.

**AQ-3:** A soil stabilizer shall be applied to unpaved construction site access routes.

**AQ-4:** Apply water three times daily to disturbed construction areas.

**AQ-5:** Ground cover shall be replaced in disturbed areas as quickly as possible.

Mitigation Measures AQ-1 through AQ-5 would substantially reduce fugitive dust emissions and exposure of sensitive receptors to substantial pollutant concentrations. Potential impacts would be Less than Significant with mitigation incorporated.

*d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

**No Impact.** The SCAQMD has identified land uses subject to odor complaints. These land uses include agriculture (farming and livestock), wastewater treatment, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD, 1993). The Project involves minor recreation improvements on open space lands and does not involve any of the SCAQMD identified land uses subject to odor complaints or



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components with the potential to create objectionable odors affecting a substantial number of people. No impact would occur.



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## **3.4 BIOLOGICAL RESOURCES**

### **3.4.1 Setting**

The Biological Study Areas (BSA) are located in eastern Orange County, California. All the BSAs are situated within the western half of the U.S. Geological Survey (USGS) Black Star Canyon 7.5-minute topographic quadrangle with the individual BSA location described in further detail below.

#### **East Orange I (EOI)**

The EOI BSA is situated immediately east of SR 241 adjacent to its intersection with SR 261. The main portion of the approximately 495-acre BSA occupies the open space between SR 241 and the now-closed Santiago Canyon Landfill, just west of Irvine Lake. A smaller spur reaches out from the southern end of the BSA, extending approximately 0.75 mile to the east-southeast, north of and adjacent to Santiago Canyon Road (S18). The mountainous EOI BSA ranges in elevation from approximately 1,250 feet above mean sea level (amsl) in the east central portion of the BSA to 725 feet amsl in the northernmost corner. Lands surrounding the EOIBSA generally include OC Parks Open Space and NCCP Reserve. This BSA is bound to the north by SR 261, to the west and south by Santiago Canyon Road and SR 241, and to the east by the now-closed Santiago Canyon Landfill. Further east beyond the landfill is Irvine Lake and a temporary use area for private radio-controlled aviation.

#### **East Orange II (EOII)**

The EOII BSA is situated in open space to the southeast of Irvine Lake and just northeast of Santiago Canyon Road. A small section of the approximately 485-acre BSA extends to the south of Santiago Canyon Road, along Blue Diamond Haul Road and encompassing the Irvine Ranch Augustine Staging Area. The mountainous EOII BSA ranges from approximately 1,225 feet amsl along the ridgelines in the southeastern portion of the BSA to 800 feet amsl in the in the northwest corner of the BSA. The EOII BSA is situated approximately 1.5 miles to the southeast of the EOI BSA and is also largely surrounded by OC Parks Open Space and NCCP Reserve lands. It is bound to the north by the private radio-controlled aviation area and to the south, east, and west by undeveloped lands with Santiago Canyon Road traversing along its southern boundary.

#### **Mountain Park (MP)**

The MP BSA is situated along the east side of SR 241, immediately south of its intersection with SR 91. In general, it spans the area between SR 241 and the unpaved road leading south from Gypsum Canyon Road, extending approximately 1.2 miles to the south. This BSA is approximately 312 acres in size. The MP BSA is composed of two general landforms: lowland canyon areas and surrounding hillslopes and ridgetops, ranging in elevation from approximately 980 feet amsl in the southwest portion of the BSA to 400 feet amsl in the north, at the intersection of East Santa Ana Canyon and Gypsum Canyon Roads. The land to the south and east of the MP BSA is in OC Parks Open Space and NCCP Reserve, with the I-91 freeway and SR 241 bordering the BSA to the north and west, respectively, with urban development beyond. Irvine Valencia Growers currently leases two small areas totaling approximately five acres in the northern portion of the MP BSA to Orange County Fire Control for use as storage yards.



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The portions of Mountain Park located west of SR 241 were surveyed separately and denoted as the Oak Canyon (OC) BSA. The OC BSA is situated between California SR 241 and a residential development to the west. The approximately 30-acre BSA abuts the residential development to the east, extending approximately 0.4 mile in a northeast to southwest direction from Oak Canyon Drive to South Weir Canyon Road. The OC BSA has a lower basin area and an upper hillslope area and ranges in elevation from approximately 950 feet above mean sea level (amsl) along the eastern boundary of the southern portion of the BSA to 675 feet amsl in the stormwater detention basin in the northern portion of the BSA. This basin receives flows diverted away from the adjacent residential area. A large berm runs north/south through the middle of the BSA separating the residential development to the west from the open space and drainage features to the east. The eastern side of the BSA also has unpaved access roads and concrete viaducts. The OC BSA is bordered to the west by residential development and to the north, east, and south by undeveloped land, though SR 241 separates the BSA from the wider area of open space to the east.

### **3.4.2 Impact Analysis**

#### **Regulatory Environment**

##### Federal Endangered Species Act

Federal Endangered Species Act (ESA) provisions protect federally listed threatened and endangered species and their habitats from unlawful take and ensure that federal actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Under the ESA, “take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” The U.S. Fish & Wildlife Service’s (USFWS) regulations define harm to mean “an act which actually kills or injures wild-life.” Such an act “may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR § 17.3). Critical habitat is defined in Section 3(5)(A) of the ESA as “(i) the specific areas within the geographical area occupied by the species on which are found those physical or biological features (I) essential to the conservation of the species, and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species upon a determination by the Secretary of Commerce or the Secretary of the Interior (Secretary) that such areas are essential for the conservation of the species.” The effects analyses for designated critical habitat must consider the role of the critical habitat in both the continued survival and the eventual recovery (i.e., the conservation) of the species in question, consistent with the Ninth Circuit judicial opinion, *Gifford Pinchot Task Force v. USFWS*. Activities that may result in “take” of individuals are regulated by the USFWS. The USFWS produced an updated list of candidate species December 6, 2007 (72 FR 69034). Candidate species are not afforded any legal protection under ESA; however, candidate species typically receive special attention from Federal and State agencies during the environmental review process.

##### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) makes it unlawful to possess, buy, sell, purchase, barter or “take” any migratory bird listed in Title 50 of the Code of Federal Regulations Part 10. “Take” is defined as possession or destruction of migratory birds, their nests or eggs. Disturbances that cause nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend may be a violation of the MBTA. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary. This act encompasses whole birds, parts of birds, and bird nests and eggs.





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Bald and Golden Eagle Protection Act of 1940 (16 USC 668)

The Bald Eagle Protection Act of 1940 (16 U.S.C. 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this Act. Take of bald and golden eagles is defined as follows: “disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (72 FR 31132; 50 CFR 22.3).

The USFWS is the primary federal authority charged with the management of golden eagles in the United States. A permit for take of golden eagles, including take from disturbance such as loss of foraging habitat, may be required if this project affects such resources. USFWS guidance on the applicability of current Eagle Act statutes and mitigation is currently under review. On November 10, 2009, the USFWS implemented new rules (74 FR 46835) governing the “take” of golden and bald eagles. The new rules were released under the existing Bald and Golden Eagle Act which has been the primary regulation protection unlisted eagle populations since 1940. All activities that may disturb or incidentally take an eagle or its nest as a result of an otherwise legal activity must be permitted by the USFWS under this act. The definition of disturb (72 FR 31132) includes interfering with normal breeding, feeding, or sheltering behavior to the degree that it causes or is likely to cause decreased productivity or nest abandonment. If a permit is required, due to the current uncertainty on the status of golden eagle populations in western United States, it is expected permits would only be issued for safety emergencies or if conservation measures implemented in accordance with a permit would result in a reduction of ongoing take or a net take of zero.

Federally Regulated Habitats

Areas meeting the regulatory definition of “Waters of the U.S.” (Jurisdictional Waters) are subject to the jurisdiction of the United States Army Corps of Engineers (USACE) under provisions of Section 404 of the Clean Water Act (CWA) (1972) and Section 10 of the Rivers and Harbors Act (1899). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, etc.), all impoundments of waters otherwise defined as “Waters of the U.S.,” tributaries of waters otherwise defined as “Waters of the U.S.,” the territorial seas, and wetlands (termed Special Aquatic Sites) adjacent to “Waters of the U.S.” (33 CFR, Part 328, Section 328.3). Wetlands on non-agricultural lands are identified using the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987). The Project Area falls within the South Pacific Division of the USACE and is under the jurisdiction of the Los Angeles District.

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit would be effective in the absence of State water quality certification pursuant to Section 401 of the CWA. As a part of the permit process the USACE works directly with the USFWS to assess potential project impacts on biological resources.

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) requires all Federal agencies to examine the environmental impacts of their actions, incorporate environmental information, and utilize public participation in the planning and implementation of all actions. Federal agencies must integrate NEPA with other planning requirements and prepare appropriate NEPA documents to facilitate better environmental decision making. NEPA requires Federal agencies to



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review and comment on Federal agency environmental plans/documents when the agency has jurisdiction by law or special expertise with respect to any environmental impacts involved (42 U.S.C. 4321- 4327) (40 CFR 1500-1508).

## **State Regulations**

### California Environmental Quality Act

CEQA establishes State policy to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures. CEQA applies to actions directly undertaken, financed, or permitted by State lead agencies. Regulations for implementation are found in the State CEQA Guidelines published by the Resources Agency. These guidelines establish an overall process for the environmental evaluation of projects.

### California Endangered Species Act

Provisions of the California Endangered Species Act protect State-listed Threatened and Endangered species. The CDFW regulates activities that may result in “take” of individuals (“take” means “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code. Additionally, the California Fish and Game Code contains lists of vertebrate species designated as “fully protected” (California Fish & Game Code §§ 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], 5515 [fish]). Such species may not be taken or possessed.

In addition to Federal and State-listed species, the CDFW also has produced a list of Species of Special Concern to serve as a “watch list.” Species on this list are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Species of Special Concern may receive special attention during environmental review, but they do not have statutory protection.

Birds of prey are protected in California under the State Fish and Game Code. Section 3503.5 states it is “unlawful to take, possess, or destroy any birds of prey (in the order Falconiformes or Strigiformes) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW. Under Sections 3503 and 3503.5 of the State Fish and Game Code, activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory nongame bird as designated in the MBTA, or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant to Fish and Game Code Section 3800 are prohibited.

### Native Plant Protection Act (Fish & Game Code 1900-1913)

California’s Native Plant Protection Act (NPPA) requires all State agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of NPPA prohibit the taking of listed plants from the wild and require notification of the CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The Applicant is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.



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Section 3503 & 3503.5 of the Fish and Game Code

Under these sections of the Fish and Game Code, the Applicant is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory non-game bird as designated in the MBTA, or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant to Fish and Game Code Section 3800.

Porter-Cologne Water Quality Control Act

Regional Water Quality Control Boards (RWQCBs) regulate the “discharge of waste” to “waters of the State.” All projects proposing to discharge waste that could affect waters of the State must file a waste discharge report with the appropriate regional board. The board responds to the report by issuing waste discharge requirements (WDR) or by waiving WDRs for that project discharge. Both terms “discharge of waste” and “waters of the State” are broadly defined such that discharges of waste include fill, any material resulting from human activity, or any other “discharge.” Isolated wetlands within California, which are no longer considered “waters of the United States” as currently defined by Section 404 of the CWA, are addressed under the Porter-Cologne Act.

State-Regulated Habitats

The State Water Resources Control Board is the State agency (together with the RWQCBs) charged with implementing water quality certification in California. The Project Area falls under the jurisdiction of the Santa Ana RWQCB.

The CDFW extends the definition of stream to include “intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (USGS-defined), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife” (CDFW, 1994).

Activities that result in the diversion or obstruction of the natural flow of a stream; or which substantially change its bed, channel, or bank; or which utilize any materials (including vegetation) from the streambed, may require that the project Applicant enter into a Streambed Alteration Agreement with the CDFW.

**Local Regulations**

Orange County General Plan – Chapter VI. Resources Element

*Natural Resources Component*

The Natural Resources Component of the Resources Element of the Orange County General Plan contains policies and programs which are designed to protect and conserve natural resources in the County, including scenic areas such as ridgelines and hillsides, climate, farmlands, native vegetation and wildlife, and mineral resources. It provides a basis for programs which served to implement natural resource conservation goals and policies and establish a framework for additional inventory and resource planning efforts (County of Orange, 2015). The Project Area occurs within a County-designated Wildlife Habitat Area.

The Goals, Objectives, and Policies relative to natural resources that apply to the Project Area are as follows:

**Goal 1** Protect wildlife and vegetation resources and promote development that preserves these resources.



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- **Objective 1.1** To prevent the elimination of significant wildlife and vegetation through resource inventory and management strategies.
- **Policy 1.** To identify and preserve the significant wildlife and vegetation habitats of the County.

**Goal 3** Manage and utilize wisely the County's landform resources.

- **Objective 3.1** To minimize to the extent feasible the disruption of significant natural landforms in Orange County.
- **Policy 5.** To protect the unique variety of significant landforms in Orange County through environmental review procedures and community and corridor planning activities.

*Open Space Component*

The Open Space Component of the Resources Element of the Orange County General Plan is the open space plan for the unincorporated areas of Orange County. This component is the successor to the Open Space Element originally adopted by the Board of Supervisors on June 27, 1973. The preparation of this component is in compliance with State Government Code Sections 65560-65568, which require each city and county to prepare and adopt an open space plan for the comprehensive and long-range preservation of open space land within its jurisdiction. [County of Orange, 2015].

The Open Space Component contains the necessary goals, objectives, policies, and programs to promote the preservation and protection of resource areas and the protection of the public from potential hazards. The component also functions in a manner to shape the overall urban form of Orange County. To that end, open space facilities such as greenbelts that buffer conflicting land uses or link recreation facilities along regional trails and water courses are desired, as well as areas set aside to preserve cultural-historic resources, significant wildlife habitats, and biotic resources such as oak groves, sycamore/riparian woodlands, and marshlands. [County of Orange, 2015]

An integral part of the Open Space Component is the Open Space/Conservation Program Map which depicts an open space framework of countywide significance. This framework includes areas of resource concentration such as existing and proposed regional recreation facilities and a system of linkages such as trails and major open space corridors. The implementation programs provide the mechanism by which an integrated open space network can be realized. [County of Orange, 2015]

The Project Area occurs within the County-designated Upper Santiago Canyon Open Space/Conservation Area. The Upper Santiago Canyon area is proposed as the County's largest inland open space/recreation corridor, linking the proposed Limestone Canyon/Whiting Ranch Regional Park complex with the Irvine Park/proposed Villa Park Basin, Peters Canyon, and Weir Canyon Regional Park complex. Upper Santiago Canyon open space corridor affords buffering and gateway opportunities at points along the Cleveland National Forest boundary in the Central County and is easily accessible to residents of the County's largest cities. The area includes Orange County's largest lake, Santiago Reservoir (Irvine Lake). When combined with the proposed Limestone Canyon Regional Park, Santiago Reservoir presents a centrally located opportunity to establish the County's largest active urban recreation area, modeled after Griffith Park in Los Angeles. Upper Santiago Canyon and environs merit high-priority status due to the presence of a scenic highway, arterial bikeways, existing and proposed regional riding and hiking trails, and six existing and proposed County regional parks. [County of Orange, 2015]



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The Goals, Objectives, and Policies relative to open space that apply to the Project Area are as follows:

**Goal 1** Retain the character and natural beauty of the environment through the preservation, conservation, and maintenance of open space.

- **Objective 1.1** To designate open space areas that preserve, conserve, maintain, and enhance the significant natural resources and physical features of unincorporated Orange County.
- **Policy 1.1** To guide and regulate development of the unincorporated areas of the County to ensure that the character and natural beauty of Orange County is retained.
- **Policy 1.2** To implement the Open Space Component through a program organization capable of conducting multiple projects at priority locations throughout the County and with sufficient resources, authority, and responsibility to effectively manage the program.
- **Policy 1.3** To seek out, evaluate, and take advantage of special opportunities to obtain open space as these opportunities become available and when the available open space meets or helps to meet established open space goals and objectives.

**Goal 4** Conserve open space lands needed for recreation, education, and scientific activities, as well as cultural-historic preservation.

- **Objective 4.1** To encourage the conservation of open space lands which provide recreational scenic, scientific, and educational opportunities.
- **Policy 4.1** To plan for the acquisition, development, maintenance, operation, and financing of open space lands which provide recreational, scenic, aesthetic, scientific, and educational opportunities.

Orange County Central-Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan

Assembly Bill 2172 (Natural Community Conservation Planning Act) bill was drafted in recognition of the fact that individual species protection programs prepared and implemented under the FESA and/or SESA were costly and ineffective in protecting and/or preventing extinction of a plant or animal species, and that habitat-based, multi-species or ecosystem-based management and preservation approach has a greater potential for long-term success. AB 2172 was formally signed by Governor Wilson in September of 1991. It provided enabling legislation authorizing the California Department of Fish and Game (CDFG) to enter into agreements with any person, for the purpose of preparing and implementing Natural Community Conservation Plans (NCCP). The NCCP Act also provided the regulatory framework for the preparation of conservation guidelines for the development and implementation of NCCPs. In addition, the act also authorized NCCPs to be undertaken by local, state or federal agencies independently or in cooperation with other persons. [County of Orange, 2015]

The County of Orange established two distinct study areas: the Southern NCCP Subregion and Central/Coastal Subregion NCCP. The Central-Coastal Subregional NCCP is one of eleven NCCP subregions that has been initiated within the five-county Southern California area and includes a Central Subarea and a Coastal Subarea (County of Orange, 2015). The Project Area occurs in the Central Subarea of the Central-Coastal Subregion NCCP. The Orange County Board of Supervisors approved the Central-Coastal NCCP/HCP on April 16, 1996 along with the certification of EIR/EIS No. 553. On July 17, 1996 an implementation agreement was executed by the Chairman of the Orange



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County Board of Supervisors, the State Resources Agency, Department of the Interior, the Transportation Corridor Agencies, Southern California Edison, the Irvine Company and other participating landowners and utility companies. The approval of the NCCP/HCP established the following (County of Orange, 2015):

- Habitat Reserve System (Nature Reserve of Orange County)
- Species and habitat covered under the approved NCCP/HCP
- Coastal Sage Scrub Take Authorization
- “Mutual Assurances” provisions
- Adaptive management programs
- Funding for reserve creation and habitat management
- Nonprofit Corporation

The primary goal of the NCCP/HCP is to protect and manage habitat supporting a broad range of plant and animal populations that are now found within the Central and Coastal Subregion. To accomplish this goal, the NCCP/HCP creates a subregional habitat Reserve System and implements a coordinated program to manage biological resources within the habitat reserve. [County of Orange, 1996]

## **Other Applicable Regulations, Plans, and Standards**

### California Native Plant Society Rare Plant Program

The mission of the CNPS Rare Plant Program is to develop current, accurate information on the distribution, ecology, and conservation status of California’s rare and endangered plants, and to use this information to promote science-based plant conservation in California. Once a species has been identified as being of potential conservation concern, it is put through an extensive review process. Once a species has gone through the review process, information on all aspects of the species (e.g., listing status, habitat, distribution, threats, etc.) are entered into the online CNPS Inventory and given a California Rare Plant Rank (CRPR). In 2011, the CNPS officially changed the name “CNPS List” to “CRPR.” The Program currently recognizes more than 1,600 plant taxa (species, subspecies and varieties) as rare or endangered in California.

Vascular plants listed as rare or endangered by the CNPS, but which might not have a designated status under State endangered species legislation, are defined by the following CRPR:

- CRPR 1A - Plants considered by the CNPS to be extinct in California
- CRPR 1B - Plants rare, threatened, or endangered in California and elsewhere
- CRPR 2 - Plants rare, threatened, or endangered in California, but more numerous elsewhere
- CRPR 3 - Plants about which we need more information – a review list
- CRPR 4 - Plants of limited distribution – a watch list

In addition to the CRPR designations above, the CNPS adds a Threat Rank as an extension added onto the CRPR and designates the level of endangerment by a 1 to 3 ranking, with 1 being the most endangered and 3 being the least endangered. These are described as follows:

- 0.1 – Seriously threatened in California (high degree/immediacy of threat)
- 0.2 – Fairly threatened in California (moderate degree/immediacy of threat)
- 0.3 – Not very threatened in California (low degree/immediacy of threats or no current threats known.



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**Impact Analysis**

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
<b>BIOLOGICAL RESOURCES: Would the Project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any 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 Impact with Mitigation Incorporated.** The Biological Resources Technical Report for the Project (refer to **Appendix B**) describes the surveys that were conducted for the Project site and immediate surrounding areas; initial reconnaissance-level surveys were conducted on January 10 and 11, 2018, with additional focused surveys were conducted from May 9 through 18, 2018 and June 25 through 28, 2018. Surveys were conducted within and adjacent to four distinct locations in the Santa Ana Mountains in eastern Orange County. These areas are defined as the Oak Canyon, Mountain Park, East Orange I, and East Orange II Biological Study Areas (OC



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BSA, MP BSA, EOI BSA, and EOII BSA, respectively). Collectively the BSAs are referred to as the Project Area (Project Area). Although federal, State or locally protected wildlife species were not detected during the surveys, site assessment revealed that the habitats within or adjacent to the Project site have the potential to support (i.e., nesting, foraging, breeding, etc.) special-status wildlife species such as but not limited to; coastal California gnatcatcher (*Polioptila californica*), least Bell's vireo (*Vireo bellii pusillus*), Cooper's hawk (*Accipiter cooperii*), coast range newt (*Taricha torosa*), and western mastiff bat (*Eumops perotis*).

Two special-status plant species recognized by the California National Plant Society (CNPS) Rare Plant Program and assigned a CRPR were observed in the Project Area; many-stemmed dudleya (*Dudleya multicaulis*) and Peirson's morning glory (*Calystegia peirsonii*). Several other special-status species are known to occur in the general Project Area; Tecate cypress (*Hesperocyparis forbesii*), felt-leaved monardella (*Monardella hypoleuca* ssp. *Lanata*), and Allen's pentachaeta (*Pentachaeta aurea* ssp. *Allenii*). These plant species, as well as others, (full list is provided in **Appendix B**) have a "low" or "moderate" potential of occurrence within the Project Area.

In general, direct impacts to special-status plants and wildlife include ground-disturbing activities associated with construction of the Project and increased human presence (i.e., crushing, trampling, trapping). Potential indirect impacts include increased noise levels from heavy equipment (wildlife only), increased human disturbance, exposure to fugitive dust, the spread of noxious weeds, and disruption of breeding or foraging activity due to routine maintenance activities (wildlife only). Weed abatement through herbicide application or mechanized tools could also impact special-status species. If the Project construction were to occur during the avian nesting season (generally considered to be between February 15<sup>th</sup> through September 15<sup>th</sup>; although some raptors species may nest as early as January) indirect impacts to nesting birds could occur; the MBTA of 1918 (16 U.S.C. 703-711) does not allow for take of migratory birds.

The MBTA makes it unlawful to possess, buy, sell, purchase, barter or "take" any migratory bird listed in Title 50 of the Code of Federal Regulations Part 10. "Take" is defined as possession or destruction of migratory birds, their nests or eggs. Disturbances that cause nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend may be a violation of the MBTA. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary. This act encompasses whole birds, parts of birds, and bird nests and eggs.

If implementation of the Project were to impact special-status species, these impacts would be considered significant. Therefore, Mitigation Measures BIO-1 through BIO-6, which would require pre-construction wildlife surveys prior to ground disturbance, focused protocol surveys for least Bell's vireo and coastal California gnatcatcher, relocation of wildlife found within Project impact areas during pre-construction surveys and daily monitoring, a biological monitor during site disturbing activities, implementation of environmental awareness training to educate Project personnel regarding on-site plants and wildlife, implementation of site-wide BMPs (i.e., restriction on open trenches and guidelines for refueling near drainage features), nesting bird surveys and avoidance measures for active nests, and pre-construction surveys for State and Federally Threatened, Endangered, Proposed, Petitioned, Candidate, and other Special-Status plants and development of a transplanting plan. These measures would be implemented to mitigate potentially significant impacts. Implementation of these Mitigation Measures would ensure that any potential impacts to special-status plant and wildlife species are reduced to a Less than Significant level.

**Mitigation Measures**

**BIO-1 Wildlife Pre-Construction Surveys and Biological Monitoring:** Prior to ground disturbance or vegetation clearing within the Project site, a qualified biologist shall conduct surveys for wildlife (no more than 14 days prior to





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site disturbing activities) where suitable habitat is present and directly impacted by construction activities. The qualified biologist must be approved by OC Parks prior to the commencement of surveys. Wildlife found within the Project site or in areas potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the project prior to the start of construction. Special-status species found within a Project impact area shall be relocated by an authorized biologist to suitable habitat outside the impact area.

Prior to the issuance of permits the Project proponent shall provide written evidence to OC Parks that the Project proponent has retained a qualified biological monitor with expertise in the species known to occur or with the potential to occur on the Project site. The qualified biologist shall be present during initial ground disturbance for each phase of construction. Once initial ground disturbance is complete, monitoring will occur periodically during all construction activities. The qualified biologist(s) shall be present at all times during ground-disturbing activities immediately adjacent to, or within habitat that supports populations of listed or special-status species.

If required, during pre-construction surveys and/or required monitoring efforts, the qualified biologist will relocate common and special-status species that enter the Project site; some special-status species may require specific permits prior to handling and/or have established protocols for relocation. Records of all detection capture, and release shall be reported to CDFW.

**BIO-2 Environmental Awareness Training:** Prior to the issuance of permits the Project proponent shall submit proof to the OC Parks, that all Project personnel attended an environmental awareness and compliance training program. The training program shall present the environmental regulations and applicable permit conditions that the Project team shall comply with. The training program shall include applicable measures established for the Project to minimize impacts to water quality and avoid sensitive resources, habitats and species. Dated sign-in sheets for attendees at these meetings shall be maintained and submitted to OC Parks.

**BIO-3 Implement Best Management Practices (BMPs):** Project shall implement the following Best Management Practices (BMPs):

- Restrict non-essential equipment to the existing roadways and/or ruderal areas to avoid disturbance to native vegetation.
- All excavation, steep-walled holes or trenches in excess of six inches in depth shall will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches will also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required).
- Minimize mechanical disturbance of soils to reduce impact of habitat manipulation on small mammals, reptiles, and amphibians.
- Removal/disturbance of vegetation shall be minimized to the greatest extent feasible.
- Install and maintain appropriate erosion/sediment control measures, as needed, throughout the duration of work activities.



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- Vehicles shall not be driven, or equipment operated, in water covered/wetted portions of the stream channel, or where riparian vegetation may be destroyed, except as otherwise provided for in the permits/agreements from the CDFW, USACE, and/or Regional Water Quality Control Board (RWQCB).
- No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.
- Disinfection of all equipment prior to use on the project site to reduce potential for the spread of ISHBs.
- Pruning of tree limbs within the Project area potentially infested with ISHBs.
- Avoidance and minimization of the transport of potential ISHB host tree materials and proper disposal of potential host materials (i.e., chipping, solarization, composting all prior to delivering to a landfill).

**BIO-4 Nesting Bird Surveys and Avoidance Measures:** Prior to initial site disturbance, seasonally timed presence/absence surveys for nesting birds shall be conducted by a qualified biologist; the qualified biologist must be approved by OC Parks prior to the commencement of surveys. If construction activities carry over into a second nesting season(s) the surveys will need to be completed annually until the Project is complete. A minimum of three survey events, three days apart shall be conducted (with the last survey no more than three days prior to the start of site disturbance), if construction is scheduled to begin during avian nesting season (February 15<sup>th</sup> through September 15<sup>th</sup>); surveys for raptors shall be conducted from January 1<sup>st</sup> to August 15<sup>th</sup>. Surveys shall be conducted within 500 feet of all Project activities.

If coastal California gnatcatcher, least Bell's vireo, or other special-status species are observed, consultation with USFWS and/or CDFW is required. If breeding birds with active nests are found prior to or during construction, a qualified biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. The prescribed buffers may be adjusted by the qualified biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors. The qualified biologist shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. If construction occurs outside of avian nesting season, only a single presence/absence survey will be required.

**BIO-5 Conduct Pre-Construction Surveys for State and Federally Threatened, Endangered, Proposed, Petitioned, Candidate, and other Special-Status Plants and Development of a Transplanting Plan:** Prior to initial ground disturbance and for undisturbed areas in subsequent construction years, the Project proponent shall conduct pre-construction surveys for State and federally listed Threatened and Endangered, Proposed, Petitioned, Candidate, and other special-status plants in all areas subject to ground-disturbing activity. The surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist, approved by OC Parks, according to protocols established by the USFWS, CDFW, and CNPS. All listed plant species found shall be marked and avoided. Any populations of special-status plants found during surveys will be fully described, mapped, and a CNPS Field Survey Form or written equivalent shall be prepared.



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Prior to excavation activities or vegetation removal, any populations of listed or special-status plant species identified during the surveys within the Project limits and beyond, shall be protected and a buffer zone placed around each population. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by the qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual; the qualified plant ecologist/biologist may increase this minimum buffer depending on species and location. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS and CDFW as applicable.

Where impacts to listed plants are determined to be unavoidable, the USFWS and/or CDFW shall be consulted for authorization. Additional mitigation measures to protect or restore listed plant species or their habitat, including but not limited to a salvage plan including seed collection and replanting, may be required by the USFWS or CDFW before impacts are authorized, whichever is appropriate.

**BIO-6 Conduct Protocol Surveys for Least Bell's Vireo and Coastal California Gnatcatcher:** A qualified avian biologist shall conduct focused protocol surveys in suitable habitat within 500 feet of proposed Project disturbance areas within the breeding season prior to the start of construction. The surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season and follow established protocols.

If a territory or nest is confirmed in a previously unoccupied area, the CDFW and USFWS shall be notified within 48 hours. In coordination with the CDFW and USFWS, a 300-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. This buffer may be adjusted as determined by a qualified avian biologist in coordination with the CDFW and USFWS. The City, in consultation with the qualified biologist, shall halt construction if activities outside of but near the 300-foot buffer are determined to be negatively impacting the nesting birds. The qualified biologist shall devise methods to reduce the noise and/or disturbance in the vicinity as needed. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge.

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

**Less than Significant Impact with Mitigation Incorporated.** One "sensitive" riparian habitat, mulefat thickets, is present within the Project Area (as defined above) but would not be subject to reestablishment modifications or impacted by proposed construction activities; approximately 2.49 acres occur within Project Area. This habitat has an "S3" designation, which indicates that they are vulnerable due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines; global and state ranks are determined by the NatureServe Network and recognized by the CDFW. The loss of sensitive riparian plant communities would be considered a significant impact.

Riparian habitats, including ephemeral and perennial streams, are biologically productive and diverse, and are the exclusive habitat of several threatened or endangered wildlife species and many other special-status species.



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Riparian and wetland habitats are highly productive ecosystems that also provide drinking water sources and foraging, nesting, and cover habitat for a diverse assemblage of wildlife species, both within the riparian habitats and adjacent upland habitats. Many wildlife species are wholly dependent on riparian habitats throughout their life cycles, and many others use riparian habitats only during certain seasons or life history phases. For example, certain mammals require drinking water or cool shaded cover during summer but otherwise may live in upland habitats. Numerous amphibians breed in aquatic habitats but spend most of their lives in uplands.

Two sensitive upland communities, coast prickly pear scrub and lemonade berry scrub, would be impacted by the Project. Approximately 0.01 acres of coast prickly pear scrub and 0.02 acres of lemonade berry scrub would be permanently impacted by construction of the Project. These habitats have the same "S3" designation as described above for mulefat thickets. The Project Area occurs in the Central Sub-Area of the Central/Coastal Subregion Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) boundaries. This NCCP/HCP treats California sage scrub as a sensitive resource; therefore, for the purposes of this project impacts and mitigation, California sage scrub is considered a sensitive community.

Table 6 below identifies the potential impacts to vegetation communities that are expected to occur from Project implementation. These impacts include the removal of existing vegetation along historical trails for reestablishment.

**Table 6 Estimated Impacts to Vegetation Communities and Land Cover Types**

Vegetation Communities/Land Cover Types	Survey Area (in acres)							
	OC BSA		MP BSA		EOI BSA		EOII BSA	
	Survey Area	Project Impacts	Survey Area	Project Impacts	Survey Area	Project Impacts	Survey Area	Project Impacts
<b>MCVII VEGETATION COMMUNITIES</b>								
Annual brome grassland	-		17.83		-			
Black sage scrub	-		-		25.78			
Black willow thickets	-		-		0.60			
Bush mallow scrub	-		0.90	0.01	-		-	
California buckwheat scrub	-		-		5.12			
California sagebrush scrub*	-		-		260.61	0.96	278.44	0.72
Chamise chaparral	-		2.49		-		7.04	0.03
Coast live oak woodland	0.57		8.82		5.83	0.02	18.98	0.06
Coast prickly pear scrub*	-		1.48	0.01	0.51		-	
Lemonade berry scrub*	-		-		22.64	0.02	-	
Mulefat thickets*	-		2.45		-			
Poison oak scrub	-		-		6.52		-	
Red brome grasslands	20.27	0.12	270.59	1.48	79.76	0.64	153.53	0.75
Red willow thickets	-		-		2.40		5.30	



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Vegetation Communities/Land Cover Types	Survey Area (in acres)							
	OC BSA		MP BSA		EOI BSA		EOII BSA	
Upland mustards	-		-		76.77		-	
Wild oats grasslands	-				2.40			
<b>OTHER LAND COVER TYPES</b>								
Disturbed/Developed	9.64	0.01	7.40	0.01	5.84	0.05	17.56	0.01
<b>TOTAL</b>	<b>30.48</b>	<b>0.13</b>	<b>311.96</b>	<b>1.51</b>	<b>494.78</b>	<b>1.69</b>	<b>480.85</b>	<b>1.57</b>

\*Sensitive Vegetation Community

Construction of the Project would remove vegetation, alter soil conditions, and have the potential to result in the loss of native seed banks within portions of the Project site. Construction activities could also result in the spread of noxious weeds within the Project site and adjacent habitats. During operation and maintenance of the Project, impacts would occur during routine maintenance activities and could include trampling or crushing of native vegetation by foot traffic, alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants due to increased human presence on foot or equipment.

Mitigation Measure BIO-7 below, which includes minimizing vegetation removal and compensation for impacts to native vegetation communities would be implemented to mitigate these potential impacts. In addition, BIO-2 and BIO-3 would require environmental awareness training for all project personnel and implementation of best management practices (i.e., establishment of construction exclusion zones). Implementation of these measures would ensure that potential impacts to sensitive habitats (approximately 0.18 acres), is reduced to a Less than Significant level.

### Mitigation Measures

#### BIO-2 Environmental Awareness Training

#### BIO-3 Implement Best Management Practices (BMPs)

**BIO-7 Vegetation Removal and Replacement:** Construction activities shall be done in such a manner as to minimize the removal of native vegetation. If native vegetation removal cannot be avoided, and the removal is approved by OC Parks, the impacted plant communities shall be replaced at a mitigation ratio of 1:1. Sensitive communities shall be replaced at a mitigation ration of 3:1. The compensation for the loss of habitats may be achieved either by a) on-site habitat creation or enhancement of California sycamore woodlands and southern riparian scrub communities with similar species compositions to those present prior to construction, b) off-site creation or enhancement of California sycamore woodlands and southern riparian scrub communities, or c) participation in an established mitigation bank program.

Prior to the removal of native vegetation, if on or off-site mitigation is required, a Habitat Mitigation and Monitoring Plan shall be prepared that will guide all restoration and monitoring activities. This plan shall include, at a minimum, the following:

- Proposed species list for creation/enhancement;
- Planting/seeding methodology;
- Irrigation plan;
- Weeding schedule;
- Success criteria;
- Monitoring methodology and schedule; and
- Reporting requirements.



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- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**Less than Significant Impact with Mitigation Incorporated.** Multiple potentially jurisdictional features were mapped within the Project Area (refer to **Appendix C** for additional details). By virtue of its hydrological connectivity to the Santa Ana River and subsequently with the Pacific Ocean, drainages within the Project Area are potentially subject to Sections 404 and 401 (Water Quality Certification) of the CWA (USACE and Regional Water Quality Control Board). Impacts to and activities within jurisdictional features are also subject to CDFW Section 1600 of the California Department of Fish and Game Code (Streambed Alteration Agreement Program). Project establishment of trails and usage of trail systems (of Mountain Park, East Orange I, East Orange II) is anticipated to permanently impact up to approximately 0.012 acres of Waters of the United States and up to approximately 0.023 acres of CDFW jurisdictional waters. The precise nature and location of these impacts is described in Appendix C.

The importance of intermittent and ephemeral streams to wildlife in arid environments is well known (Levick et al., 2008). Ephemeral drainages, such as those occurring within the Project Area, provide unique habitat that is distinct from the surrounding uplands, providing more continuous vegetation cover and microtopographic diversity than the surrounding uplands. Ephemeral and intermittent streams in the arid west provide important habitat for wildlife and are responsible for much of the biotic diversity (Levick et al., 2008). They have higher moisture content and provide shade and cooler temperatures within the channel. In cases where the habitat is distinct in species composition, structure, or density, wash communities provide habitat values not available in the adjacent uplands.

Direct impacts to "Waters of the U.S" and CDFW jurisdictional waters could include the removal of native riparian vegetation, the discharge of fill, degradation of water quality, and increased erosion and sediment transport. Potential indirect impacts could include alterations to the existing topographical and hydrological conditions and the introduction of non-native, invasive plant species. Operational impacts to jurisdictional habitats would be similar to direct and potential indirect impacts.

As required by law, the County would comply with State and federal regulations regarding conducting Project activities in water courses and habitats under the jurisdiction of the CDFW and USACE. In compliance with State and federal regulations, the County would be required to obtain requisite permits pursuant to Sections 401 and 404 of the CWA, and Game Code Section 1600, prior to Project construction.

Although the County proposes to construct the Project when potentially jurisdictional features are dry, Project related impacts to jurisdictional waters would be considered significant. Therefore, Mitigation Measures BIO-1 (Wildlife Pre-Construction Surveys and Biological Monitoring), BIO-3 (Implement Best Management Practices), and BIO-6 (Vegetation Removal and Replacement) which would require on-site biological monitoring, compensation for loss of native habitats (to fund replacement elsewhere), installation and maintenance of appropriate erosion/sediment control measures (to limit runoff and downstream impacts), would be implemented to mitigate these potentially significant impacts. Implementation of these Mitigation Measures, along with compliance with the requisite regulatory agency-issued permits, would ensure that potential impacts to jurisdictional features are less than significant.

**Mitigation Measures**

**BIO-1 Wildlife Pre-Construction Surveys and Biological Monitoring**

**BIO-3 Best Management Practices**

**BIO-7 Vegetation Removal and Replacement**



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- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Less than Significant Impact.** The literature review conducted as part of the Biological Resources Technical Report (Appendix B) did not reveal known wildlife movement corridors within or immediately adjacent to the Project Area. Drainages and small canyons within the Project Area likely provide a conduit for travel for mammals such as coyotes (*Canis latrans*), bob cats (*Lynx rufus*), deer, and mega fauna such as mountain lions (*Puma concolor*). The movement of such wildlife through the Project site is expected to be somewhat limited during the daytime due to residential dwellings and resulting human activity in the area.

The Project Area is located at the western edge of a large area of generally undeveloped open space that facilitates unimpeded wildlife movement and provides “live-in habitat” for a variety of species. Due to the lack of significant development to within the BSAs and the Santa Ana Mountains to the east and southeast, wildlife movement is generally unconstrained throughout that area. Wildlife movement in lands to the west and north is heavily impacted by urban development. In addition, California State Routes 241 (to the west) and 91 (to the north of the OC and MP BSAs) likely serve as barriers to terrestrial wildlife movement.

Within the BSAs, the lack of structures or other significant development and the presence of relatively intact habitat and features such as ephemeral drainages and unpaved roads all facilitate wildlife passage. However, the BSAs do not occur within any known wildlife movement corridor or habitat linkage (Penrod et al, 2001).

The Project is not expected to impact or 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. Construction activities would be limited to daytime hours; wildlife movement is anticipated to be limited during this time due to existing anthropogenic influence. There are no known bird or bat migratory corridors that would be directly impeded by the Project. Large concentrations of migrants are not known to utilize any specific portion of the Project site and Project activities are not expected to preclude use of the area. Migrating birds would have access to riparian communities within the Project site. Although species would be disrupted during certain activities, impacts to migratory corridors from the Project would not be significant. Therefore, impacts would be Less than Significant in this regard

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**No Impact.** There are no known local policies or ordinances protection biological resources in the Project area. Therefore, Project implementation is not expected to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- f) *Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?*

**Less than Significant Impact with Mitigation Incorporated.** The Project Area is located in the northern portion of the Central Sub-Area of the Central/Coastal Subregion NCCP/HCP boundaries. The goal of the NCCP/HCP, “is to protect and manage habitat supporting a broad range of plant and animal populations that now are found within the Central and Coastal Subregion.” The Project would permanently impact approximately 1.68 acres of coastal sage scrub habitat.



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Where applicable the Project would follow the conservation measures outlined in the NCCP/HCP within Section 5.8.5 (Policies Governing the Siting and Construction of New Recreational Facilities), and included below.

1. New County EMA/HBP facility improvements shall be consistent with permitted facilities outlined in Section 5.8.4, and the parks, approved Interim Operations Plan, or Resource Management Plan.
2. New facility siting shall be coordinated with the non-profit reserve management corporation.
3. The facility shall be located and designed to minimize impacts to sensitive resources.
4. Access roads and infrastructure supporting new facilities will be routed to minimize disturbance and impacts to sensitive resources.
5. Necessary infrastructure required for new park facilities shall be consistent with policies set forth in Section 5.9.
6. Where proposed facilities may potentially impact sensitive resources, a qualified biologist shall be hired to document the resources and vegetation in the area to be disturbed by the proposed facility.
7. EMA/HBP estimates that the construction of future recreational facilities within regional parks could result in up to 150 acres of CSS loss and Incidental Take of habitat supporting gnatcatcher sites within the Reserve System. The take of habitat and species associated with the development of future recreational facilities located within the reserve is considered authorized take and mitigated under this subregional NCCP/HCP
8. Since many proposed recreational facilities will not be constructed in the immediate future and because regional recreational needs change over time, flexibility will be allowed in future design and siting of facilities
9. Where impacts to sensitive vegetation occurs, revegetation plans shall be come part of the facility improvement plans
10. Revegetated areas shall be monitored for a minimum 5 year period

In addition, Mitigation Measure BIO-06 would require compensation for impacts to native plant communities such as coastal sage scrub habitat. Integration of the mitigation measures outlined above for other impacts, along with implementation of all applicable conservation measures outlined in the NCCP/HCP would ensure that the proposed Project would not conflict with the provisions of the plan.

**Mitigation Measures**

**BIO-1 Wildlife Pre-Construction Surveys and Biological Monitoring**

**BIO-2 Environmental Awareness Training**

**BIO-3 Best Management Practices**

**BIO-4 Nesting Bird Surveys and Avoidance Measures**

**BIO-5 Conduct Pre-Construction Surveys for State and Federally Threatened, Endangered, Proposed, Petitioned, Candidate, and other Special-Status Plants and Development of a Transplanting Plan**

**BIO-6 Conduct Protocol Surveys for Least Bell's Vireo and Coastal California Gnatcatcher**

**BIO-7 Vegetation Removal and Replacement**





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## 3.5 CULTURAL RESOURCES

### 3.5.1 Setting

Between January and June 2018, Stantec Consulting Services Inc. (Stantec) conducted an archaeological study of portions of the East Orange I, East Orange II, and Mountain Park Project Areas (Stantec, 2018). The archaeological study consisted of an archival records search of the Project Areas and the surrounding Study Area conducted at the South Central Coastal Information Center (SCCIC) of the California Historic Resources Information System (CHRIS), located at California State University, Fullerton, a Sacred Lands File search conducted with the Native American Heritage Commission (NAHC) in Sacramento, and an archaeological survey of approximately 584.9 acres within portions of the Project Areas. The remaining 68.9 acres were not surveyed due to steep terrain, dense vegetation or combination of both.

The results of the record search indicated that one prehistoric resource was previously documented within the East Orange I Project Area, and 12 prehistoric resources, three historic resources, and one multi-component resource were previously documented within a ½-mile radius; one prehistoric site, two isolated finds comprised of a single mano, and two groundstone fragments were previously documented within the East Orange II Project Area, and five archaeological sites (all prehistoric) were previously documented within a ½-mile radius; one historic resource was previously documented within the Mountain Park Project Area, and one prehistoric resource and one historic resource were previously documented adjacent to the Mountain Park Project Area. The survey resulted in the identification and documentation of a single historic resource, the Saddleback Park Motocross Raceway, within the East Orange I Project Area (Stantec, 2018). The Cultural Resources Technical Report is included as **Appendix D**.

### 3.5.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>CULTURAL RESOURCES: Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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- a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

**Less than Significant Impact with Mitigation Incorporated.** According to the Resources Element of the County of Orange General Plan, none of the Project Areas are located within a designated historical area; however, as discussed above, historic resources are documented within, as well as within a ½-mile radius of, both the East Orange I and Mountain Park Project Areas. Therefore, there is a potential to disturb previously documented and/or undocumented historic resources. The Project involves clearing activities required for development of the new staging areas, trails, and parking lot areas. Mitigation Measure CULT-1 listed below would be implemented to reduce potential impacts to historic resources to a Less than Significant level and if cultural resources are encountered during construction activities, activity would halt until a determination by an archaeologist is made. With the implementation of Mitigation Measure CULT-1, the Project would have Less than Significant impacts on historic resources and no further mitigation would be required.

**Mitigation Measure**

**CULT-1:** Prior to start of the Project, the applicant shall provide written evidence to OC Parks, that the applicant has retained a County-certified archaeologist, to observe ground disturbance activities and salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage.

Prior to the ground disturbance, the applicant shall obtain approval of the archaeologist's follow-up report from OC Parks. The report shall include: the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. The archaeologist shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of OC Parks. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of OC Parks.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Less than Significant Impact with Mitigation Incorporated.** As discussed above, prehistoric archaeological resources are documented within, as well as within a ½-mile radius of, both the East Orange I and East Orange II Project Areas, and within a ½-mile radius of the Mountain Park Project Area. According to the Resources Element of the County of Orange General Plan, East Orange I and East Orange II Project Areas are located within the Foothill Area and Mountain Park is located with the Upper Santa Ana River-Weir Canyon Area general area of sensitivity for prehistoric archaeology. Therefore, the potential to disturb previously documented and/or undocumented prehistoric archaeological resources is high. The Project involves clearing activities required for development of the new staging areas, trails, and parking lot areas. Mitigation Measure CULT-1 listed below would be implemented to reduce potential impacts to prehistoric archaeological resources to a Less than Significant level and if cultural resources are encountered during construction activities, activity would halt until a determination by an archaeologist is made. With



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the implementation of Mitigation Measure CULT-1, the Project would have Less than Significant impacts on archaeological resources and no further mitigation would be required.

**Mitigation Measure**

**CULT-1**

- c) *Disturb any human remains, including those interred outside of formal cemeteries?*

**Less than Significant Impact with Mitigation.** No evidence exists to suggest the Project site has been used for human burials. However, in the event human remains are encountered during Project activities, implementation of Mitigation Measure CULT-2 would serve to address potential impacts. This measure requires that no further work would continue at the location of the find until the County Coroner has made all the necessary findings as to the origin and distribution of such remains. With implementation of this mitigation measure, impacts related to the disturbance of previously unknown human remains on site would be less than significant.

**Mitigation Measure**

**CULT-2**

**Human Remains.** If human remains are discovered, all work shall be halted immediately within 50 feet of the discovery, the City shall be notified, and the County Coroner must be notified, according to Section Public Code Resources Code Section 5097.98. The County Coroner must be notified within 24 hours of the discovery, and within two working days of notification of the discovery would make such a determination. If the County Coroner determines that the remains are or are believed to be Native American, the County Coroner would notify the NAHC in Sacramento within 24 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the County Construction Engineer, the treatment and disposition of the human remains.





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## 3.6 ENERGY

### 3.6.1 Setting

There are a number of state and local regulations requiring energy efficiency. These include but are not limited to the state's Renewable Portfolio Standard (RPS) requirements which mandate an increasing use of renewable energy supplies for electricity generation, the City of Anaheim General Plan Green Element, and the County of Orange General Plan Natural Resources Element.

### 3.6.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Energy. Would the Project:</b>				
a) Result in potentially significance environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction and operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) Result in potentially significance environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction and operation?*

**Less than Significant Impact.** Resources that would be consumed as a result of the proposed Project include water, electricity, and fossil fuels during construction and operation. Construction would require the manufacture of new materials, some of which may not be recyclable at the end of the proposed Project's lifetime. The energy required for the production of these materials would also result in an irretrievable commitment of natural resources. However, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources. Construction and operation of the Project would utilize only a small amount of fuel, as necessary to fuel vehicles and equipment necessary for the reestablishment and maintenance of the recreational facilities. Compliance with all applicable building codes, state of California, County of Orange, and cities of Anaheim and Orange policies would ensure that all-natural resources are conserved to the maximum extent possible.

Furthermore, to meet air quality requirements and save materials and fuel for economic gain, it is to the advantage of the Applicant to implement energy efficiency and fuel use reduction measures for all on-site equipment, and wherever possible during construction.

- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*



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**No Impact.** The proposed project would be compliant with all state and local plans for renewable energy or energy efficiency because it would develop a renewable source of power, helping to offset the use of nonrenewable resources and contribute to an overall reduction of nonrenewable resources currently used to generate electricity.



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### 3.7 GEOLOGY AND SOILS

#### 3.7.1 Setting

East Orange I and II are located within the unincorporated area of Silverado, California, and Mountain Park is located within the City of Anaheim. These areas are located within Orange County in the foothills of the Santa Ana Mountains. This part of Orange County is part of the Peninsular Range Natural Province of southern California, a system of northwesterly trending ridges that extend from the Transverse Ranges south into Baja California. The topography of this province is characterized by irregular coastal plain in the west, as well as prominent ridges, peaks, valleys and subdued upland areas as one moves south and east (Jahns, 1954). The general topography of the Project areas is comprised of rolling foothills intersected by ephemeral and perennial drainages, with slope between 10 and 30 degrees. The Paleontological Resources Technical Report is included as **Appendix E**.

#### 3.7.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b><u>GEOLOGY AND SOILS:</u> Would the project:</b>				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building code (1997), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving?*

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

**Less than Significant Impact.** The County of Orange is identified as affected by Alquist-Priolo Earthquake Fault Zones as of January 2010 (DOC, 2010). The areas of East Orange I and II and Mountain Park are represented within the Black Star Canyon Quadrangle. However, Alquist-Priolo Earthquake Fault Zones have not been prepared for the Black Star Canyon Quadrangle (CGS, 2001). The Alquist-Priolo Earthquake Fault Zone nearest to the Project areas is Elsinore Fault Zone represented within the Prado Dam Quadrangle (CGS, 2003). The Whittier Fault of the Elsinore Fault Zone is the nearest fault to the Project areas located approximately 1.15 miles north to northeast of the Mountain Park area. The Whittier Fault is an approximately 40 km long, Holocene, right-lateral strike-slip fault with a slip rate of approximately 2.5 and 3.0 mm per year and a probable magnitude of  $M_w 6.0$  to  $M_w 7.2$  (SCEDC, 2018). The Project consists of the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and parking lot areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. Due to the minimal nature of the proposed disturbance caused by the Project, the risk of exposing people or structures to potential adverse effects, including the risk of loss, injury, or death due to fault rupture during an earthquake is limited. Therefore, impacts are expected to be Less than Significant.

- ii. Strong seismic ground shaking?

**Less than Significant Impact.** No habitable structures (e.g. residential buildings) are proposed to be built within the Project area. Therefore, the risk of exposing people or structures to potential adverse effects, including the risk of loss, injury, or death due to strong seismic ground shaking is limited and impacts are expected to be Less than Significant.





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iii. Seismic-related ground failure, including liquefaction?

**Less than Significant Impact.** Liquefaction occurs when groundwater is forced out of the pores of soil as it subsides. This excess water momentarily liquefies the soil, causing an almost complete loss of strength. If this layer is at the surface, its effect is much like that of quicksand for any structure located on it. If the liquefied layer is subsurface, the material above it may slide laterally depending on the confinement of the unstable mass. Zones of liquefaction are located near and/or within the Project areas (DOC, 2001). However, the Project is limited to the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and parking lot areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. The Project does not include the construction of habitable or new structures that would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, Project impacts from seismic related ground failure, including liquefaction, would be Less than Significant.

iv. Landslides?

**Less than Significant Impact.** Landslides often occur during or after strong earthquakes. The areas of the Project are located within Earthquake-Induced Landslide Zones (DOC, 2001). However, the Project is limited to the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and parking lot areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. The Project does not include the construction of habitable or new structures that would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, Project impacts from landslides would be Less than Significant.

b) *Result in substantial soil erosion or the loss of topsoil?*

**Less than Significant Impact with Mitigation.** The Project consists of the development of a staging area, rehabilitating existing trails, and reestablishing historical trails within previously disturbed areas. No new trails are proposed as part of the Project. An existing staging area will be improved with ADA parking and a connection to existing trails. The new staging area will include a decomposed granite parking lot, accessible parking and signage in accordance with standards for ADA use, portable restrooms, benches, and picnic tables. Construction activities of the Project may temporarily cause soil erosion and would be managed through the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), as required by State Water Resources Control Board Order No. 2009-0009-DWQ.

**Mitigation Measure**

**WQ-3: Stormwater Pollution Prevention Plan:** The applicant shall demonstrate compliance with California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number; or other proof of filing in a manner meeting the satisfaction of the Manager, Permit Intake. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.



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- c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less than Significant Impact.** Please refer to responses 3.6 a), iii) and a), iv).

- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building code (1997), creating substantial risks to life or property?*

**Less than Significant Impact.** Expansive soils generally have a significant amount of clay particles, which can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The extent of shrink/swell is influenced by the amount and kind of clay in the soil. According to the Soil Survey of Orange County and Parts of Riverside County, the soils within the Project areas have moderate to high percentages of clays and loams and the soil within the Mountain Park area may be expansive (USDA, 2018). However, the Project is limited to the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and parking lot areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance and does not create substantial risks to life or property. Therefore, Project impacts related to expansive soils would be Less than Significant.

- 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 wastewater?*

**No Impact.** The Project does not include the construction of new septic tanks or alternative wastewater disposal system; therefore, no impacts would occur.

- f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less than Significant with Mitigation Incorporated.** A paleontological evaluation and inventory of the Project area analyzed existing paleontological data to determine sensitivity (Paleo Solutions, 2018). The three components of the analysis included a geologic map review, a literature search, and an institutional record search. The analysis of existing data was supplemented with a pedestrian field survey, which was conducted in order to search for fossil resources exposed at the Project area surface as well as to document the geological units that are exposed within the Project area. According to the record search, there are no previously recorded fossil localities within the Project area; however, there are numerous fossil localities recorded from within the Project vicinity and other areas of California from sediments similar to those mapped within the Project area. Additionally, the Resources Element of the County of Orange General Plan designates all of the Project areas as being located within the Northern Santa Ana Mountains general area of paleontological sensitivity.

The field survey results indicate that all mapped high and very high paleontologically sensitive units, with the exception of early to middle Pleistocene-aged very old alluvial fan deposits, are currently exposed in the Project area. Additionally, several fossil localities were documented during the field survey, and specimens included fish scales, invertebrate shell fragments, and mammal bones (Paleo Solutions, 2018). Therefore, there is potential for adverse impacts to scientifically significant paleontological resources during ground disturbance within the paleontologically sensitive units identified within the Project area. Mitigation Measure GEO-1 listed below would be implemented to reduce potential impacts to paleontological resources or unique geologic features to a Less than Significant level and if paleontological resources are encountered during construction activities, activity would halt until a determination by a paleontologist is made. With the implementation of Mitigation Measure GEO-1, the Project would have Less than



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Significant impacts on paleontological resources or unique geologic features and no further mitigation would be required.

**Mitigation Measure**

**GEO-1:** Prior to the start of construction, a paleontological resource monitoring and mitigation plan (PRMMP) will be prepared. The PRMMP will provide detailed recommended monitoring locations including locations mapped as high to very high sensitivity; a description of a worker training program; detailed procedures for monitoring, fossil recovery, laboratory analysis, and museum curation; and notification procedures in the event of a fossil discovery by paleontological monitor or other project personnel. A curation agreement with an accredited repository approved by OC Parks must be obtained. Any subsurface bones or potential fossils that are unearthed during construction should be evaluated by a Qualified Paleontologist.





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## **3.8 GREENHOUSE GAS**

### **3.8.1 Setting**

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs), comparable to a greenhouse, which captures and traps radiant energy. GHGs are emitted by natural processes and human activities. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature. Global warming is the observed increase in average temperature of the earth's surface and atmosphere.

The six major GHGs are; carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFCs), and perfluorocarbon (PFCs). The GHGs absorb longwave radiant energy emitted by the Earth, which warms the atmosphere. The GHGs also emit longwave radiation both upward to space and back down toward the surface of the Earth. The downward part of this longwave radiation emitted by the atmosphere is known as the "greenhouse effect." However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. Emissions from human activities such as fossil fuel combustion for electricity production and vehicles have elevated the concentration of these gases in the atmosphere.

The California Air Pollution Control Officers Association (CAPCOA), in its 2008 "Report on Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act," stated:

*"While it may be true that many GHG sources are individually too small to make any noticeable difference to climate change, it is also true that the countless small sources around the globe combine to produce a very substantial portion of total GHG emissions."*

*California Global Warming Solution Act of 2006 (AB32):*

Under AB 32, CARB is responsible for monitoring and reducing GHG emissions in the State and for establishing a statewide GHG emissions cap for 2020 that is based on 1990 emissions levels. CARB (2009) has adopted the AB 32 Climate Change Scoping Plan (Scoping Plan), which contains the main strategies for California to implement to reduce CO<sub>2</sub> equivalent (CO<sub>2</sub>e) emissions by 169 million metric tons (MMT) from the State's projected 2020 emissions level of 596 MMT CO<sub>2</sub>e under a business-as-usual scenario. The Scoping Plan breaks down the amount of GHG emissions reductions the CARB recommends for each emissions sector of the State's GHG inventory but does not directly discuss GHG emissions generated by construction activities.

*Senate Bills (SB) 97 and 375:*

- Pursuant to SB 97, the State Office of Planning and Research prepared, and the Natural Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. Effective as of March 2010, the revisions to the CEQA Environmental Checklist Form (Appendix G) and the Energy Conservation Appendix (Appendix F) provide a framework to address global climate change impacts in the CEQA process; State CEQA Guidelines section 15064.4 was also added to provide an approach for assessing impacts from GHGs.
- SB375 (effective January 1, 2009) requires CARB to develop regional reduction targets for GHG emissions and prompted the creation of regional land use and transportation plans to reduce emissions from



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passenger vehicle use throughout the State. The targets apply to the regions covered by California's 18 metropolitan planning organizations (MPOs). The 18 MPOs must develop regional land use and transportation plans and demonstrate an ability to attain the proposed reduction targets by 2020 and 2035.

**Executive Orders (EO):**

- EO B-30-15 (Governor Brown, April 2015) established a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It additionally directed all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve GHG emissions reductions to meet the 2030 and 2050 targets.
- EO S-13-08 (Governor Schwarzenegger, November 2008) established a coalition of state agencies and directed them to plan for sea level rise and climate impacts through coordination of the state Climate Adaptation Strategy.
- EO S-01-07 (Governor Schwarzenegger, January 2007) established a low carbon fuel standard for California and directed the carbon intensity of California's transportation fuels to be reduced by at least 10 percent by 2020.
- EO S-3-05 (Governor Schwarzenegger, June 2005) directed the state to reduce GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 level by 2050. Executive Order B-16-2012 (Governor Brown, March 2012) affirmed the long-range emissions reduction target of 80 percent below 1990 levels by 2050.

The SCAQMD has proposed a "bright-line" screening level threshold of 3,000 metric tons/year CO<sub>2</sub>e for all non-industrial land use types. This bright-line threshold is based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, Less than Significant impact on GHG emissions. SCAQMD's guidelines for analyzing a project's GHG impacts is to amortize project emissions over a 30-year period, add them to annual operation phase emissions and compare the emissions to the 3,000 metric tons/year CO<sub>2</sub>e threshold of significance level to determine significance.

Many California counties and cities have developed a climate action plan focusing on reducing GHGs from local sources, to facilitate meeting the State reduction targets of AB 32. To date, County of Orange has not adopted a Climate Action Plan.

### 3.8.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>GREENHOUSE GASES: Would the project:</b>				



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Issues	Potentially Significant Impact	Less than Significant Impact 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

**Less than Significant Impact.** The proposed Project is limited to minor improvements to existing parking facilities and reestablishment of existing and historical trails on open space land. No new trails are proposed as part of the Project. The Project would generate GHG emissions during construction primarily from off-road equipment and on-road vehicle exhaust from worker vehicles and materials delivery. Operation phase emissions would occur from on-road vehicles associated with trail users travel to adjacent parking and trail access facilities as well as from maintenance trail/landscaping equipment periodically used during operation.

GHG emissions for the Project were estimated using the CalEEMod version 2016.3.2 (CalEEMod, 2016). Detailed GHG emissions estimates for the Project are included in **Appendix A** (Project Emissions Estimates). **Table 7** below, presents a summary of the estimated total GHG emissions that would result from Project implementation.

**Table 7 Total Estimated Project GHG Emissions**

Project Phase	Total Metric Tons			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Construction Emissions (total)	20.58	0.01	<0.00	20.73
Construction Emissions (amortized over 30 years)	0.69	<0.00	<0.00	0.69
Operation Emissions (annual)	66.23	0.01	<0.00	66.48
Total Project Emissions	2.58	0	0	67.17
Interim SCAQMD Threshold				3,000
Project Emissions Exceed SCAQMD Threshold?				No

As shown in **Table 7**, the Project would result in a total estimated 67.17 metric tons of CO<sub>2</sub>e emissions per year when construction emissions are amortized over 30 years in accordance with SCAQMD guidance. The 67.17 metric tons of CO<sub>2</sub>e emissions is less than the 3,000 metric tons CO<sub>2</sub>e significance threshold and the Project would therefore not generate greenhouse gas emissions, either directly or indirectly, that would have a substantial adverse effect on the environment and potential impacts would be Less than Significant.

- b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*



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**Less than Significant Impact.** The State Legislature, enacted Assembly Bill 32 [AB 32], (the California Global Warming Solutions Act of 2006 which was signed on September 27, 2006), to further the goals of Executive Order S-3-05 (Health and Safety Code, S38500 et seq.). AB 32 requires CARB to adopt Statewide GHG emissions limits to achieve Statewide GHG emissions levels at the same levels they were atmospherically in 1990 by the year 2020. A longer-range goal requires an 80% reduction in GHG emissions from 1990 levels by 2050. CARB adopted the 2020 Statewide target and mandatory reporting requirements in December 2007 and a Statewide scoping plan in December 2008 (the AB 32 Scoping Plan). Senate Bill 32 (SB 32), signed on September 8, 2016, expands on the mandate of AB 32 requiring CARB to ensure that State GHG emissions are reduced to 40 percent below the 1990 emission level by year 2030. Section 38566 is added to the current Health and Safety Code, which states “the State board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the Statewide greenhouse gas emissions limit no later than December 31, 2030”.

The Project does not include stationary sources of GHG emissions and is not subject to compliance with AB 32’s cap-and-trade program. Orange County has not adopted a Climate Action Plan. The Project’s use of fuels during construction would be consistent with existing regulations related to low carbon fuel standards achieved through regulations placed on the fuel manufacturing and supply industry. Considering the above, as well as that the Project’s GHG emissions would be below SCAQMD’s thresholds of significance, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Potential impacts would be Less than Significant.





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### 3.9 HAZARDS AND HAZARDOUS MATERIALS

#### 3.9.1 Setting

This section evaluates potential impacts to Hazards and Hazardous Materials that could result from Project implementation. Analysis in this section is based on the existing environmental setting conditions.

#### 3.9.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>HAZARDS AND HAZARDOUS MATERIALS: Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Less than Significant Impact.** The Project includes recreational improvements and general park maintenance. Vehicles and equipment associated with Project construction and maintenance would use limited quantities of hazardous materials. Hazardous materials associated with construction (i.e. gasoline, diesel, coolants etc.) are considered hazardous because they are flammable and/or may contain toxic compounds, such as volatile organic compounds and heavy metals. All hazardous materials and wastes associated with Project construction would be handled, transported, and disposed of in compliance with all applicable federal, State, and local regulations. Compliance with these laws and regulations would reduce the potential impact associated with the routine transport, use, storage, or disposal of hazardous materials to a Less than Significant level.

- 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?*

**Less than Significant Impact.** The Project includes recreational improvements and general park maintenance consisting of sustainably designed trail systems, staging areas for parking, public access, portable toilets, and picnic areas, informative signage, and planting of native plants as well as non-native plant removal. The Project does not include a component with the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials to the environment; therefore, impacts would be Less than Significant

- c) *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 Project area. The nearest school, Running Springs Elementary School, is located approximately 0.40 mile west of the Mountain Park Area at 8670 Running Springs Dr, Anaheim, CA 92808. Therefore, no impacts would occur.

- 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?*

**No Impact.** Based on desktop review of public databases (DTSC EnviroStor; State Water Resources Control Board GeoTracker), there are no known hazardous waste facilities or open cleanup sites within the Project area. Therefore, since the Project is not located on a list associated with hazardous materials, no impacts would occur.

- 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 Project area is located approximately 10 miles northeast of John Wayne Airport, approximately 15 miles east of Fullerton Municipal Airport, and approximately nine miles southwest of Chino Airport. The Project is not located within an airport land use plan area or compatibility zone. Therefore, no impacts would occur.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*



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**No Impact.** All roads in the vicinity of the Project area would remain open during Project construction, eliminating potential impacts related to access for emergency vehicles. In addition, the Project does not include construction of residences or facilities that would require evacuation. As such, the Project would not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, no impacts would occur.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

**Less than Significant Impact.** The Project and surrounding area are within a County-adopted 'Very High Fire Hazard' Zone. The Project does not involve development of residential dwellings and would not increase the wildland-urban interface, defined as the area where structures and other human development meet or intermingle with undeveloped wildland or natural open space. Any construction equipment and activities would comply with codes and ordinances enforced by the County's Fire Authority-Community Risk Reduction Department through compliance with established local codes and regulations during construction activities. The Project would have a Less than Significant impact with respect to exposing people or structures to a significant risk of loss, injury, or death involving wildland fires.





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### 3.10 HYDROLOGY AND WATER QUALITY

#### 3.10.1 Setting

East Orange I and II are located within the unincorporated area of Silverado, California, and Mountain Park is located within the City of Anaheim. These areas are located within the north-central portion of Orange County in the foothills of the Santa Ana Mountains. The general topography of the Project areas is comprised of rolling foothills intersected by ephemeral and perennial drainages, with slope between 10 and 30 degrees. East Orange I and II project sites surround Irvine Lake (East Orange I is located to the west of the lake, and East Orange II is located to the north, south and east of the lake). Irvine Lake was originally constructed in 1933 and is now owned by the Serrano Water District and the Irvine Ranch Water District and is operated by Serrano Water District. The primary purpose of Irvine Lake (Santiago Creek Reservoir) is to store water; the lake is used both as a source of water for non-drinking purposes, such as irrigation for avocado orchards, and as a source of water for the Baker Water Treatment Plant which creates drinking water for an estimated 85,000 homes in Orange County (Irvine Ranch Water District, 2019).

The Project consists of the reestablishment of trails; staging areas for parking, public access, portable toilets, and picnic areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. No new trails are proposed as part of the Project. Project construction activities may temporarily cause impacts to hydrology and water quality through removal of native riparian vegetation, alterations to the existing topographical and hydrological conditions, the discharge of fill, as well as soil erosion and sediment transport. Operational impacts to hydrology and water quality would be limited to general operations and maintenance activities associated with upkeep of trails, as well as cleaning/ pumping out of portable toilets.

As detailed in Section 3.5 (Biological Resources), Project construction is anticipated to permanently impact up to 0.023 acres of CDFW jurisdictional waters and 0.012 acres of Waters of the United States); the Project would not impact any potentially jurisdictional wetland "waters of the U.S."

#### 3.10.2 Impact Analysis

Issues		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b><u>HYDROLOGY AND WATER QUALITY:</u> Would the project:</b>					
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river				



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Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?*

**Less than Significant Impact with Mitigation.** The Project site is under the jurisdiction of the Santa Ana RWQCB, which administers the NPDES program at the regional level. Establishment and operation of the proposed Project would consist of maintenance activities such as minor ground disturbance, trail maintenance, and periodic vegetation removal which is approved under the conditions established with the donation of the land. According to Santa Ana RWQCB guidance, the proposed Project is not required to obtain coverage under the Construction General Permit, as construction activities for routine maintenance to maintain original line and grade, hydraulic capacity, or the original purpose of a facility do not require coverage. Additionally, as discussed above in Section 1.6, the proposed Project would obtain (if needed) a 401 permit from the Santa Ana RWQCB to provide coverage for fill of Waters of the United States if implementation would not avoid discharge of dredge or fill materials to Waters of the U.S. and/or State and a 404 permit from the USACE. It is anticipated that coverage for the 404 permit would be provided under a Nationwide Permit (such as Nationwide 3: Maintenance, Nationwide 18: Minor Discharges, or Nationwide 42: Recreational Facilities).

Direct impacts to "Waters of the U.S" and CDFW jurisdictional waters (necessitating the 401/404 permitting) could include the removal of native riparian vegetation, the discharge of fill, degradation of water quality, and increased erosion and sediment transport. Potential indirect impacts could include alterations to the existing topographical and



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hydrological conditions and the introduction of non-native, invasive plant species. Operational impacts to jurisdictional habitats would be similar to direct and potential indirect impacts.

As required by law, the County would comply with State and federal regulations regarding conducting Project activities in water courses and habitats under the jurisdiction of the CDFW and USACE. In compliance with State and federal regulations, the County would be required to obtain requisite permits pursuant to Sections 401 and 404 of the CWA, and Game Code Section 1600, prior to Project construction.

In the event that construction activities (outside of routine maintenance) for the Project would exceed one acre, the potential for stormwater discharges would be managed through the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), as required by State Water Resources Control Board Order No. 2009-0009-DWQ. The County of Orange's Construction General Permit would provide coverage for the proposed Project.

Project operation activities which have the potential to cause soil erosion and/or impacts to water quality, such as minor ground disturbance, trail maintenance, or vegetation removal, would be mitigated through implementation of a WQMP, which is required by the County of Orange. The WQMP would utilize the Orange County DAMP, which documents the specific water pollutant control elements of the Orange County Stormwater Program. The DAMP is the primary policy, planning and implementation document for municipal NPDES Stormwater Permit compliance (Orange County Public Works, 2019).

Compliance with the requirements of the 401/404 permits, SWPPP, WQMP, and DAMP would ensure that the Project's potential impact to violate a water quality standard or waste discharge requirements would, therefore, be Less than Significant with mitigation.

**Mitigation Measures**

**WQ-1: Water Quality Management Plan:** The applicant shall submit for review and approval by the Manager, Building and Safety Permit Services, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. The applicant shall utilize the Orange County Drainage Area Management Plan (DAMP), Model WQMP, and Technical Guidance Manual for reference, and the County's WQMP template for submittal. This WQMP shall include the following:

- Detailed site and project description
- Potential stormwater pollutants
- Post-development drainage characteristics
- Low Impact Development (LID) BMP selection and analysis Hydromodification Control BMP selection and analysis
- Structural and Non-Structural source control BMPs
- Site design and drainage plan (BMP Exhibit)
- GIS coordinates for all LID and Treatment Control BMPs
- Operation and Maintenance (O&M) Plan that (1) describes the long-term operation and maintenance requirements for BMPs identified in the BMP Exhibit; (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced BMPs; and (3) describes the mechanism for funding the long-term operation and maintenance of the referenced

**BMPs**



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The BMP Exhibit from the approved WQMP shall be included as a sheet in all plan sets submitted for plan check and all BMPs shall be depicted on these plans.

**WQ 2: Compliance with the NPDES Implementation Program:** The applicant shall demonstrate compliance with the County's NPDES Implementation Program in a manner meeting the satisfaction of the Manager, OC Inspection, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the BMP Exhibit from the project's approved WQMP have been implemented, constructed and installed in conformance with approved plans and specifications
- Demonstrate that the applicant has complied with all non-structural BMPs described in the project's WQMP
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs (the O&M Plan shall become an attachment to the WQMP;
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the initial occupants;
- Agree to pay for a Special Investigation from the County of Orange for a date twelve (12) months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan
- Demonstrate that the applicant has RECORDED one of the following:
  1. The CC&R's (that must include the approved WQMP and O&M Plan);
  2. A water quality implementation agreement that has the approved WQMP and O&M Plan attached; or
  3. The final approved Water Quality Management Plan (WQMP) and Operations and Maintenance (O&M) Plan.

**WQ 3: Stormwater Pollution Prevention Plan:** The applicant shall demonstrate compliance with California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number; or other proof of filing in a manner meeting the satisfaction of the Manager, Permit Intake. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.

- b) *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 Project consists of rehabilitating existing trails, reestablishing historical trails; creating staging areas for parking, public access, portable toilets, and picnic areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. The Project would not tap into groundwater underneath or adjacent to the Project site, nor would it impede groundwater recharge. Project activities are not anticipated to result in a substantial change to infiltration as no new impervious surfaces are being proposed. Furthermore, the Project's minimal water requirements (e.g., placement of water troughs for horseback riding) are not expected to exceed the allowable water supply. Therefore, no impact would occur.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*





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*i. Result in substantial erosion or siltation on- or off-site?*

**Less than Significant Impact with Mitigation.** The Project would incorporate a SWPPP, which would prevent substantial erosion or siltation into the ephemeral drainage features during construction. Erosion and sediment control measures specified in the NPDES permit would also minimize impacts during construction and operations. Additionally, the County would comply with State and federal regulations regarding conducting Project activities in watercourses and habitats under the jurisdiction of the CDFW and USACE. This includes obtaining required CDFW Streambed Alteration Agreement, as well as CWA Section 401 and 404 permits (for discharge of dredged or fill materials into waters of the U.S.).

With the implementation of a SWPPP, WQMP, NPDES permit, CWA permits, the Project would not result in substantial erosion or siltation on- or off-site. Therefore, the Project would have a Less than Significant impact with implementation of mitigation measures WQ-1, WQ-2, and WQ-3.

**Mitigation Measures**

**WQ-1: Water Quality Management Plan**

**WQ 2: Compliance with the NPDES Implementation Program**

**WQ 3: Stormwater Pollution Prevention Plan**

*ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*

**Less than Significant Impact.** The Project consists of the rehabilitating existing trails, reestablishing historical trails; creating staging areas for parking, public access, portable toilets, and picnic areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. The Project does not include substantial development of impervious surfaces and is therefore not expected to create or contribute to run-off water. Under the NPDES permit, any surface run-off associated with Project construction activities would be captured and managed. Furthermore, with the implementation of the WQMP, any potential runoff resulting from project operations activities would also be mitigated. In compliance with State and federal regulations, the County would obtain required permits pursuant to Sections 401 and 404 of the CWA. Potential impacts would be Less than Significant.

*iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems tot provide substantial additional sources of polluted runoff; or*

**Less than Significant Impact.** The Project consists of the rehabilitating existing trails, reestablishing historical trails, creation of staging areas for parking, public access, portable toilets, and picnic areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. The Project does not include substantial development of impervious surfaces and is therefore not expected to create or contribute to run-off water which would exceed the capacity of existing or planned stormwater drainage systems. Impervious surface will be installed at the existing gravel parking lot in Parcel 1 of Mountain Park for ADA parking stalls. Furthermore, the Project would incorporate a SWPPP and WQMP which would prevent and/or mitigate substantial polluted runoff during both construction and operations. Therefore, the Project would have a Less than Significant impact.



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*iv. Impede or redirect flood flows?*

**No Impact.** As stated above, the Project site (i.e., East Orange II) is within a 100-year flood hazard area. However, the Project consists of the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and development of parking lot areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. The Project does not propose construction of any permanent or habitable structures. Therefore, the Project would not place obstacles or structures within a 100-year flood hazard area which could impede or redirect flood flows, and no impact would occur.

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

**Less than Significant Impact.** A tsunami is a series of waves generated in a body of water by a pulsating or abrupt disturbance that vertically displaces water. Inundation of the Project's site by a tsunami is highly unlikely as the Project site is approximately 15 miles northeast of the Pacific Ocean. With respect to seiche, which is a standing wave in an enclosed or partially enclosed body of water, the Project site is partially surrounded by Irvine Lake. However, aside from minimal vegetation restoration, most project activities are planned to occur away from Irvine Lake and are therefore not anticipated to be impacted by seiche.

Mudflow may occur in the Project area as a result of heavy rains following wildfires. The Project and surrounding area are within a County-adopted 'Very High Fire Hazard' Zone. Any construction equipment and activities would comply with codes and ordinances enforced by the County's Fire Authority-Community Risk Reduction Department through compliance with established local codes and regulations during construction activities. Therefore, the Project would have a Less than Significant impact with respect to inundation by mudflow.

The Project site (i.e., East Orange II) is within a 100-year flood hazard area. Specifically, East Orange II is partially located in "Zone A" and "Zone AE" as well as a defined floodway of Santiago Creek (FEMA, 2019). However, the Project would not place habitable structures or any sources of pollutants (above the baseline) that would affect flows in a 100-year flood hazard area. Therefore, the Project would have a Less than Significant impact with respect to potential pollutant releases and flooding hazards.

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

**Less than Significant Impact with Mitigation.** The Project consists of the development of rehabilitating existing trails, reestablishing historical trails; creating staging areas for parking, public access, portable toilets, and picnic areas, as well as necessary tree, vegetation, and debris removal, and routine park maintenance. The Project does not include substantial development of impervious surfaces and is therefore not expected to create or contribute to run-off water which would exceed the capacity of existing or planned stormwater drainage systems.

The Project site is under the jurisdiction of the Santa Ana RWQCB, which administers the NPDES program at the regional level. Construction projects resulting in the disturbance of 1.0 acre or more require a NPDES permit. Under NPDES, run-off from development must be captured and filtered to remove pollutants prior to discharging the run-off into storm drains. Development of the Project, and implementation of the required SWPPP, WQMP, NPDES permit, CWA and permits, would not conflict with or obstruct the implementation of any water quality control plan or sustainable groundwater management plan. Implementation of the project would include preparation and implementation of a Water Quality Control Plan.



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With the implementation of a SWPPP, WQMP, NPDES permit, CWA permits, the Project would not result in substantial erosion or siltation on- or off-site. Therefore, the Project would have a Less than Significant impact with implementation of mitigation measures WQ-1, WQ-2, and WQ-3.

**Mitigation Measures**

**WQ-1: Water Quality Management Plan**

**WQ 2: Compliance with the NPDES Implementation Program**

**WQ 3: Stormwater Pollution Prevention Plan**





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### 3.11 LAND USE AND PLANNING

#### 3.11.1 Setting

The East Orange areas consists of a series of low-lying hills and valleys along the Santa Ana Mountains. Residential, commercial and industrial developments exist to the west of these sites. Both Mountain Park and Oak Canyon are located within the City of Anaheim.

**Table 8 Land Use Designations**

<b>Project Component</b>	<b>General Plan Land Use Designation</b>	<b>Zoning (Jurisdiction)</b>
East Orange I	General Agriculture (County of Orange), Low/Medium Density Residential (City of Orange)	P-C: Planned Community (City of Orange)
East Orange II	General Agriculture (County of Orange), Open Space, Low/Medium Density Residential (City of Orange Sphere of Influence)	P-C: Planned Community (City of Orange)
Mountain Park	Estate Density (City of Anaheim)	SP 90-4: Mountain Park (City of Anaheim)
Oak Canyon	Open Space, Estate Density, Low/Medium Density (City of Anaheim)	SP 90-4: Mountain Park (City of Anaheim)

Both of East Orange I and II are located within the City of Orange sphere of influence. East Orange I is located within the boundaries of the City of Orange, with a small portion of the trail crossing unincorporated County of Orange lands. East Orange II is located within unincorporated Orange County, however East Orange II is also located within the Sphere of Influence of the City of Orange. Both Mountain Park and Oak Canyon are located within the City of Anaheim. Lands within the Sphere of Influence could become part of the City at a later date.

Much of the land surrounding East Orange I and II is in OC Parks Open Space and NCCP Reserve. Southern California maintains an electric powerline easement and PAC Bell maintains a telephone line easement along the paved access road to Santiago Canyon Landfill (East Orange I) and the airport (East Orange II).

As discussed above under Section 2.0, the East Orange I property is topographically complex and is comprised of low rolling hills, steep canyons with intervening scrub- and chaparral-covered ridges and alluvial terraces with deeply incised watercourses. Elevations on site range from approximately 750- to 1,600-feet above sea level [Glen Lukos, 2004]. The East Orange II property contains similar habitat to that described above for the East Orange I property. This area, however, has experienced much less disturbance and remains in a more natural state.

Mountain Park is located generally in Gypsum Canyon, south of the Riverside (SR-91) Freeway, in the City of Anaheim and its Sphere of Influence, Orange County, California. The majority of Mountain Park is in the jurisdiction of the City of Anaheim; however, the southern- and eastern-most portions of the project site are in unincorporated County of Orange in the City of Anaheim's sphere-of-influence. The City of Anaheim has prepared a specific plan for Mountain Park, which was adopted in 2005, which establishes the framework for the development of the project site. The Mountain Park Specific Plan encompasses approximately 3,001 acres. The project site is currently undeveloped with the exception of a 300-acre sand and gravel mining operation located in the northeastern portion of Gypsum Canyon which was vacated in June 2005. In addition to describing the project's purpose, vision, and features, the specific plan presents the project description, zoning and development standards. The Specific Plan is regulatory in nature and serves as zoning for Mountain Park. Subsequent development plans and subdivision maps must be consistent with both the specific plan and the City of Anaheim General Plan. Any situation or condition not specifically



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covered by the provisions contained within the Mountain Park Specific Plan is subject to the regulations of the City of Anaheim Municipal Code.

### 3.11.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>LAND USE AND PLANNING: Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*a) Physically divide an established community?*

**No Impact.** While the Project is located within either the City of Orange (East Orange I and II) or the City of Anaheim (Mountain Park and Oak Canyon) Sphere of Influence and has a varied general plan designation of open space, low density, and low medium density residential, the individual sites (East Orange I, East Orange II, Oak Canyon, and Mountain Park) are undeveloped, with no residential uses on any of the sites. Existing uses on the sites include recreational use, event spaces, and wildlife corridors. The sites are all physically separated from the developed and urbanized portions of the City of Orange by several different features, including the existing 241 toll road, and California SR-91. All improvements made by the Project would be limited to minor recreational improvements which would not occur within in or near residential areas. Therefore, the project would have no impact on physically divide an established community.

*b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

**No Impact.** The East Orange I site's zoning designation for both the City and County of Orange is P-C (planned community), which is intended to provide for a more efficient use of land and a better community environment by utilizing more imaginative and innovative planning concepts than would be possible under conventional zoning controls. If usable open space is provided in excess of the amount required under conventional zoning, a proposed project within the P-C district constitutes an environment equal to or better than what might be accomplished under traditional zoning practices. As the site is to effectively be used as 100-percent open space, the East Orange I site would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project.

The East Orange II site's County of Orange zoning is a combination of A1 (general agricultural), and SG (sand and gravel extraction). The site is designated on the County of Orange General Plan as OS (open space). One of the permitted uses of the A1 designation is for parks, playgrounds, and non-commercial athletic fields. The open space



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designation also allows for a variety of recreational activities. The SG zoning designation also allows for all agricultural and open space uses. The proposed project's recreational activities would be consistent with all three zones. Therefore, the East Orange II site would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project.

The Mountain Park Specific Plan was previously found to be consistent with the City of Anaheim General Plan and was adopted with its own Environmental Impact Report. The Specific Plan also allowed up to 2,500 units of housing. The currently proposed Project would not include any housing units on the Mountain Park site, limiting its overall environmental impact compared to the previously approved Specific Plan and its associated Environmental Impact Report. As with the Specific Plan before, the Mountain Park site would be consistent with the City of Anaheim's Land Use, Aesthetics, Geology and Soils, Hydrology, Water Quality, Circulation, Air Quality, Noise, Hazardous Materials, Public Utilities, and Parks and Recreation Goals, Policies and Objectives. The Mountain Park site would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project. Therefore, the project would have no impact.







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## 3.12 MINERAL RESOURCES

### 3.12.1 Setting

The Mineral Resources and Mineral Hazards Mapping Program provides data about California's non-fuel resources, naturally occurring mineral hazards, and information about active and historic mining activities throughout the State. Land classification is the principal responsibility of the Mineral Resources and Mineral Mapping Program. The non-fuel mineral resources include the metals such as gold, silver, iron and copper; the industrial minerals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt and dimension stone; and construction aggregate which includes sand and gravel, and crushed stone. The presence or absence of significant sand, gravel, or stone deposits that are suitable as sources of aggregate are classified according to areas called Mineral Resource Zones (MRZ), which are described below. The intent of classification is to assist lead agencies, planners, and the public in the wise use, management, and conservation of California's mineral resources. As California's population continues to expand, the demand for minerals-especially building construction such as aggregate-will similarly grow.

MRZ-1 – Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.

MRZ-2 – Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or there is a high likelihood of their presence and development should be controlled.

MRZ-3 – Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.

MRZ-4 – Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.

### 3.12.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>MINERAL RESOURCES: Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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- 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?*

**Less than Significant Impact.**

**East Orange I:** The East Orange I site is not located within a Mineral Resource Zone. Maintaining the current nature of the site while providing additional hiking and recreational opportunities as the Project proposes would not 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.

**East Orange II:** Two sections of the East Orange II site are located within areas of potential mineral deposits, specifically aggregate. The 96-acre remote control airfield area upstream of Irvine Lake is located within an MRZ-2 area, which is an area where adequate information indicates that significant deposits are present, or where it is judged that a high likelihood exists for their presence. Current uses on the site include a paved landing strip for remote controlled airplanes, a helicopter landing zone, parking areas, picnic tables, portable bathrooms, and message boards. The area's parking facilities can also be used staging area for hiking. The use of the site would not change as part of the proposed project. Likewise, the recreational area downstream of Irvine Lake Dam would not see a change in its usage. As the proposed use of the sites are not changed from the existing uses, the Project itself would not 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.

**Mountain Park:** The former quarry is located within an MRZ-2 area, which is an area where adequate information indicates that significant deposits are present, or where it is judged that a high likelihood exists for their presence. The City of Anaheim states that this is only aggregate resources within the Project site. The City of Anaheim General Plan EIR mentions the closure of mineral extraction within the Project site, and that the Project site is not designated as a regionally significant source of aggregate.

Therefore, the project would have less than significant impacts.

- 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?*

**Less than Significant Impact.**

**East Orange I:** The East Orange I site is located within the City of Orange Sphere of Influence. Mineral resource deposits in Orange (and its Sphere of Influence) are primarily limited to the sand and gravel resources contained in and along the Santa Ana River and Santiago Creek. The East Orange I site is not located along any waterway listed by the City of Orange General Plan. Therefore, no loss of availability of a locally important mineral resource recovery site as delineated by a local general plan, specific plan or other land use plan.

**East Orange II:** The East Orange II site is also located within the City of Orange Sphere of Influence. Mineral resource deposits in Orange (and its Sphere of Influence) are primarily limited to the sand and gravel resources contained in and along the Santa Ana River and Santiago Creek. As the East Orange II site surrounds portions of Irvine Lake, part of the Santiago Creek system, the City will evaluate development proposals within these areas, and ensure adequate mitigation or preservation of the areas for future mining activity. As the proposed Project would not introduce any new uses to the East Orange II site, less than Significant impacts would occur regarding the loss of availability of a locally important mineral resource recovery site as delineated by a local general plan, specific plan or other land use plan.



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**Mountain Park:** The City of Anaheim has delineated specific locations within city limits and its Sphere of Influence where important mineral resources are located. In general, these locations are located along the Santa Ana River. All three specified locations that contain other materials other than aggregate are located at least five miles to the west of the Project site. The City also mentions that the project site, along with other areas of the City, contain aggregate resources. The City of Anaheim General Plan EIR mentions the closure of mineral extraction within the Project site, and that the Project site is not designated as a regionally significant source of aggregate; therefore, there would be a Less than Significant impact.





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### **3.13 NOISE**

#### **3.13.1 Setting**

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 dBs represents a ten-fold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10-decibel increase in sound level is perceived as approximately a doubling of loudness over a wide range of intensities.

There are several methods of characterizing sound. The most common in California is the A weighted sound level or dBA. This scale gives weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called Leq. The most common averaging period is hourly, but Leq can describe any series of noise events of arbitrary duration.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The Day/Night Average Sound Level (DNL) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

#### Existing Noise Environment

The Project site(s) are within OC Parks open space, including portions of the NCCP Reserve, adjacent to SR 91 and SR 241. The nearest sensitive receptors to the Project sites are located in an existing residential area near Oak Canyon, approximately 100 feet. The existing noise environment in the Project vicinity is primarily from vehicular traffic along SR 91 and SR 241.

#### City Noise Ordinance

The City of Anaheim, which is the closest city to the proposed Project area, states in their Municipal Code that noise sources associated with construction-related activities are typically exempt provided the activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. (City of Anaheim, 2016). A portion of the Project is also located within



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the City of Orange. The City of Orange states in their Municipal Code Section 8.24.050(e) Noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday are typically exempt.

### 3.13.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>NOISE: Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of an 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

**Less than Significant Impact.** The Project includes the development of staging areas, update of existing trails, and parking lot areas, primarily within existing disturbed areas. The City of Anaheim, which is the closest city to the Project area, states in their Municipal Code that noise sources associated with construction-related activities are typically exempt provided the activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. (City of Anaheim, 2016). A portion of the Project is also located within the City of Orange. The City of Orange states in their Municipal Code that noise sources associated with construction-related activities are typically exempt provided the activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on Monday through Saturdays. Additionally, no construction activities are allowed on Sundays or federal holidays.

While construction of the Project could temporarily increase noise levels beyond those that currently exist at or near the Project site, the Project would not result in exposure of persons to or generation of noise levels in excess of standards established in the local General Plan, noise ordinance, or applicable standards of other agencies. As described above, construction would occur only during approved times. These include Monday through Saturday, between the hours of 8:00 a.m. and 7:00 p.m. Compliance with these work hours would be enforced through the



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implementation of Mitigation Measure NOI-1. As construction remains within the City's approved work hours potential impacts would be less than significant.

**Mitigation Measure**

**NOI-1 Construction and Maintenance Noise Reduction**

- A. The project proponent shall produce evidence acceptable to the Manager, Building and Safety, that:
  - 1) All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of a dwelling shall be equipped with properly operating and maintained mufflers.
  - 2) All operations shall comply with Orange County Codified Ordinance Division 6 (Noise Control) including limiting construction activities between the hours of 8:00 a.m. and 7:00 p.m. on all days except Sunday.
  - 3) Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings.
- B. Notations in the above format, appropriately numbered and included with other notations on the front sheet of the project's permitted plans, will be considered as adequate evidence of compliance with this condition.
  - b) *Generation of excessive ground borne vibration or ground borne noise levels?*

**Less than Significant Impact.** Construction of the Project could result in noise and vibration from the use of mechanical machinery (e.g., clearing activities), as well as crew vehicles, required for development of the new staging areas, rehabilitating existing trails, reestablishing historical trails, and parking lot areas. Some noise may also occur during operations from maintenance workers accessing the site. No blasting is required for either construction or operation of the Project. The nearest sensitive receptors to the Project site are residences located more than 100 feet from Oak Canyon. Construction activities would be short-term and intermittent; during operations, maintenance activities would be confined to road, trail, and parking lot areas away from sensitive receptors. Therefore, impacts resulting from exposure to or generation of excessive ground borne vibration/ noise would be less than significant.

- 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 Project area is located approximately ten miles northeast of John Wayne Airport, approximately 15 miles east of Fullerton Municipal Airport, and approximately nine miles southwest of Chino Airport. The Project is not located within an airport land use plan area or compatibility zone. Therefore, no impacts would occur.







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### 3.14 POPULATION AND HOUSING

#### 3.14.1 Setting

This section evaluates potential impacts on Population and Housing that could result from Project implementation. Analysis in this section is based on the existing environmental setting conditions. The United States Census estimates the population of Irvine at approximately 282,572. Irvine has approximately 98,362 total housing units, with a 0.8% homeowner vacancy rate, and a 4% rental vacancy rate. Of the total housing supply, approximately 48.2% (44,762 units) are owner-occupied, and 51.8% (48,107) are renter-occupied.

#### 3.14.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>POPULATION AND HOUSING: Would the project:</b>				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**No Impact.** The Project would not induce population growth in the area either directly or indirectly. The Project is intended to improve existing recreational facilities with the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and develop parking lot areas, and does not include the construction of new homes, businesses, or other buildings or infrastructure. Therefore, no population impacts would occur.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

**No Impact.** There is no existing housing within the Project areas; therefore, there would be no impact to displace substantial numbers of existing housing or the need for replacement housing elsewhere.





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### 3.15 PUBLIC SERVICES

#### 3.15.1 Setting

This section evaluates potential impacts to Public Services that could result from Project implementation. Analysis in this section is based on the existing environmental setting conditions.

Fire protection, as well as emergency medical services and rescue services, is provided by the Orange County Fire Authority (OCFA). Many cities in Orange County have their own fire department; however, others choose to contract fire services with the OCFA. The OCFA is contracted to provide these services to the unincorporated areas of Orange County as well as numerous cities. East Orange I and II are located within the unincorporated area of Silverado, California, and Mountain Park is located within the City of Anaheim. East Orange I and II and Mountain Park are covered by Division 4 of the OCFA with Station #8 being approximately three miles west of East Orange I and II, located at 10631 Skyline Dr, North Tustin and Station #53 being approximately one mile north of Mountain Park, located at 25415 La Palma Ave, Yorba Linda.

Police protection for the Project area is provided by the Orange County Sheriff's Department (OCSD). East Orange I and II are located within the unincorporated area of Silverado and Mountain Park is located within the City of Anaheim. The City of Anaheim, as well as the unincorporated areas of Orange County, contract with the OCSD for police services. The closest OCSD office from the Project site is located at 20202 Windrow Dr, Lake Forest, CA, approximately seven miles south of East Orange II.

All areas of the Project are within the jurisdiction of the Orange Unified School District. However, the nearest school to East Orange Areas I and II is Northwood High School approximately 2.7 miles southwest in the adjacent Irvine Unified School District, located at 4515 Portola Pkwy, Irvine. The nearest school to Mountain Park is Running Springs Elementary School approximately 0.40 mile west at 8670 Running Springs Dr, Anaheim.

#### 3.15.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>PUBLIC SERVICES: Would the project:</b>				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact, in order to maintain acceptable service ratios for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



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Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

i. Fire protection?

**No Impact.** The Project consists of the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and develop parking lot areas. The Project would not construct additional residential or commercial developments, nor would it alter acceptable service ratios or response times. The implementation of the Project would not result in environmental impacts associated with the provision of or requiring new or physically altered fire department facilities. Therefore, no impacts would occur.

ii. Police protection?

**No Impact.** The Project consists of the development of staging areas, rehabilitating existing trails, reestablishing historical trails, and develop parking lot areas. The Project would not construct additional residential or commercial developments, nor would it alter acceptable service ratios or response times. The implementation of the Project would not result in environmental impacts associated with the provision of or requiring new or physically altered police department facilities. Therefore, no impacts would occur.

iii. Schools?

**No Impact.** The Project would not introduce additional residential development or result in any population increase that would increase demand for school services. Therefore, no impacts would occur.

iv. Parks?

**No Impact.** The Project would increase the available park supply in the region and would not result in increased usage of existing parks. The recreational improvements to existing trails and general park maintenance proposed for all three parcels are intended to improve and expand permitted recreational use including hiking, mountain biking, and horseback riding. The Project area is designated as P-R (Parks and Recreation). The properties are located within existing Orange County Regional Parks and Open Space and add further acreage to the previous inventory of nearly 60,000 acres. No new housing is proposed, and OC Parks is responsible for and will continue management of the property; therefore, less than Significant impact would occur.



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v. Other public facilities?

**No Impact.** The Project would not introduce new residences and thus the Project would not significantly impact the level of other public services or increase the need for other public facilities, such as libraries or hospitals. Therefore, no impact would occur.





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### 3.16 RECREATION

#### 3.16.1 Setting

In 2014, the Irvine Company donated permanently protected open space to the County of Orange. Four parcels consisting of East Orange I, East Orange II, Mountain Park, and Irvine Park Addition were donated for a total land area of nearly 2,300 acres, adding to the 20,000-acre IROS previously donated by the Irvine Company. These parcel areas are adjacent to Irvine Lake and near the junction of SR 91 and SR 241. The properties are located near existing Orange County Regional Parks and Open Space, such as the recreational facilities surrounding Irvine Lake, and add further acreage to the previous inventory of nearly 60,000 acres. OC Parks is responsible for the management of the property. East Orange II is adjacent to Irvine Lake, which is stocked with largemouth bass, catfish, trout, and crappie. Other activities surrounding the lake include boating and camping.

Recreational improvements and general park maintenance are proposed for three of the four parcels and are intended to improve and expand permitted recreational uses including hiking, mountain biking, and horseback riding. Sustainably designed trail systems are proposed and will be inclusive of a variety of trail characteristics in order to appeal to a wide spectrum of public user-group types and experience levels. Staging areas are proposed to provide parking, public access, portable toilets, and picnic areas. Signage indicating relative information or regulation, access, park boundaries, and public health and safety will be added around the Property and much of the existing signage will be replaced.

#### 3.16.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>RECREATION: Would the project:</b>				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**Less than Significant Impact.** Within the East Orange I site, a staging area will be established to facilitate managed public recreational access to the site. Additional improvements include a picnic area, a trailhead, signage, and an entry gate. OC Parks will provide signage at all access points consistent with other OC Parks wilderness and nature preserve facilities. A multi-use trail configuration comprised of historical trails and provisional trails will be established



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as part of the proposed project. Historical trails will continue to be maintained in their current condition. The provisional trails and staging area will be used for managed access events only. Trail conditions, habitat impacts, and public satisfaction for the provisional trails will be regularly evaluated during the term of the IRRMP. Official trails will be designated in the RRMP, based on findings from the studies of the provisional trails. Proper maintenance and an increased number of trails and other facilities will keep any increase of use to the existing trails and recreational facilities to a Less than Significant impact, preventing accelerated physical deterioration.

East Orange II has a variety of recreational opportunities and existing facilities. The large event space along the shores of the lake would retain their existing uses and intensities. Lease terms with James Event Productions, Inc. set prior to the land transfer to Orange County Parks will still be honored. As with East Orange I, provisional trails will be opened through managed activities to expand controlled access and provide further recreational activities. Existing trails will be maintained in their current condition. Proper maintenance will keep any increase of use to the existing trails and recreational facilities to a Less than Significant impact, preventing accelerated physical deterioration.

Mountain Park will feature a new staging area with ADA parking at the existing gravel parking lot. Routine maintenance would ensure that existing trails do not deteriorate. Impacts 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 Project consists of the development of a staging area, rehabilitating existing trails, and reestablishing historical trails within previously disturbed areas and would not require the construction or expansion of recreational facilities. An existing staging area will be improved with ADA parking and a connection to existing trails. The new staging area will include accessible parking and signage in accordance with standards for ADA use, portable restrooms, benches, and picnic tables. No motorized vehicles would be permitted on the trails, except for vehicles associated with routine operations and maintenance, park patrol, and emergency services. The Project sets aside the majority of its acreage to wildlife habitat. Project impacts would be Less than Significant.





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## **3.17 TRANSPORTATION**

### **3.17.1 Setting**

This section evaluates potential impacts to traffic and transportation that could result from Project implementation. Analysis in this section is based on the existing environmental setting conditions. For the purposes of this section, the network of freeways and roadways surrounding the Project sites is referred to as the existing roadway system.

#### **3.17.1.1 Existing Roadway System**

The existing roadway network with the potential to be utilized by the Project includes:

##### State Route 241

State Route (SR) 241 (SR-241) is a north-south state route that bisects the Project site. SR 241 is a toll road for its entire length within Orange County. The northern portion of SR 241 which bisects the Project is part of the Eastern Transportation Corridor, which is comprised of SR 261, SR 133, and SR 241.

##### State Route 91

State Route 91 (SR-91) is a major east-west highway that serves a large portion of Los Angeles County. SR-91 runs 59 miles in length, beginning at Vermont Avenue in Gardena, west of the Junction with I-110. SR-91 then runs eastwards to Riverside at the Junction with SR-60.

##### East Santiago Canyon Road

East Santiago Canyon Road is an east-west major arterial two-lane highway, located in County of Orange unincorporated lands. Shortly south of Irvine Lake, East Santiago Canyon Road downgrades to a primary arterial highway. Santiago Canyon Road begins at the intersection E Chapman Ave and Jamboree Road (E Chapman becomes E Santiago Canyon Road). Santiago Canyon Road then runs roughly southeast for 11 miles through Santiago Canyon to the intersection of Ridgeline Road and El Toro Road.

##### East Santa Ana Canyon Road

Santa Ana Canyon Road, located within the City of Anaheim, parallels SR 91 east-west from the Anaheim-Orange County line to Gypsum Canyon Road. In the vicinity of the Project, East Santa Ana Canyon Road is classified by the City of Anaheim as a Hillside Secondary Arterial. These are roadways that provide for circulation within the City through areas that are constrained by terrain. Hillside secondary arterial facilities are four-lane roadways, with two parking lanes, that are undivided.

##### Gypsum Canyon Road

Gypsum Canyon Road, located within the City of Anaheim, runs north-south for approximately one mile, and crosses both SR 91 and the Santa Ana River. In the vicinity of the Project, Gypsum Canyon Road is classified by the City of Anaheim as a Hillside Primary Arterial. These are roadways that provide for circulation within the City and to its adjacent communities through areas that are constrained by terrain. Primary arterials are typically six lane divided facilities with no parking or four lane divided with left turn pockets and two parking lanes.



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S Weir Canyon Road

Weir Canyon Road, located within the City of Anaheim, runs northwest-southwest between the Project and SR-91. In the vicinity of the Project, Weir Canyon Road is classified by the City of Anaheim as a Hillside Primary Arterial. These are roadways that provide for circulation within the City and to its adjacent communities through areas that are constrained by terrain. Primary arterials are typically six lane divided facilities with no parking or four lane divided with left turn pockets and two parking lanes. Northwest of the Project, Weir Canyon is classified by the City of Anaheim as a Scenic Expressway.

### 3.17.1.2 Project Site Primary Access

The Project locations will be accessed by a variety of routes. It is anticipated that East Orange I and II will be accessed primarily via East Santiago Canyon Road, and Mountain Park will be accessed by a combination of East Santa Ana Canyon Road, Gypsum Canyon Road, and S Weir Canyon Road.

### 3.17.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>TRANSPORTATION AND TRAFFIC: Would the project:</b>				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

**Less than Significant Impact.** Implementation of the Project would not result in an impact on measures of effectiveness for the performance of the circulation system. During construction, a small number of worker trips would be required to transport equipment and labor to and from the site daily; the exact number of trips would vary based on the staffing level and intensity of the construction activity, however it is not expected to exceed 20 trips per day during the one month construction period. These trips would be easily accommodated by the existing traffic system and would not result in a change in the existing level of service in the region. Operation of the Project is anticipated to add



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an additional 9 trips during the week to the local traffic system. This small increase in traffic above baseline would not result in a conflict with the applicable plans, ordinances, and policies. Therefore, no impact would occur.

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

**Less than Significant Impact.** Implementation of the Project would not result in a noticeable increase in level of service standards or travel demand measures. During construction, a small number of worker trips would be required to transport equipment and labor to and from the site daily; the exact number of trips would vary based on the staffing level and intensity of the construction activity; however, it is not expected to exceed 20 trips per day. These trips would be easily accommodated by the existing traffic system and would not result in a change in the existing level of service in the region. Operation of the Project is anticipated to add an additional 9 trips during the week to the local traffic system

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

**No Impact.** Implementation of the Project would not include design features which would increase hazards, such as new curves or intersections. The Project would require the temporary use of construction equipment such as small earth movers. These pieces of equipment would be transported using existing roadways using trailers and would not constitute an incompatible use or create an on-going traffic disruption.

*d) Result in inadequate emergency access?*

**No Impact.** Implementation of the Project would not include any physical changes to the access routes at or near the Project site during either construction or project operations which would hinder or prevent emergency access to the area. The Project area has existing recreational infrastructure which is currently supported by regional emergency services. The Project would not reduce or remove existing emergency access points. Therefore, no impact resulting from inadequate emergency access would occur.





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### 3.18 TRIBAL CULTURAL RESOURCES

#### 3.18.1 Setting

The Legislature added new requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

#### 3.18.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>TRIBAL CULTURAL RESOURCES:</b> 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:				
a) 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*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:*

- a) *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*



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**Less than Significant Impact.** The Project site is not listed or eligible for listing in the California Register of Historical Resources or local register. As discussed in Section 3.5, a cultural resources study of the Project areas and 0.5-mile radii was conducted for cultural resources to assist in determining whether implementation of the Project would affect cultural resources.

The results of the East Orange I record search indicated that one prehistoric resource (CA-ORA-1240, P30- 001240) was previously documented within the East Orange I Project Area, and 12 prehistoric resources, three historic resources, and one multi-component resource were previously documented within a 0.5-mile radius of East Orange I. The results of the East Orange II record search indicated that one prehistoric site CA-ORA-1294 (P30-001294), two isolated finds comprised of a single mano, and two groundstone fragments were previously documented within the East Orange II Project Area, and five archaeological sites (all prehistoric) were previously documented within a 0.5-mile radius of the East Orange II Project Area. The results of the Mountain Park records search indicated that one historic period resource was previously documented within the Mountain Park Project Area and one prehistoric resource and one historic resource were previously documented adjacent to the Mountain Park Project Area.

As there are no structures, grading, or excavation activities associated with the Project, the Project would not 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 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), and Less than Significant impacts would occur.

- b) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

**Less than Significant Impact.** California Native American tribes have been notified and requested consultation conducted in accordance with AB 52. On February 28, 2019, letters were sent out to the San Gabriel Band of Mission Indians, the Juaneño Band of Mission Indians, the Soboba Band of Luiseño Indians, and the Gabrieleño Band of Mission Indians - Kizh Nation. The Gabrieleño Band of Mission Indians - Kizh Nation requested consultation with the County on March 8, 2019, via email. Following the written request, representatives from the Tribe and staff from OC Public Works/OC Development Services and OC Parks engaged in consultation via telephone conference on April 18, 2019. Given the information provided on the specifics of the Project, the Tribe concluded consultation. A final consultation letter was sent to the Gabrieleño Band of Mission Indians - Kizh Nation on April 23, 2019.



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### 3.19 UTILITIES AND SERVICE SYSTEMS

#### 3.19.1 Setting

Utilities and service systems to much of the project site is minimal. Most of the site is undeveloped or previously disturbed and vacant. The Santa Ana Regional Water Quality Control Board is responsible for all areas of the project. Power is provided by Southern California Edison. The site is without potable water.

#### 3.19.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>UTILITIES AND SERVICE SYSTEMS: Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of the State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?*

**Less than Significant Impact.** The Project requires no potable water supply for the Project site; however, it does include portable toilets to facilitate the East Orange I parking lot. The Project would not require the construction of a



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new water or wastewater treatment facility or expansion of the existing treatment facilities serving the Project area. Therefore, Less than Significant impacts would occur.

- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

**No Impact.** The project consists of the development of a staging area, rehabilitating existing trails, and reestablishing historical trails within previously disturbed areas. An existing staging area will be improved with ADA parking. The new staging area will include accessible parking and signage in accordance with standards for ADA use, portable restrooms, benches, and picnic tables. Water supplies would not be required as part of the proposed Project. Water supplies would not be impacted by the Project.

- 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?*

**Less than Significant Impact.** The Project consists of the development of a staging area, rehabilitating existing trails, and reestablishing historical trails within previously disturbed areas. An existing staging area will be improved with ADA parking and a connection to existing trails. The new staging area will include a decomposed granite parking lot, accessible parking and signage in accordance with standards for ADA use, portable restrooms, benches, and picnic tables. While the project would include approximately 4 additional portable restrooms (two at EO I/II, two at Mountain Park) there are already existing portable restrooms on the Project site on land managed by OC Parks. These portable restrooms would be provided and serviced by a local company with the capacity to maintain and dispose of all generated wastes. The impact would be Less than Significant to the wastewater treatment provider.

- 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?*

**No Impact.** The Project consists of the development of a staging area, rehabilitating existing trails, and reestablishing historical trails within previously disturbed areas. An existing staging area will be improved with ADA parking. The new staging area will include accessible parking and signage in accordance with standards for ADA use, portable restrooms, benches, and picnic tables. Trash cans would be placed at each staging area to prevent littering. The Project location is served by the Olinda Alpha Landfill, the Frank R. Bowerman Landfill and the Prime Desecha Landfill, which collect the solid waste currently generated by existing activities within festival areas around Irvine Lake. New solid waste generated by the Project's proposed improvements would be minimal compared with existing activities. There would be no impact.

- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**No Impact.** New solid waste generated by the Project's proposed improvements would be minimal compared with existing activities. The Project would comply with all federal, state, and local statutes and regulations relating to solid waste. There would be no impact.





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## 3.20 WILDFIRE

### 3.20.1 Setting

Wildland fires (wildfires) can occur in open spaces containing a mixture of flammable and nonflammable vegetation cover. The native areas surrounding the active landfill operation area are vulnerable to wildfires due to the steep topography, highly flammable scrub vegetation and limited access for firefighting.

Portions of the proposed Project are located within State Responsibility Areas (SRA) and Local Responsibility Areas (LRA) mapped by CalFire as Very High Fire Hazard Severity Zone (VHFHSZ). An LRA is an area where fire protection is typically provided by city fire departments rather than by CalFire. An SRA is an area where CalFire has the legal responsibility to provide fire protection services. Areas which have been mapped as VHFHSZ are the most at risk for fire within the State. The fire hazard severity model used by CalFire to map these areas consists of two key elements: probability of burning and probable fire behavior. The model also includes probability of flames and embers threatening buildings and considers potential flame length, ember generation potential, and overall likelihood of an area burning. Actions such as creating defensible space around buildings or thinning of nearby vegetation reduce the fire risk of an area, but such actions do not substantially change the overall fire hazard. Fire risk is evaluated as a combination of existing hazards plus mitigations (such as vegetation clearance).

In general, the fire hazard of an area is based on a combination of several variables. Some of these include:

- Fuel Load (vegetation type, density, moisture content)
- Topography (slope)
- Weather
- Building construction (considering combustible roof coverings)
- Wildfire history, and
- Whether there are local measures in place to help reduce the zone's fire rating.

### 3.20.2 Impact Analysis

Issues	Potentially Significant Impact	Less than Significant Impact With Mitigation Incorporated	Less than Significant Impact	No Impact
<b>Wildfire. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</b>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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Issues	Potentially Significant Impact	Less than Significant Impact With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Expose people or structures to significance risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*a) Substantially impair an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** Construction and operation of the proposed Project would include renovations and improvements to existing recreational trails, and the installation of minor improvements such as portable toilets and trash containers. The Project does not include the construction and operation of infrastructure which would alter the existing baseline emergency response risks or interfere with any adopted emergency response or emergency evacuation plans. All existing plans would remain unchanged during the construction and operation of the proposed Project.

*b) Due to slope, prevailing winds, or 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 with Mitigation.** Construction of the proposed Project would involve the use of various earthmoving equipment such as compact excavators or ride-on earth movers. Additionally, some specialized internal combustion tools such as brush mowers and chainsaws will be utilized for tree and vegetation removal. This introduction of equipment into the areas mapped as VHFHSZ would increase the baseline wildfire risks and expose construction workers, and nearby residents to an increased risk of wildfire. During construction, heavy equipment and passenger vehicles driving on vegetated areas prior to clearing could increase the risk of fire. Heated mufflers, explosives used during site preparation, and improper disposal of cigarettes could potentially ignite surrounding vegetation. The use of heavy equipment, such as bulldozers and graders during construction activities and to clear vegetation, has the potential to ignite a wildland fire from sparks created when equipment blades strike rocks or metal objects. If discovered by equipment operator or other Project personnel, small ignitions can be quickly suppressed by the construction equipment and/or on site fire watch personnel by activities such as bulldozing a small ignition.

The Project site contains areas mapped as a VHFHSZ, during extreme weather conditions an uncontrolled grass fire originating within those areas could spread off site and up the slopes of the adjacent wildland areas, posing a risk to life and property. However, the probability of a wildfire to occur as a result of unmitigated Project construction would be low due to the low vegetative fuel load, the proposed moderate level of heavy equipment use and the short construction duration. Regionally, any fire that escapes control or spreads into the mountains could result in a large amount of damage, and the risk of fire as a result of unmitigated Project construction is therefore considered potentially significant.

The fuel tanks on board some construction equipment can contain fuel volumes ranging from 100 to 500 gallons. Accidental ignition could result in a fire, which, depending on the location, could spread outside the immediate area. All construction equipment is required to have fire suppression equipment on board or at the work site. Additionally, permitting requirements of the jurisdictional fire agencies, existing fire codes, and the development of a Project-



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specific fire plan, as required by Mitigation Measure FIRE-1 (Fire Protection Plan), would mitigate this potentially significant impact to below a level of significance.

**Mitigation Measure**

**FIRE-1 Fire Prevention Plan**

The Applicant shall prepare a Fire Prevention Plan that meets the Orange County Fire Authority (Authority) requirements. The plan shall contain, but not be limited to, the following provisions:

1. Comply with all applicable laws of the State of California and the Fire Prevention Plan. Ensure that a copy of this Fire Prevention Plan and any special permits are to be known and in possession of Project foreman/supervisor on work site daily.
2. All construction equipment shall be fitted with appropriate spark arrestors. Spark arrestors shall meet the standards set forth in the National Wildfire Coordinating Group publication for Multi-position Small Engines, #430-1, or General Purpose and Locomotive, #430-2. Unless determined appropriate by the Authority, spark arrestors are not required on equipment powered by exhaust-driven turbo charged engines or motor vehicles equipped with a maintained muffler. The Applicant shall provide documentation of spark arrestors to the Authority prior to bringing each piece of equipment on site.
3. All construction vehicles and equipment shall carry at least one fully charged fire extinguisher. Fire extinguishers shall be of the type and size set forth in the California Public Resources Code Section 4431. Fire extinguishers shall be appropriately maintained throughout construction, and records of pressure checks shall be submitted to the Authority monthly. Additionally, the following requirements shall apply:
  - i. Each truck, personnel vehicle, tractor, grader or piece of heavy equipment shall have one shovel, one axe (or Pulaski) and a fully charged fire extinguisher.
  - ii. Each gasoline powered tool (such as chainsaws, chippers, rock drills, etc.) shall have one shovel and one pressurized fire extinguisher. Shovels must be kept within 25 feet of tools when in use.
  - iii. All tools and equipment above shall be in good workable conditions, with employee's trained on their use.
  - iv. Shovels shall be "O" or larger and be not less than 46 inches in over length.
  - v. Axes (or Pulaskis) shall have 2.5-pound or larger heads and be not less than 28 inches in overall length
4. Welding or other hot work shall not occur during the Project without an appropriate hot work permit.
5. A full-time fire watch with appropriately trained personnel and appropriate firefighting equipment shall be available and on site during all times when construction work is taking place. The Applicant shall designate a qualified on-site fire supervisor during Project construction who shall be authorized to act on behalf of the Authority in fire prevention and suppression. The on-site supervisors shall be approved prior to start of Project construction by the Authority.



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Fire Watch personnel shall be responsible for patrolling the construction work area for the prevention and detection of fires, and to make sure all fire regulations and fire prevention plans are met, and to take/direct suppression action where necessary. The Fire Watch personnel shall not be permitted to perform other non-fire-related duties. Fire Watch personnel shall remain on duty for at least one hour after the close of work or sunset (whichever comes first). During Red Flag conditions or when deemed necessary by the Authority, Fire Watch personnel shall be required until sunset.

6. The Applicant shall cooperate with the Authority to determine appropriate protocols and provisions for fire and emergency access to the area. The protocols shall include provisions and appropriate notifications if roadway blockages were to occur due to large loads during construction or operation.
  7. Cleared and maintained parking areas shall be designated. No parking shall be allowed outside of designated areas. Parking lots shall be covered with gravel.
  8. The Applicant shall coordinate with the Authority to determine if additional repeaters or communication equipment would be required for fire response.
  9. Refueling shall be performed within equipment service areas, parking areas, and gas and oil storage areas whenever possible.
  10. Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material down to mineral soil for the radius of at least ten feet. Small mobile or stationary internal combustion engines shall be cleared of flammable material for a slope distance of at least ten feet from such engine.
  11. The Applicant shall participate in the Red Flag Warning program with local fire agencies and the National Weather Service. The Applicant shall stop work during Red Flag conditions. If a Red Flag Warning were to occur during critical work activities, or work activities that cannot be stopped (such as equipment movement), the Authority shall be immediately notified. Communication protocols shall be outlined in the plan. The Authority shall approve resumption of construction activities.
- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

**Less than Significant Impact with Mitigation.** The Project does not propose the installation of new infrastructure, rather improvements to the existing project facilities. The Project would not include new roadways or powerlines which could increase fire risk. Construction and operation of the project would both involve ongoing maintenance to existing facilities, and would include the use of internal combustion engines and small earth moving equipment. This introduction of equipment into the areas mapped as VHFHSZ for the rehabilitation and maintenance of the Project would increase the baseline wildfire risks and expose construction workers, and nearby residents to an increased risk of wildfire. Similar to impacts discussed above, permitting requirements of the jurisdictional fire agencies, existing fire codes, and the development of a Project-specific fire plan, as required by Mitigation Measure FIRE-1 (Fire Protection Plan), would mitigate this potentially significant impact to below a level of significance.



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**Mitigation Measure****FIRE-1 Fire Prevention Plan**

- d) Expose people or structures to significance risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes?*

**No Impact.** The Project does not involve development of residential dwellings and would not increase the wildland-urban interface, defined as the area where structures and other human development meet or intermingle with undeveloped wildland or natural open space. Construction of the Project does not substantially alter the risk of landslides after a wildfire compared to other uses and risks in the area. Impacts which could result from increased risks to downslope or downstream areas would be similar to those currently posed by the existing baseline wildfire risk and would not increase during operation of the proposed Project.





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### 3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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.** Subject to Mitigation Measures BIO-1 through BIO-7, the Project would not have a substantial impact on special status species, stream habitat, and wildlife dispersal and migration. The Project does not include a component with the potential to otherwise degrade the quality of the environment or eliminate important examples of the major periods of California history or prehistory and include the implementation of Mitigation Measures CULT-1 and GEO-1. Consequently, the Project's Mandatory Finding of Significance relative to degrading the quality of the environment would be Less than Significant with mitigation incorporated.

- 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.)*

**Less than Significant with Mitigation Incorporated.** Less than Significant with Mitigation Incorporated.



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A cumulative impact could occur for a given resource area if the project were to result in an incrementally considerable contribution to a significant cumulative impact resulting from past, present, and reasonably foreseeable future projects. As addressed in the above analysis, implementation of the Project would not, in itself, result in any potentially direct or indirect significant unavoidable impacts.

The Project is limited to short-term construction activities regarding development of a staging area, rehabilitating existing trails, and installing minor services such as trash cans. An existing staging area will be improved with ADA parking and a connection to existing trails. The new staging area will include a graveled parking lot, accessible parking and signage in accordance with standards for ADA use, portable restrooms, benches, and picnic tables. The Project is consistent with the existing land use, would not result in population growth, would not generate substantial demand for new utility and service systems or long-term increase in air emissions, noise, or traffic. The Project trails and parking lot are located in generally remote areas, and there are no known planned projects in the vicinity of any of the Project sites. Past and ongoing projects in the vicinity of the trails and trailheads include roads, residential developments, and other recreational projects. The impacts of the proposed Project would be limited in both intensity and scope due to the relatively small size, scattered locations, and type of trail improvements proposed.

Construction of the Project would primarily result in potential impacts associated with construction to biological resources, cultural resources, geology and soils, hydrology and water quality, and noise. With incorporation of Mitigation Measures AQ-1 through AQ-5, BIO-1 through BIO-7, CULT-1, GEO-1, WQ-1 through WQ-3, NOI-1, and FIRE-1, potential impacts of the Project would be substantially avoided or offset and would not rise to a level of significance.

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 trail alignments. Cumulative impacts would be less than significant.

- c) *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?*

**Less than Significant with Mitigation Incorporated.** Subject to Mitigation Measure NOI-1, which would require construction and maintenance activities to occur during days and times consistent the County's Noise Ordinance, the Project would not have result in an environmental effect, which would cause substantial adverse effects on human beings. The Project would have Less than Significant impacts relative to adverse effects on humans, either directly or indirectly with mitigation incorporated.





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Mitigation Monitoring and Reporting Plan

## 4.0 MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
<b>AIR QUALITY</b>							
<b>AQ-1</b>	OC Parks	Vehicle travel on unpaved roadways shall be limited to 15 miles per hour or less.	All Project Activities				
<b>AQ-2</b>	OC Parks	A gravel apron, 25 feet long by road width, shall be used to reduce mud/dirt trackout from unpaved truck/vehicle exit routes.	Project Activities Involving Grading and/or Excavations				
<b>AQ-3</b>	OC Parks	A soil stabilizer shall be applied to unpaved construction site access routes.	Project Activities Involving Grading and/or Excavations				
<b>AQ-4</b>	OC Parks	Apply water three times daily to disturbed construction areas.	Project Activities Involving Grading and/or Excavations				
<b>AQ-5</b>	OC Parks	Ground cover shall be replaced in disturbed areas as quickly as possible.	Project Activities Involving Grading and/or Excavations				
<b>BIOLOGICAL RESOURCES</b>							
<b>BIO-1</b>	OC Parks	<b>Wildlife Pre-Construction Surveys and Biological Monitoring:</b> Prior to ground disturbance or vegetation clearing within the Project site, a qualified biologist shall conduct surveys for wildlife (no more than 14 days prior to site disturbing activities) where suitable habitat is present and directly impacted by construction activities. The qualified biologist must be approved by OC Parks prior to the commencement of surveys. Wildlife found within the Project site or in areas	Prior to Construction				



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Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<p>potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the project prior to the start of construction. Special-status species found within a Project impact area shall be relocated by an authorized biologist to suitable habitat outside the impact area.</p> <p>The Project proponent shall provide written evidence to OC Parks, that the Project proponent has retained a qualified biological monitor with expertise in the species known to occur or with the potential to occur on the Project site. The qualified biologist shall be present during initial ground disturbance for each phase of construction. Once initial ground disturbance is complete, monitoring will occur periodically during all construction activities. The qualified biologist(s) shall be present at all times during ground-disturbing activities immediately adjacent to, or within habitat that supports populations of listed or special-status species.</p> <p>If required, during pre-construction surveys and/or required monitoring efforts, the qualified biologist will relocate common and special-status species that enter the Project site; some special-status species may require specific permits prior to handling and/or have established protocols for relocation. Records of all detection capture, and release shall be reported to CDFW.</p>					
<b>BIO-2</b>	OC Parks	<b>Environmental Awareness Training:</b> The Project proponent shall submit proof to the OC Parks, that all Project personnel attended an environmental awareness and compliance training program. The training program shall present the environmental regulations and applicable permit conditions that the Project team shall comply with. The training program shall include applicable measures established for the Project to minimize impacts to water quality and avoid sensitive resources, habitats and species. Dated sign-in sheets for attendees at these meetings shall be maintained and submitted to OC Development Services.	Prior to Construction				
<b>BIO-3</b>	OC Parks	<b>Implement Best Management Practices (BMPs):</b> The Project shall implement the following Best Management Practices (BMPs):	All Project Activities				



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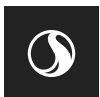
Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<ul style="list-style-type: none"> <li>Restrict non-essential equipment to the existing roadways and/or ruderal areas to avoid disturbance to native vegetation.</li> <li>All excavation, steep-walled holes or trenches in excess of six inches in depth shall will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches will also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required).</li> <li>Minimize mechanical disturbance of soils to reduce impact of habitat manipulation on small mammals, reptiles, and amphibians.</li> <li>Removal/disturbance of vegetation shall be minimized to the greatest extent feasible.</li> <li>Install and maintain appropriate erosion/sediment control measures, as needed, throughout the duration of work activities.</li> <li>Vehicles shall not be driven, or equipment operated, in water covered/wetted portions of the stream channel, or where riparian vegetation may be destroyed, except as otherwise provided for in the permits/agreements from the CDFW, USACE, and/or Regional Water Quality Control Board (RWQCB).</li> <li>No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.</li> </ul>					



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Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<ul style="list-style-type: none"> <li>Disinfection of all equipment prior to use on the project site to reduce potential for the spread of ISHBs.</li> <li>Pruning of tree limbs within the Project area potentially infested with ISHBs.</li> <li>Avoidance and minimization of the transport of potential ISHB host tree materials and proper disposal of potential host materials (i.e., chipping, solarization, composting all prior to delivering to a landfill).</li> </ul>					
<b>BIO-4</b>	OC Parks	<p><b>Nesting Bird Surveys and Avoidance Measures:</b> Prior to initial site disturbance, seasonally timed presence/absence surveys for nesting birds shall be conducted by a qualified biologist; the qualified biologist must be approved by OC Parks prior to the commencement of surveys. If construction activities carry over into a second nesting season(s) the surveys will need to be completed annually until the Project is complete. A minimum of three survey events, three days apart shall be conducted (with the last survey no more than three days prior to the start of site disturbance), if construction is scheduled to begin during avian nesting season (February 15th through September 15th); surveys for raptors shall be conducted from January 1st to August 15th. Surveys shall be conducted within 500 feet of all Project activities.</p> <p>If coastal California gnatcatcher, least Bell's vireo, or other special-status species are observed, consultation with USFWS and/or CDFW is required. If breeding birds with active nests are found prior to or during construction, a qualified biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. The prescribed buffers may be adjusted by the qualified biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors. The qualified biologist shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. If construction occurs outside of avian nesting season, only a single presence/absence survey will be required.</p>	All Project Activities				



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Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
BIO-5	OC Parks	<p><b>Conduct Pre-Construction Surveys for State and Federally Threatened, Endangered, Proposed, Petitioned, Candidate, and other Special-Status Plants and Development of a Transplanting Plan:</b> Prior to initial ground disturbance and for undisturbed areas in subsequent construction years, the Project proponent shall conduct pre-construction surveys for State and federally listed Threatened and Endangered, Proposed, Petitioned, Candidate, and other special-status plants in all areas subject to ground-disturbing activity. The surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist, approved by OC Parks, according to protocols established by the USFWS, CDFW, and CNPS. All listed plant species found shall be marked and avoided. Any populations of special-status plants found during surveys will be fully described, mapped, and a CNPS Field Survey Form or written equivalent shall be prepared.</p> <p>Prior to ground disturbance activities or vegetation removal, any populations of listed or special-status plant species identified during the surveys within the Project limits and beyond, shall be protected and a buffer zone placed around each population. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by the qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual; the qualified plant ecologist/biologist may increase this minimum buffer depending on species and location. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS and CDFW as applicable.</p> <p>Where impacts to listed plants are determined to be unavoidable, the USFWS and/or CDFW shall be consulted for authorization. Additional mitigation measures to protect or</p>	Prior to construction				



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		restore listed plant species or their habitat, including but not limited to a salvage plan including seed collection and replanting, may be required by the USFWS or CDFW before impacts are authorized, whichever is appropriate.					
<b>BIO-6</b>	OC Parks	<p><b>Conduct Protocol Surveys for Least Bell's Vireo and Coastal California Gnatcatcher</b> A qualified avian biologist shall conduct focused protocol surveys in suitable habitat within 500 feet of proposed Project disturbance areas within the breeding season prior to the start of construction. The surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season and follow established protocols.</p> <p>If a territory or nest is confirmed in a previously unoccupied area, the CDFW and USFWS shall be notified within 48 hours. In coordination with the CDFW and USFWS, a 300-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. This buffer may be adjusted as determined by a qualified avian biologist in coordination with the CDFW and USFWS. The County, in consultation with the qualified biologist, shall halt construction if activities outside of but near the 300-foot buffer are determined to be negatively impacting the nesting birds. The qualified biologist shall devise methods to reduce the noise and/or disturbance in the vicinity as needed. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge.</p>	Prior to construction				
<b>BIO-7</b>	OC Parks	<p><b>Vegetation Removal and Replacement:</b> Construction activities shall be done in such a manner as to minimize the removal of native vegetation. If native vegetation removal cannot be avoided, and the removal is approved by OC Parks, the impacted plant communities shall be replaced at a mitigation ratio of 1:1. Sensitive communities shall be replaced at a mitigation ration of 3:1. The compensation for the loss of habitats may be achieved either by a) on-site habitat creation or enhancement of California sycamore woodlands and southern</p>	All Project Activities				



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Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<p>riparian scrub communities with similar species compositions to those present prior to construction, b) off-site creation or enhancement of California sycamore woodlands and southern riparian scrub communities, or c) participation in an established mitigation bank program.</p> <p>Prior to the removal of native vegetation, if on or off-site mitigation is required, a Habitat Mitigation and Monitoring Plan shall be prepared that will guide all restoration and monitoring activities. This plan shall include, at a minimum, the following:</p> <ul style="list-style-type: none"> <li>• Proposed species list for creation/enhancement;</li> <li>• Planting/seeding methodology;</li> <li>• Irrigation plan;</li> <li>• Weeding schedule;</li> <li>• Success criteria;</li> <li>• Monitoring methodology and schedule; and</li> <li>• Reporting requirements.</li> </ul>					
<b>CULTURAL RESOURCES</b>							
<b>CULT-1</b>	OC Parks	<p>The applicant shall provide written evidence to OC Parks, that the applicant has retained a County-certified archaeologist, to observe ground disturbance activities and salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage.</p> <p>The applicant shall obtain approval of the archaeologist's follow-up report from OC Parks. The report shall include: the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. The archaeologist shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis.</p>	Prior to construction				



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Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of OC Parks. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of OC Parks.					
CULT-2	OC Parks	Human Remains. If human remains are discovered, all work shall be halted immediately within 50 feet of the discovery, the City shall be notified, and the County Coroner must be notified, according to Section Public Code Resources Code Section 5097.98. The County Coroner must be notified within 24 hours of the discovery, and within two working days of notification of the discovery would make such a determination. If the County Coroner determines that the remains are or are believed to be Native American, the County Coroner would notify the NAHC in Sacramento within 24 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the County Construction Engineer, the treatment and disposition of the human remains.	During Construction				
<b>Geology and Soils</b>							
GEO-1	OC Parks	Prior to the start of construction, a paleontological resource monitoring and mitigation plan (PRMMP) will be prepared. The PRMMP will provide detailed recommended monitoring locations including locations mapped as high to very high sensitivity; a description of a worker training program; detailed procedures for monitoring, fossil recovery, laboratory analysis, and museum curation; and notification procedures in the event of a fossil discovery by paleontological monitor or other project personnel. A curation agreement with an accredited repository approved by OC Parks must be obtained. Any subsurface bones or potential fossils that are unearthed during construction should be evaluated by a Qualified Paleontologist.	Prior to construction				





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Mitigation Monitoring and Reporting Plan

Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
<b>WQ-3</b>	OC Parks	See <b>WQ-3 Stormwater Pollution Prevention Plan</b> below	Prior to construction				
<b>Hydrology and Water Quality</b>							
<b>WQ-1</b>	OC Parks	<p>The applicant shall submit for review and approval by the Manager, Building and Safety Permit Services, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. The applicant shall utilize the Orange County Drainage Area Management Plan (DAMP), Model WQMP, and Technical Guidance Manual for reference, and the County's WQMP template for submittal. This WQMP shall include the following:</p> <ul style="list-style-type: none"> <li>- Detailed site and project description</li> <li>- Potential stormwater pollutants</li> <li>- Post-development drainage characteristics</li> <li>- Low Impact Development (LID) BMP selection and analysis</li> <li>- Hydromodification Control BMP selection and analysis</li> <li>- Structural and Non-Structural source control BMPs</li> <li>- Site design and drainage plan (BMP Exhibit)</li> <li>- GIS coordinates for all LID and Treatment Control</li> </ul> <p><b>BMPs</b></p> <p>Operation and Maintenance (O&amp;M) Plan that (1) describes the long-term operation and maintenance requirements for BMPs identified in the BMP Exhibit; (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced BMPs; and (3) describes the mechanism for funding the long-term operation and maintenance of the referenced BMPs</p> <p>The BMP Exhibit from the approved WQMP shall be included as a sheet in all plan sets submitted for plan check and all BMPs shall be depicted on these plans.</p>	Prior to construction				
<b>WQ-2</b>	OC Parks	<p><b>Compliance with the NPDES Implementation Program</b></p> <p>Prior to the issuance of a certificate of use and occupancy, the applicant shall demonstrate compliance with the County's</p>	Prior to construction				



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Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<p>NPDES Implementation Program in a manner meeting the satisfaction of the Manager, OC Inspection, including:</p> <ul style="list-style-type: none"> <li>- Demonstrate that all structural Best Management Practices (BMPs) described in the BMP Exhibit from the project's approved WQMP have been implemented, constructed and installed in conformance with approved plans and specifications</li> <li>- Demonstrate that the applicant has complied with all non-structural BMPs described in the project's WQMP</li> <li>- Submit for review and approval an Operations and Maintenance (O&amp;M) Plan for all structural BMPs (the O&amp;M Plan shall become an attachment to the WQMP;</li> <li>- Demonstrate that copies of the project's approved WQMP (with attached O&amp;M Plan) are available for each of the initial occupants;</li> <li>- Agree to pay for a Special Investigation from the County of Orange for a date twelve (12) months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&amp;M Plan</li> <li>- Demonstrate that the applicant has RECORDED one of the following:</li> </ul> <ol style="list-style-type: none"> <li>1. The CC&amp;R's (that must include the approved WQMP and O&amp;M Plan) for the project's Homeowner's Association;</li> <li>2. A water quality implementation agreement that has the approved WQMP and O&amp;M Plan attached; or</li> <li>3. The final approved Water Quality Management Plan (WQMP) and Operations and Maintenance (O&amp;M) Plan.</li> </ol>					
<b>WQ-3</b>	OC Parks	<p><b>Stormwater Pollution Prevention Plan</b></p> <p>The applicant shall demonstrate compliance with California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number; or other proof of filing in a manner meeting the satisfaction of the Manager, Permit Intake. Projects subject to this requirement shall prepare</p>					



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Mitigation Monitoring and Reporting Plan

Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.					
<b>Noise</b>							
<b>NOI-1</b>	OC Parks	<b>Construction and Maintenance Noise Reduction</b> A. The project proponent shall produce evidence acceptable to the Manager, Building and Safety, that: 1. All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of a dwelling shall be equipped with properly operating and maintained mufflers. 2. All operations shall comply with Orange County Codified Ordinance Division 6 (Noise Control) including limiting construction activities between the hours of 8:00 a.m. and 7:00 p.m. on all days except Sunday. 3. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings. B. Notations in the above format, appropriately numbered and included with other notations on the front sheet of the project's permitted plans, will be considered as adequate evidence of compliance with this condition.	During Construction				
<b>Wildfires</b>							
<b>FIRE-1</b>	Orange County Fire Authority	<b>FIRE-1 Fire Prevention Plan</b> The Applicant shall prepare a Fire Prevention Plan that meets the Orange County Fire Authority (Authority) requirements. The plan shall contain, but not be limited to, the following provisions: 1. Comply with all applicable laws of the State of California and the Fire Prevention Plan. Ensure that a copy of this Fire Prevention Plan and any special permits are to be known and in possession of Project foreman/supervisor on work site daily.	Prior to construction				



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Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<p>2. All construction equipment shall be fitted with appropriate spark arrestors. Spark arrestors shall meet the standards set forth in the National Wildfire Coordinating Group publication for Multi-position Small Engines, #430-1, or General Purpose and Locomotive, #430-2. Unless determined appropriate by the Authority, spark arrestors are not required on equipment powered by exhaust-driven turbo charged engines or motor vehicles equipped with a maintained muffler. The Applicant shall provide documentation of spark arrestors to the Authority prior to bringing each piece of equipment on site.</p> <p>3. All construction vehicles and equipment shall carry at least one fully charged fire extinguisher. Fire extinguishers shall be of the type and size set forth in the California Public Resources Code Section 4431. Fire extinguishers shall be appropriately maintained throughout construction, and records of pressure checks shall be submitted to the Authority monthly. Additionally, the following requirements shall apply:</p> <p>4. Each truck, personnel vehicle, tractor, grader or piece of heavy equipment shall have one shovel, one axe (or Pulaski) and a fully charged fire extinguisher.</p> <p>5. Each gasoline powered tool (such as chainsaws, chippers, rock drills, etc.) shall have one shovel and one pressurized fire extinguisher. Shovels must be kept within 25 feet of tools when in use.</p> <p>6. All tools and equipment above shall be in good workable conditions, with employee's trained on their use.</p> <p>7. Shovels shall be "O" or larger and be not less than 46 inches in over length.</p> <p>8. Axes (or Pulaskis) shall have 2.5-pound or larger heads and be not less than 28 inches in overall length</p> <p>9. Welding or other hot work shall not occur during the Project without an appropriate hot work permit.</p> <p>10. A full-time fire watch with appropriately trained personnel and appropriate firefighting equipment shall be available and on site during all times when</p>					



**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Mitigation Monitoring and Reporting Plan

Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<p>construction work is taking place. The Applicant shall designate a qualified on-site fire supervisor during Project construction who shall be authorized to act on behalf of the Authority in fire prevention and suppression. The on-site supervisors shall be approved prior to start of Project construction by the Authority.</p> <p>Fire Watch personnel shall be responsible for patrolling the construction work area for the prevention and detection of fires, and to make sure all fire regulations and fire prevention plans are met, and to take/direct suppression action where necessary. The Fire Watch personnel shall not be permitted to perform other non-fire-related duties. Fire Watch personnel shall remain on duty for at least one hour after the close of work or sunset (whichever comes first). During Red Flag conditions or when deemed necessary by the Authority, Fire Watch personnel shall be required until sunset.</p> <p>11. The Applicant shall cooperate with the Authority to determine appropriate protocols and provisions for fire and emergency access to the area. The protocols shall include provisions and appropriate notifications if roadway blockages were to occur due to large loads during construction or operation.</p> <p>12. Cleared and maintained parking areas shall be designated. No parking shall be allowed outside of designated areas. Parking lots shall be covered with gravel.</p> <p>13. The Applicant shall coordinate with the Authority to determine if additional repeaters or communication equipment would be required for fire response.</p> <p>14. Refueling shall be performed within equipment service areas, parking areas, and gas and oil storage areas whenever possible.</p> <p>15. Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material down to mineral soil for the radius of at least</p>					



**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Mitigation Monitoring and Reporting Plan

Mitigation Measure	Lead Agency Department	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
		<p>ten feet. Small mobile or stationary internal combustion engines shall be cleared of flammable material for a slope distance of at least ten feet from such engine.</p> <p>16. The Applicant shall participate in the Red Flag Warning program with local fire agencies and the National Weather Service. The Applicant shall stop work during Red Flag conditions. If a Red Flag Warning were to occur during critical work activities, or work activities that cannot be stopped (such as equipment movement), the Authority shall be immediately notified. Communication protocols shall be outlined in the plan. The Authority shall approve resumption of construction activities.</p>					



IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Proposed Findings

## 5.0 PROPOSED FINDINGS

### 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 the mitigation measures described on an attached sheet have been added to the project. A **MITIGATED NEGATIVE DECLARATION** will be prepared. *Attached Mitigation Measures and Monitoring Program.*

☒

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 significant effect 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." 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**, nothing further is required.

☐

Signature: Joanna Chang

Date: 9/6/19







**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

List of Preparers

## 6.0 LIST OF PREPARERS

Lead Agency	Natalia Gaerlan, PLA	Orange County Parks
Project Manager	StephAnnie Roberts	Stantec Consulting Services Inc.
Graphics Design	Jared Varonin	Stantec Consulting Services Inc.
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	StephAnnie Roberts	Stantec Consulting Services Inc.
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Air Quality	Michael Weber	Stantec Consulting Services Inc.
Biological Resources	Jared Varonin	Stantec Consulting Services Inc.
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Greenhouse Gas Emissions	Michael Weber	Stantec Consulting Services Inc.
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	StephAnnie Roberts	Stantec Consulting Services Inc.
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Noise	Lindsay McDonough	Stantec Consulting Services Inc.
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Recreation	David Christie	Stantec Consulting Services Inc.
Transportation and Traffic	Patrick Meddaugh	Stantec Consulting Services Inc.
Tribal Cultural Resources	Colleen Hulbert	Stantec Consulting Services Inc.
Utilities and Service System	David Christie	Stantec Consulting Services Inc.
Wildfire	Patrick Meddaugh	Stantec Consulting Services Inc.
Mandatory Findings of Significance	StephAnnie Roberts	Stantec Consulting Services Inc.





**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

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**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

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# FIGURES

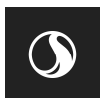
**Figure 1 Project Vicinity**

**Figure 2 Recreation Trail Opportunities Overview**

**Figure 3 Recreation Trail Opportunities East Orange I**

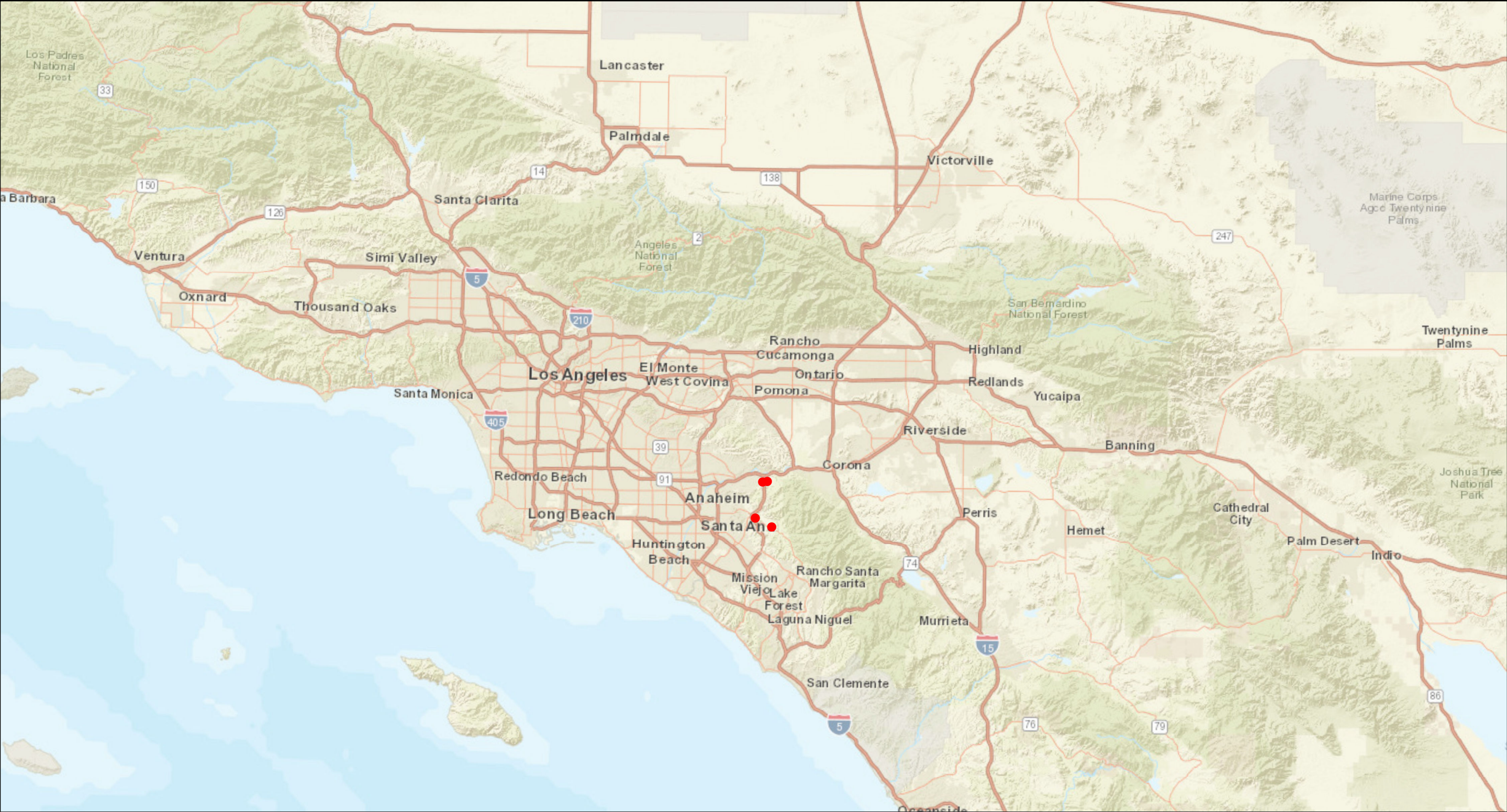
**Figure 4 Recreation Trail Opportunities East Orange II**

**Figure 5 Recreation Trail Opportunities Mountain Park**

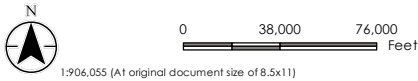








● Project Site Location



**Notes**  
1. NAD 1983 COR596 StatePlane California VI FIPS 0406 F1 US  
2. Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

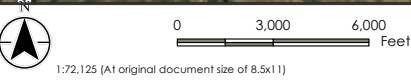
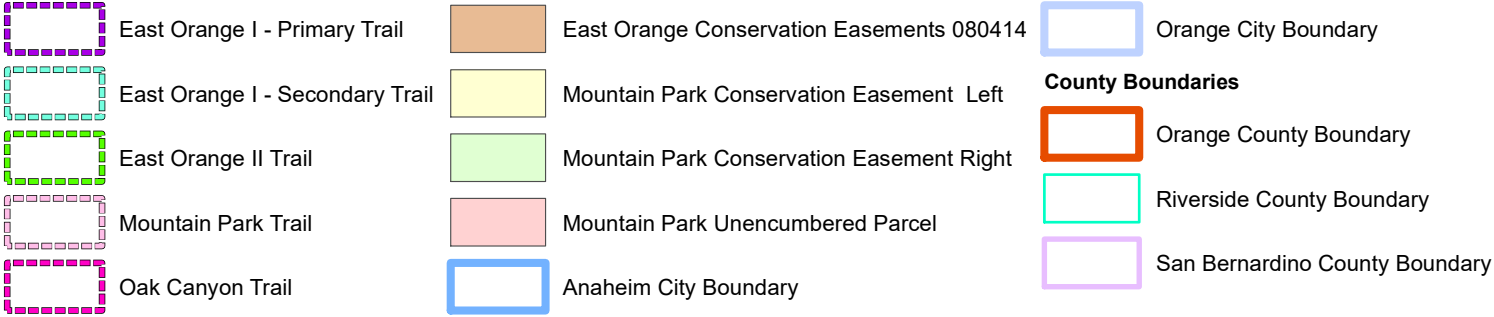
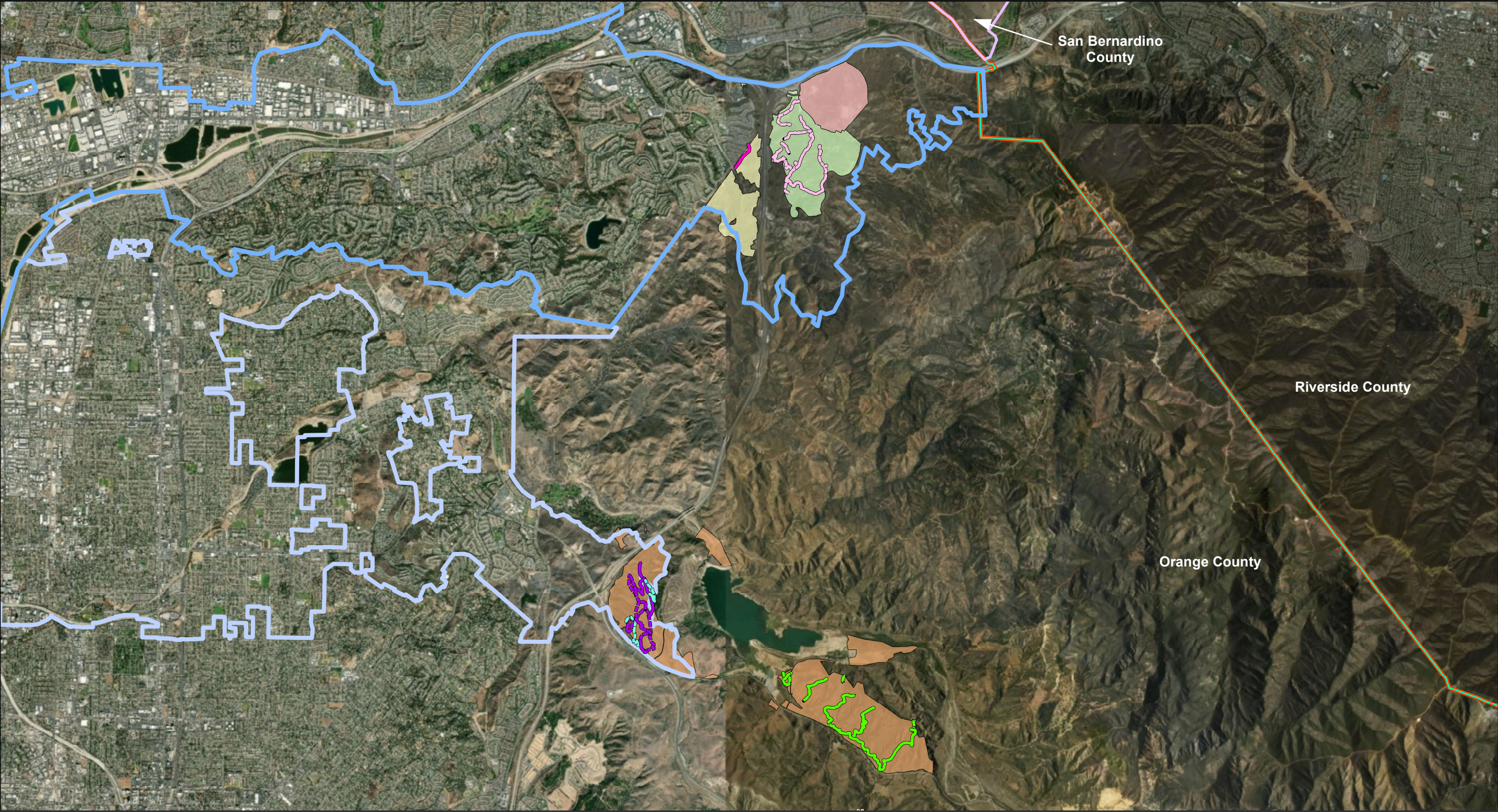


Project Location  
Santiago Canyon/Anaheim, CA  
Prepared by DL on 2019-03-26  
Technical Review by JV on 2019-03-26  
Independent Review by SR on 2019-03-27

Client/Project  
Orange County Parks  
Interim Recreation and Resource Management Plan  
Initial Study / Mitigated Negative Declaration

Figure No.  
**1**  
Title  
**Project Vicinity**





**Notes**  
1. NAD 1983 COR596 StatePlane California VI FIPS 0406 F1 US  
2. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
3. MUSYM - Refer to Section 2 of the Preliminary Jurisdictional Delineation Report for more information on MUSYM in the Survey Area.



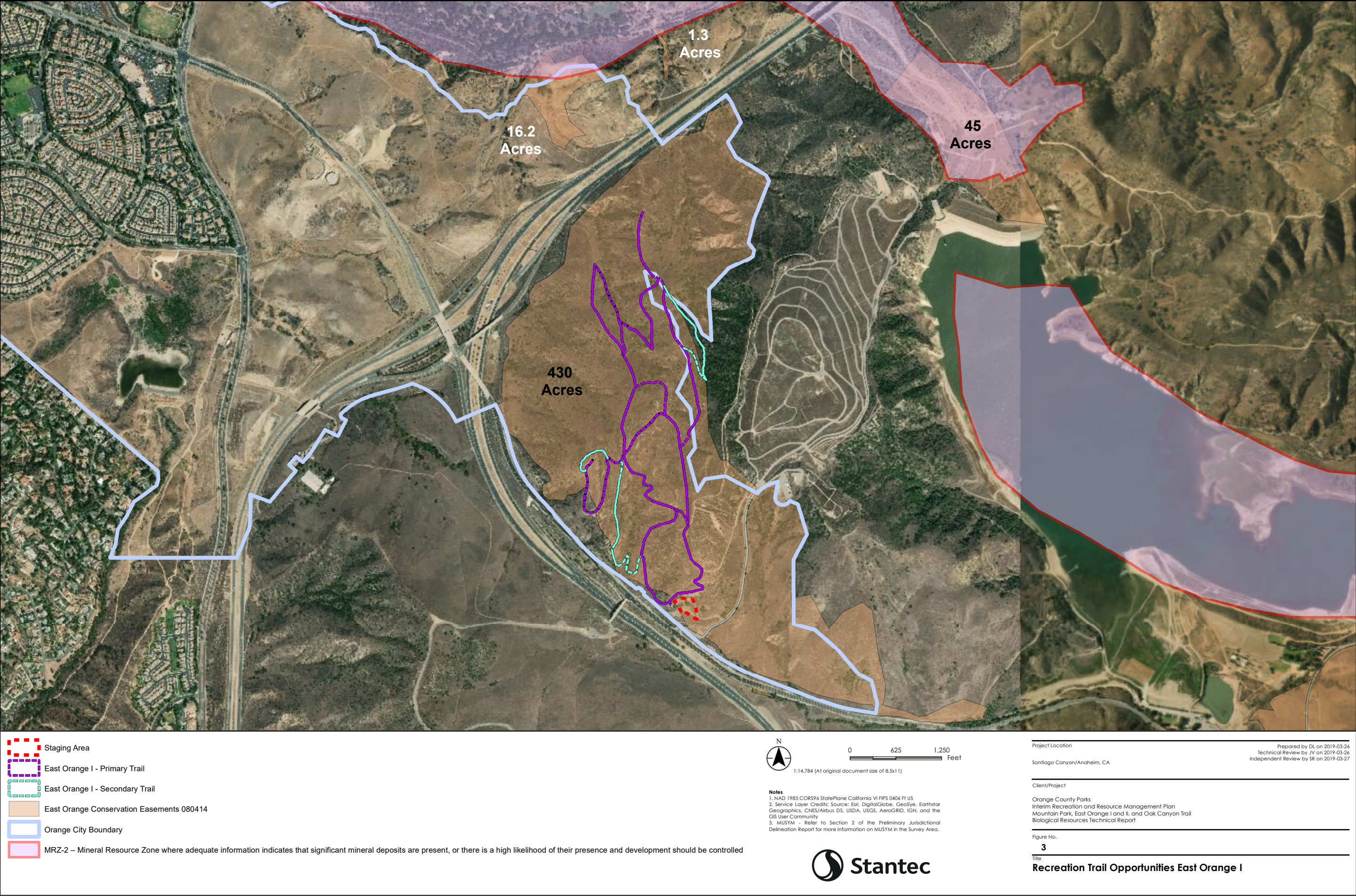
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Independent Review by SR on 2019-03-27

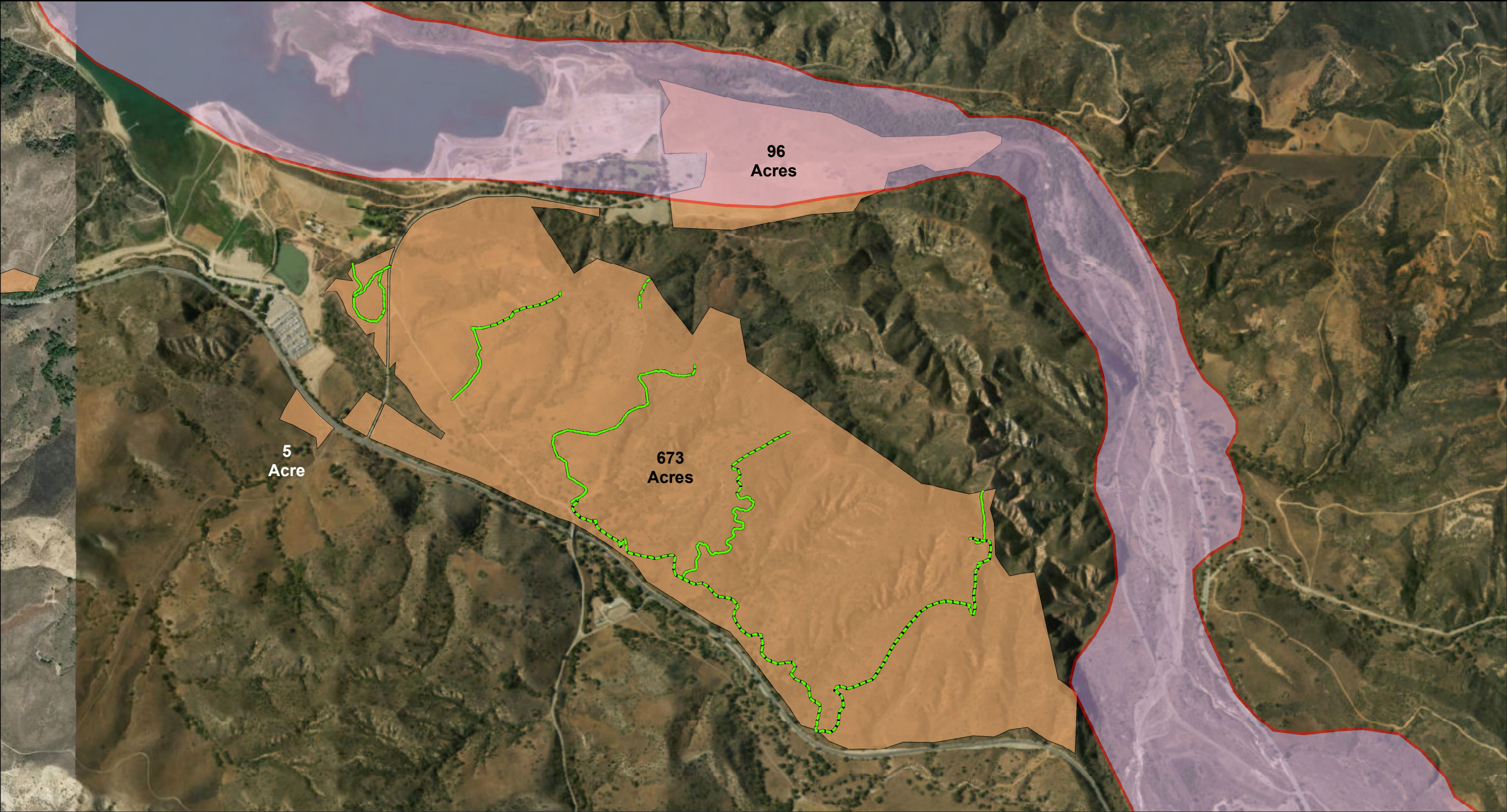
Client/Project  
Orange County Parks  
Interim Recreation and Resource Management Plan  
Mountain Park, East Orange I and II, and Oak Canyon Trail  
Biological Resources Technical Report




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Title  
**Recreation Trail Opportunities Overview**

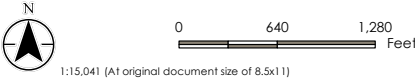








-  East Orange II Trail
-  East Orange Conservation Easements 080414
-  MRZ-2 – Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or there is a high likelihood of their presence and development should be controlled



**Notes**  
1. NAD 1983 COR596 StatePlane California VI FIPS 0406 F1 US  
2. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
3. MUSTM - Refer to Section 2 of the Preliminary Jurisdictional Delineation Report for more information on MUSTM in the Survey Area.



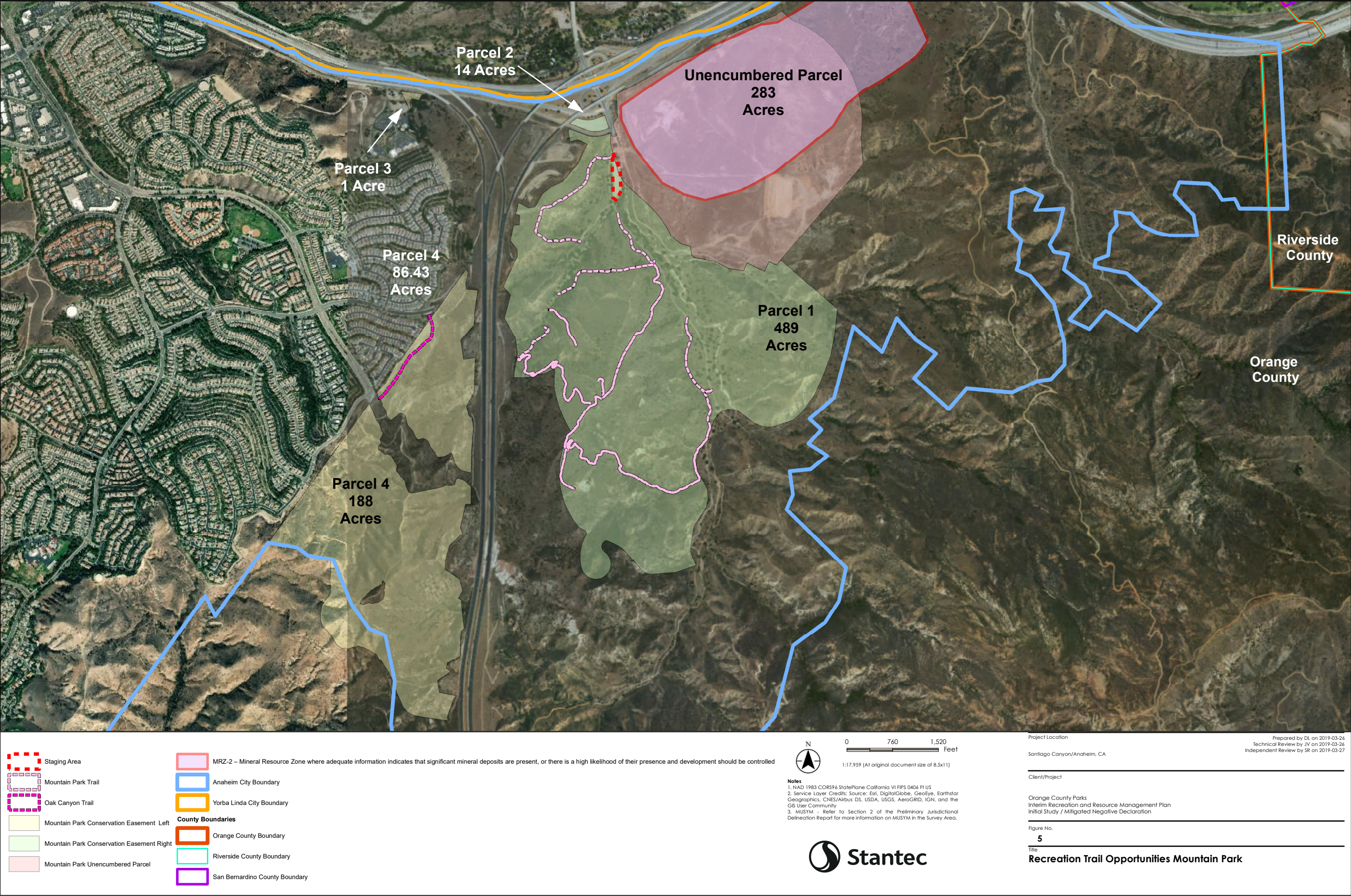
Project Location  
Santiago Canyon/Anaheim, CA

Prepared by DL on 2019-03-26  
Technical Review by JV on 2019-03-26  
Independent Review by SR on 2019-03-27

Client/Project  
Orange County Parks  
Interim Recreation and Resource Management Plan  
Mountain Park, East Orange I and II, and Oak Canyon Trail  
Biological Resources Technical Report

Figure No.  
**4**  
Title  
**Recreation Trail Opportunities East Orange II**





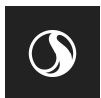




**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Appendix A Project Emissions Estimates

## **Appendix A PROJECT EMISSIONS ESTIMATES**



**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Appendix B Biological Resources Technical Report

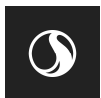
## **Appendix B BIOLOGICAL RESOURCES TECHNICAL REPORT**



**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Appendix C Jurisdictional DELINEATION Report

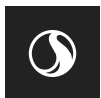
## **Appendix C JURISDICTIONAL DELINEATION REPORT**



**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Appendix D Cultural Resources TECHNICAL Report

## **Appendix D CULTURAL RESOURCES TECHNICAL REPORT**





**IRVINE RANCH OPEN SPACE 2014 DONATION INTERIM RECREATION AND RESOURCE MANAGEMENT  
PLAN PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

Appendix E Paleontological Resources TECHNICAL Report

## **Appendix E PALEONTOLOGICAL RESOURCES TECHNICAL REPORT**

