
Initial Study/Mitigated Negative Declaration
PP-22-0220

Talbert Regional Park Master Plan

APRIL 2026

Prepared for:

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
Park	Talbert Regional Park (and Project Site)
Restoration Plan	Talbert Regional Park Final Habitat Restoration Plan
MND	Mitigated Negative Declaration
CEQA	California Environmental Quality Act
proposed project	Talbert Regional Park Master Plan Project
ADA	Americans with Disabilities Act
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
AQMP	Air Quality Management Plan
CAAQS	California Ambient Air Quality Standards
NAAQS	National Ambient Air Quality Standards
GHG	greenhouse gas
SCAG	Southern California Association of Governments
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
CARB	California Air Resources Board
Caltrans	California Department of Transportation
VMT	vehicle miles traveled
O ₃	ozone
NO ₂	nitrogen dioxide
CO	carbon monoxide
VOC	volatile organic compound
PM ₁₀	coarse particulate matter
PM _{2.5}	fine particulate matter
PRC	Public Resources Code
NO _x	oxides of nitrogen
SO _x	sulfur oxides
CalEEMod	California Emissions Estimator Model
LST	localized significance threshold
LOS	level of service
TACs	Toxic air contaminants
DPM	diesel particulate matter
PDFs	project design features
CRPR	California Rare Plant Ranking
CDFW	California Department of Fish and Wildlife
USFWS	U.S. Fish and Wildlife Service
NCCP/HCP	Natural Communities Conservation Plan/Habitat Conservation Plan
Master Plan	Talbert Regional Park Master Plan

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1 Introduction

1. Project title:

Talbert Regional Park Master Plan

2. Project location:

Talbert Regional Park
1298 Victoria Street
Costa Mesa, California 92627

3. Lead Agency Contact and phone number:

Orange County Department of Public Works (OCPW)
601 North Ross Street
Santa Ana, California 92701
Cindy Salazar, Planning Division Manager
714-667-8870
Cindy.Salazar@ocpw.ocgov.com

4. Project sponsor's name and address:

Orange County Parks (OC Parks)
Sheila Cedervall ASLA, LEED AP
949.585.6442
Sheila.Cedervall@ocparks.com

601 North Ross Street
Santa Ana, California 92701

5. General plan designation:

Public/Institutional

6. Zoning:

Institutional & Recreational (I&R)

7. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

The 2025 Talbert Regional Park Master Plan document encapsulates the long-term vision for the Park with an emphasis on resiliency, safety, and accessibility. The Master Plan also functions as a Resource Management Plan, providing goals and strategies to guide decisions regarding future policy, land use, and on-going decisions. Design concepts for the Park have evolved through a collaborative process with the

regulatory agencies and members of the public residing in communities surrounding the Park. The proposed key improvement areas are the Nature Center, Balboa Boulevard Entrance and minor Infrastructure Improvements. Please refer to Chapter 3 for the Project Description.

8. Surrounding land uses and setting (Briefly describe the project’s surroundings):

The North Talbert parcel is bound to the north and east by the City of Costa Mesa’s Fairview Park, to the west by the Santa Ana River, and the south by Victoria Street. The Fairview Channel bisects the northernmost portion of the Park. South Talbert is bounded to the north by Victoria Street, to the east by Balboa Street, to the west by the Santa Ana River, and to the south by the Randall Preserve property. The City of Costa Mesa operates three adjacent facilities: Canyon Park, Vista Park, and Fairview Park. Canyon Park is east of South Talbert, adjacent to a residential area situated atop a mesa, an area historically used as a landfill site. Vista Park is adjacent to Victoria Street at the southern tip of North Talbert.

9. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

See Table 1-1.

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

On October 9, 2019, Dudek (on behalf of OC Parks) requested a Sacred Land File search from the NAHC (Appendix C). On October 23, 2019, the NAHC responded to the request indicating the result of the Sacred Land File search was positive and suggested OC Parks contact 17 tribes that may have interest in or knowledge of tribal cultural resources in the proposed project Area. These tribes or tribal representatives include the Agua Caliente Band of Cahuilla Indians, the Juaneño Band of Mission Indians, the Juaneño Band of Mission Indians Acjechemen Nation (two representatives), Juaneño Band of Mission Indians, the Gabrieleno Band of Mission Indians – Kizh Nation, the Gabrieleno/Tongva San Gabriel Band of Mission Indians, the La Jolla Band of Luiseno Indians, the Gabrielino Tongva Indians of California Tribal Council, the Pala Band of Mission Indians, the Pechanga Band of Luiseno Indians, the Rincon Band of Luiseno Indians (two representatives), the San Luis Rey Band of Mission Indians, the Soboba Band of Luiseno Indians, and the Pauma Band of Luiseno Indians. OC Parks led the AB 52 efforts and led consultation with these tribes.

On December 7, 2022, the County sent 4 letters to tribes who have requested to be notified of projects initiated by the County. The contacts did not respond, except for the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation), who requested further consultation. A consultation teleconference call occurred between the Kizh Nation and the County on February 21, 2023. Consultation resulted in the inclusion of standard condition measure TRC-1 for the Project. See Section 4.18, Tribal Cultural Resources, below.

2 Environmental Determination

Environmental Factors Potentially Affected

This document incorporates the Environmental Checklist Form from Appendix G of the CEQA Guidelines. The environmental factors listed below are evaluated in this document. Environmental factors that are checked contain at least one impact has been determined to be a “Potentially Significant Impact.” Environmental factors unchecked indicate that impacts were determined to have resulted in no impacts, less than significant impacts, or less than significant impacts with mitigation measures, regulatory requirements, or County Standard Conditions of Approval incorporated into the Project.

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

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

DocuSigned by:
Virginia Gomez
ED76DCA58AD94B6...

Signature

5/4/2026 | 11:16 AM PDT

Date

3 Project Description

3.1 Project Overview

Talbert Regional Park (Park) is an open space area owned and operated by the County of Orange (County) as a part of the OC Parks' 60,000-acre system. The Park is located in the western portion of the City of Costa Mesa along the Santa Ana River. The 182-acre property consists of two areas divided horizontally by Victoria Street, and serves the cities of Huntington Beach, Costa Mesa, and Newport Beach. The 92.5 acres north of Victoria Street is known as North Talbert, while the 88.5 acres south of Victoria Street is known as South Talbert.

OC Parks completed the Talbert Regional Park Final Habitat Restoration Plan (Restoration Plan) in December 2015, which calls for natural preservation of native habitat through non-native plant removal, habitat restoration, and public use within identified interest areas (Victoria Pond and Sheephills Bicycle [BMX] area). Key components of the plan include removal of non-native plant species to encourage restoration of riparian woodland and mulefat scrub areas within South Talbert, and the southeast border area of North Talbert referred to as Placentia Drain. Three alternatives (minimal, medium, and maximum touch) for on-going improvements were presented. The proposed improvements outlined in the 2025 Master Plan primarily follow the medium touch plan, with the inclusion of additional elements from the other alternatives. The proposed project encompasses implementation of the Master Plan document and the key improvements presented therein for the existing Park.

OC Parks held public workshops and completed updates to the Master Plan in Winter, Spring, and Summer 2025. The 2025 Talbert Regional Park Master Plan document encapsulates the long-term vision for the Park with an emphasis on resiliency, safety, and accessibility. The Master Plan also functions as a Resource Management Plan, providing goals and strategies to guide decisions regarding future policy, land use, and on-going decisions. Public and stakeholder input guided the planning process, and alternative solutions were presented for public review. During preparation of the Master Plan, technical studies and biological surveys were completed and coordinated with OC Parks staff. Orange County Public Works (OCPW), on behalf of the County of Orange, is the lead agency pursuant to the California Environmental Quality Act (CEQA) responsible for the review and approval of the Talbert Regional Park Master Plan Project's Initial Study/Mitigated Negative Declaration (IS/MND).

3.2 Project Location

The Park is located in the western portion of the City of Costa Mesa along the eastern bank of the Santa Ana River, in western Orange County, California (Figure 1, Project Location). Regional access is provided via State Route (SR) 55 and Interstate (I) 405. Nearby cities include Huntington Beach, Fountain Valley, Santa Ana, Irvine, and Newport Beach, as well as a portion of unincorporated Orange County. The 182-acre property consists of two areas (North Talbert and South Talbert) divided horizontally by Victoria Street, and the Park serves the cities of Huntington Beach, Costa Mesa, and Newport Beach.

The North Talbert parcel (North Talbert; 92.5 acres) is bound to the north and east by the City of Costa Mesa's Fairview Park, to the west by the Santa Ana River, and the south by Victoria Street. The Fairview Channel bisects the northernmost portion of the Park. The South Talbert parcel (South Talbert; 88.5 acres) is bound to the north by Victoria Street, to the east by Balboa Street, to the west by the Santa Ana River, and to the south by the Randall Preserve. The City of Costa Mesa operates three adjacent facilities: Canyon Park, Vista Park, and Fairview Park. Canyon Park is east of South Talbert, adjacent to a residential area situated atop a mesa. Vista Park is adjacent to Victoria Street at the southern tip of North Talbert.

The entire Park is located within the Central and Coastal Subregion of the Natural Community Conservation Plan/Habitat Conservation Plan. South Talbert lies within the California State Coastal Zone and improvements are subject to review by the California Coastal Commission (North Talbert is outside of the Coastal Zone).

3.3 Environmental Setting

The Park is designated as Public/Institutional in the City of Costa Mesa General Plan Land Use map and is zoned as Institutional & Recreational (I&R) (City of Costa Mesa 2016a; 2016b). The County's General Plan (County GP) Land Use Element Map does not designate use(s) for the Park as it is located outside of the County's delineated Sphere of Influence boundary (County of Orange 2015). Despite the lack of County land use designation, the Park is identified as an Existing Regional Park in the County's Master Plan of Regional Recreational Facilities (County of Orange 2012).

The Park contains salt marsh and wetland habitat impacted by nonnative and invasive plant species. Offering both passive and active recreation, the Park is used predominantly by hikers and joggers, nature watchers, casual bicyclists, and motocross bicyclists. North Talbert features a large grassy area, picnic areas, an equestrian corral and watering station, and restroom facilities. The trail system winding throughout North and South Talbert allows for observation of natural resources and linkage to other parks upstream and downstream along the Santa Ana River. Group use within the habitat areas is permitted, consisting of guided nature walks; individual use is facilitated by interpretive signage. The primary feature at South Talbert is Victoria Pond, a scenic natural resource visible from Victoria Avenue. The water body was expanded to the south in 1991 as a mitigation measure during construction of the Greenville-Banning Channel. A hydrographic survey conducted in 2014 found the maximum pond depth to be approximately 7.4 feet.

Currently, no on-site parking is available for Park visitors. Parking for two City of Costa Mesa-owned parks, Fairview Park and Vista Park, is available on foot near North Talbert along Placentia Avenue. Limited street parking is available for South Talbert along Balboa Boulevard at the western terminus of West 19th Street. Both North and South Talbert offer extensive public trail networks. Trails can be accessed by traversing through Fairview Park or Vista Park, and from Arbor Street by traversing through Canyon Park to South Talbert. Trails can also be accessed from Victoria Street or via the Santa Ana River Trail Footbridge connecting to the Banning Channel Bikeway. North Talbert trails consist of a mixture of decomposed granite near the grassy public use area, transitioning to dirt to the south, and asphalt to the north. South Talbert trails consist predominantly of natural earthen loamy soil that becomes slick when wet and is prone to collect water during the rainy season.

The only connection between North and South Talbert is provided by the Banning Channel Bikeway, which passes under Victoria Street. A paved mixed-use trail atop the Santa Ana River flood control levee, the Bikeway is frequently used by pedestrians, joggers, and bicyclists. Other off-site pedestrian connections include a stairway within Fairview Park adjacent to the northeastern boundary in North Talbert. Canyon Park also includes a trail connection to South Talbert on the far side of Balboa Street.

While existing topography within the Park is generally flat, the inclusion of sloped terrain in North Talbert provides for a moderate range of onsite terrain. Specifically, within the Park, above sea level elevations range from approximately 62 feet within North Talbert to 8 feet within South Talbert. Bluffs rise approximately 80 feet above the Park along its northern and eastern boundaries. Notable topographic features within North Talbert include Placentia Drain, a linear channel at the base of the eastern bluffs providing drainage for Fairview Park as well as Talbert. South Talbert includes Victoria Pond, and an internal BMX skill area referred to as "Sheephills". A portion of the lower Greenville-Banning Channel crosses within the site boundary, and upland mesas are included along the southeastern boundary.

Figure 2, Existing Conditions: Talbert Regional Park, includes photographs of several locations within the Park's boundary and highlights existing trails and vegetation, "Sheephills", and Victoria Pond.

3.4 Project Characteristics

3.4.1 Proposed Project

The proposed project is a Master Plan document intended to guide the future improvement and maintenance of the Park. The proposed project includes access improvements, infrastructure improvements, and habitat restoration as shown in Figure 3: Proposed Improvements. Described below are the proposed key improvements envisioned as part of the Talbert Regional Park Master Plan.

Proposed Key Improvements

Design concepts for the Park have evolved through a collaborative process with regulatory agencies and members of the public residing in communities surrounding the Park. The proposed improvements are designed to be compatible with the surrounding context and provide a higher degree of function as well as recreational opportunities. The proposed key improvements are:

- Nature Center
- Balboa Boulevard Entrance Improvements
- Infrastructure Improvements

Details regarding each of the proposed improvements are provided below.

Nature Center

A new Nature Center is proposed within the northeastern corner of the North Talbert parcel at the location of the existing restrooms. The existing restrooms are provided in a small, circular building (approximately 250 square feet in size) located on a concrete slab/foundation and constructed of concrete masonry blocks. The Nature Center building would be approximately 500 square feet in size and would be constructed of concrete with a stucco finish and metal roof with a low-reflectivity finish. The Nature Center may include a small classroom area, restrooms, and interpretive signage to serve as an educational center for park visitors.

Balboa Boulevard Entrance Improvements

Improvement of the existing Balboa Boulevard entrance would accommodate emergency and maintenance vehicles, bikes, and pedestrians. As proposed, the existing railroad-tie stairs providing park access would be retained and repaired, and a new 20-foot-wide ADA-accessible ramp would be located to the south of the railroad-tie stairs to accommodate emergency vehicle access. See Figure 4: Balboa Boulevard Entrance Plan. As proposed, the ramp would be constructed of compacted natural soil with decomposed granite and would be firm, stable, and slip-resistant (surface to be installed will be specified during the preparation of construction-level documents for the ramp and Balboa Boulevard entrance improvements). A gate and a rolled curb opening area are proposed at the ramp entrance off Balboa Boulevard. Approximately 42,000 cubic yards of fill would be required for the proposed entry ramp, offsite Banning Channel Bikeway connection, and improvement of existing and proposed trails in South Talbert. Partial or full lane closures on Balboa Boulevard are not expected to be needed during construction of the proposed entrance improvements.

Signage:

A monument pedestrian arrival sign would be installed off Balboa Boulevard near the proposed access ramp, and a wayfinding signage would also be installed within the park (near the existing railroad tie stairs and near the lower elevation end of proposed access ramp) to direct visitors to the Park and to enhance safety.

Proposed Infrastructure Improvements

Enhancements of the interior circulation system is proposed to provide improved multi-modal trails to enhance user experience. Proposed improvements to existing access, trails, maintenance yard, and wayfinding systems are described below.

Trail Improvements

The bike and pedestrian trail system constitutes the primary visitor activity within the Park. The South Talbert pedestrian circulation route is to be improved as a raised, 15-foot-wide trail system. This improvement would entail raising the existing trail system up to 18 inches from its current elevation and would correct the existing drainage and ponding problem by reducing the occurrence of seasonal wet areas. This portion of the trail improvements are approximately 8,350 feet in length (see Figure 5, Conceptual Trail Segments). Additionally, a new 4-foot-wide, 200-foot long, single-track trail (not raised) in North Talbert and a new, 15-foot wide, 2,020-foot-long trail (raised) in South Talbert are proposed to enhance connections within the existing network by providing direct access to the existing Victoria Pond and the Banning Channel Bikeway. A new access ramp connecting the new, east-west trail in South Talbert to the Banning Channel Bikeway would also be constructed within the adjacent property owned by OC Flood Control. This enhanced system would also accommodate requirements for both ADA and emergency access.

Please refer to Figure 3 for depiction of the existing and proposed trail system.

Maintenance Yard

Proposed improvements to the existing maintenance yard located in North Talbert consist of extending electrical service, as well as installing durable security fencing, a security camera, and lighting. The existing maintenance yard area consists of two mostly fenced areas (and associated storage trailers (shipping containers)) totaling approximately 4,750 square feet and surrounding disturbed and unvegetated lands. Electrical service would be extended from an existing buried line serving the existing restrooms located in the northeastern corner of the North Talbert parcel. Trenching for electrical service between the restrooms building and the maintenance yard would occur within existing roads/areas of linear disturbance. During operations, lighting installed at the maintenance yard would only be turned on when needed by OC Parks staff or other authorized County personnel.

Wayfinding

Wayfinding signage would be installed throughout the Park to announce arrival, strengthen branding identity as a part of the OC Parks system, and provide clear directional navigation for visitors. Proposed signage types include Arrival Signs, Directional Signs, Interpretive Signs, and Trail Markers. See Figure 6, Conceptual Wayfinding Plan, for conceptual location and type of wayfinding signage to be installed. Wayfinding signage would be installed via post/pole footings into small concrete foundations.

Habitat Restoration

The Park functions as a protected nature area within the urban fabric and is home to wildlife species that are dependent on the health of the larger ecosystem. The Master Plan calls for continuation of existing, permitted restoration practices including the removal of non-native vegetation throughout South Talbert, and at the Placentia Drain within North Talbert. Planting of native coastal sage and riparian tree species is planned within South Talbert to expand the existing mitigation/restoration areas. The Restoration Plan includes non-native plant removal and vegetation thinning both of which are described in more detail below.

Non-Native Plant Removal

Throughout the Park, removal of non-native vegetation is to be conducted on an on-going basis. Specifically, exotic tree species including Brazilian Pepper and Myoporum are to be removed in the area directly south of Victoria Pond. These trees are to be replaced by native vegetation, and the removal would create open areas where expansion of native habitat would be promoted.

Vegetative Thinning

Thinning of dense shrubs in selected areas is proposed to discourage reinstatement of the unauthorized encampments that have existed within the Park.

Project Design Features:

Several applicant-proposed project design features (PDFs) will be employed during implementation of the proposed project to avoid and minimize potential direct and indirect effects of construction on the study area. These PDFs include regulatory requirements and elements incorporated into the Master Plan development procedure to ensure compatibility with natural resource conservation goals.

- **PDF BIO-1.** Sediment and erosion control measures would be developed and implemented in accordance with RWQCB Construction General Permit requirements to reduce the potential for the project to result in increased siltation of, or release of pollutants into creeks and their tributaries. Best management practice (BMP) categories employed would include erosion control, sediment control, and non-stormwater good housekeeping.
- **PDF BIO-2.** The footprint of disturbance would be limited to the maximum extent feasible, such as limiting access to via pre-existing access routes to the greatest extent possible. Parking, staging, storage, excavation, and disposal site locations would be confined to the smallest areas possible and be positioned in previously disturbed areas to the greatest extent practical.
- **PDF BIO-3.** To reduce fugitive dust resulting from project construction and to minimize adverse air quality impacts, the project would employ dust control measures in accordance with the Air Quality Management District's Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction
- **PDF BIO-4.** To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 2 feet deep would be covered with tarp, plywood, or similar materials at the close of each working day to prevent animals from being trapped. Ramps may be constructed of earth filled or wooden planks within deep-walled trenches to allow animals to escape. Before such holes or trenches are backfilled, they would be thoroughly inspected for trapped animals. If trapped animals are observed, escape ramps or structures would be installed immediately to allow escape. If the trapped animal is injured and cannot use escape ramps or structures, a qualified biologist would be contacted to identify the appropriate next steps.

- **PDF BIO-5.** All construction pipes, culverts, and similar structures that are stored at the construction site for one or more overnight periods would be thoroughly inspected for burrowing owls and nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved. An option is to cap the ends of any stored pipes to prevent any animals from entering. If an animal is discovered inside a pipe, that section of pipe would not be moved until the project biologist or designated representative has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated out of harm's way by an approved biologist.
- **PDF BIO-6.** The project will include a Habitat Restoration Plan which will guide the restoration activities for the project and will detail the proposed methods of restoration, including application type and planting palette. Additionally, the plan will include performance standards to assess the success of the project compared to baseline conditions and inform adaptive management. The Habitat Restoration Plan will be approved by the resource agencies to ensure compliance with allowed uses within the Central-Coastal Subregion NCCP/HCP Reserve and maintenance/improvement of habitat function for covered species.
- **PDF BIO-7.** No invasive non-native plant species shall be planted, seeded, or otherwise introduced as part of the project. Plant material shall be native species appropriate to the site. A qualified biologist shall review landscape plans before approval.
- **PDF BIO-8.** Equipment would be cleaned prior to transport to the Park to prevent potential non-native plant species and other foreign matter, such as sediment and debris, from entering the site.

3.4.2 Proposed Construction

Construction of the proposed improvements would include site preparation (including installation of temporary fencing), vegetation removal, grading, trenching for extension of utilities, and construction of the Nature Center. Construction is anticipated to begin September 2027 and end in March 2028, for an approximated construction duration of up to 7 months. The total number of construction workers within the Park would vary by phase; however, excluding haul truck activity, the anticipated maximum number of workers on a daily basis is approximately 15. While active areas of construction would be temporarily closed for public use, the remainder of the Park would remain open construction.

Construction phasing is anticipated as follows:

- Site preparation (overall site; 15 days)
- Grading (45 days; includes grading for new trails and connection to Banning Channel Bikeway)
- Trenching (30 days)
- Construction (60 days): Balboa Boulevard Entrance Plan
- Construction (90 days); Nature Center

Site clearing and rough grading would occur during the site preparation phase. Grading would require 42,000 cubic yards of fill, all of which would be imported. The maximum depth of disturbance for utility trenching would be approximately 18-24 inches. A summary of the anticipated construction equipment, quantity of equipment, hours of operation of the equipment, and worker, vendor, and haul trips per phase is included in Table 2-1.

Table 3-1. Anticipated Construction Scenario

Construction Phase	Worker Round-Trips per Day	Vendor Truck Round-Trips per Day	Total Haul Truck Trips	Equipment	Quantity	Hours/Day
Site preparation (overall site) (15 days)	16	4	0	Graders	1	8
				Tractors/loaders/backhoes	1	7
				Scrapers	1	8
Grading (45 days)	20	4	25	Rubber-tired dozers	1	8
				Tractors/loaders/backhoes	2	7
				Graders	1	8
Trenching (maintenance yard electricity connection; 30 days)	16	4	0	Plate compactors	1	8
				Tractors/loaders/backhoes	1	8
				Trenchers	1	8
Construction (Nature Center; 90 days)	20	10	0	Rubber-tired dozers	1	8
				Tractors/loaders/backhoes	2	7
				Graders	1	8
Construction (Balboa Boulevard Access Improvements) (60 days)	20	10	0	Rubber-tired dozers	1	8
				Tractors/loaders/backhoes	2	7
				Graders	1	8

Note: Water trucks were not modeled as equipment in the construction models; instead, they were modeled as vendor trips in the site preparation, grading, and trenching phases.

3.4.3 Proposed Operation

The Park would continue to operate from 7:00 a.m. to sunset, Sunday through Saturday. A new, locked gate is proposed at the Balboa Boulevard Entrance Ramp; however, perimeter fencing is not proposed around the Park. As such, and similar to existing conditions, access to the Park will remain open. The existing maintenance yard is to be secured through installation of new and durable fencing.

Similar to the existing condition, access would be available at South Talbert through two access points located on Balboa Boulevard and Victoria Street. The proposed Balboa Boulevard Entrance Ramp would essentially replace the existing gated access point located off Balboa Boulevard and approximately 220 feet south of Discovery Street. See Figure 4. There are three existing access points along the Banning Channel Bikeway, and the Master Plan proposes an additional connection to the Banning Channel Bikeway at the western end of a proposed east-west trail (See Figure 4). Access to North Talbert would be available through Fairview Park, Vista Park, and Victoria Street. There are several access points along the Banning Channel Bikeway including one access point from the Santa Ana River Trail Footbridge.

Emergency access would be available in South Talbert from Balboa Boulevard via a proposed entrance ramp. Helispots are currently located in two areas in South Talbert and would be maintained as part of the proposed project.

The Park would continue to be staffed with one employee during the entirety of the Park’s hours of operation, who would monitor visitor activities, conduct repairs, and collect trash. Maintenance of the Park would involve occasional trail maintenance and repairs of facilities. Trail maintenance would involve trimming back vegetation, and spot re-grading. Consistent with existing practices, trail maintenance would occur throughout the year, by the existing on-site Park staff member with the use of handheld tools and a stake bed truck.

The following maintenance activities are currently being implemented throughout the Park and would continue to be implemented as part of the project:

- **Routine Trail Maintenance:** Allowing trails to dry properly after a significant storm event is necessary to ensure trails stay in good condition. Trails used by hikers and bikers should be temporarily closed and monitored until conditions such as mud and ponding are reduced. General trail use should be monitored periodically to identify overuse and potential impacts to sensitive species or habitat.
- **Cyclical Trail Maintenance:** Trail drainage maintenance and brushing is to be performed on a recurring basis; regularly scheduled tasks are to be scheduled through OC Parks Computerized Maintenance Management System and assigned to Park staff. Trail deficiencies are identified through scheduled inspections, then work orders are routed to in-house or contracted resources.
 - Trails are trimmed of encroaching vegetation on an as needed basis. All trails are cleared, and trail structures such as bridges, culverts, and causeways are inspected as needed.
 - Construction, re-construction, re-engineering, and restoration activities are to be performed on a periodic basis as necessary to address road and trail infrastructure deterioration due to age or need to meet current standards.
- **Incident-Related/One Time Repair:** Construction, re-construction, re-engineering, re-design, demolition, and restoration activities may be performed on a project basis to address road and trail infrastructure damage caused by poor design, natural or man-made events such as a major storm, wildfire, dam water release, or vandalism.

3.5 List of Discretionary Actions

Table 3-2 provides a summary of public agency approvals and recommendations that are associated with the project.

Table 3-2. Public Agency Approvals

Entity	Action
U.S. Fish and Wildlife Service	Section 7 Informal/Formal Consultation
U.S. Army Corps of Engineers	Section 404 Nationwide Permit
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement
Santa Ana Regional Water Quality Control Board	Section 401 Water Quality Certification National Pollutant Discharge Elimination System Permit
South Coast Air Quality Management District	Permit to Construct
County of Orange Board of Supervisors	Adoption of Mitigated Negative Declaration (MND) Approval of project

4 Environmental Evaluation

Evaluation of Environmental Impacts

The Lead Agency shall conduct an Initial Study to determine if the proposed project may have a significant effect on the environment. All phases of project planning, implementation, and operation must be considered in the Initial Study of the project. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

4.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
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 type="checkbox"/>	<input checked="" 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 and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-than-Significant Impact. Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. Certain urban settings or features, such as a striking or renowned skyline, may also represent a scenic vista. Scenic vistas generally refer to views that are accessible from public vantage points, such as public roadways and parks. The City of Costa Mesa’s General Plan Conservation Element does not designate scenic vistas or identify specific scenic resources within the City. While the Park is owned and operated by the County of Orange, the County GP Land Use Element Map does not designate use(s) for the Park as it is located outside of the County’s delineated Sphere of Influence boundary (County of Orange 2015).

The proposed project is a Master Plan document that includes access improvements, infrastructure improvements, and habitat restoration as shown in Figure 3: Proposed project construction would result in temporary visual changes to affected portions of the Park, including the presence of filled areas associated with proposed access ramps and elevated trails, demolition of the existing restrooms and construction of the nature center, materials staging, and construction equipment. Upon completion of construction, these temporary visual changes would cease.

Once operational, the visual quality of the Park would resume similar to existing conditions, with minor improvements such as the proposed Nature Center, proposed Balboa Boulevard Entrance Plan, and new and improved trails. The Nature Center would be approximately twice the size of the existing bathrooms, with a stucco finish and metal roof, and would serve as an update and replacement to the existing bathrooms made of concrete masonry blocks. The proposed Balboa Boulevard Entrance Plan includes the addition of a 21-foot-wide ramp, gate, rolled curb, and wayfinding to enhance safety and guide visitors. The proposed infrastructure improvements include enhancements to the Park's interior circulation system with raised multi-modal trails to improve drainage and connectivity, upgraded maintenance yard infrastructure, and comprehensive wayfinding signage to improve user experience and accessibility. Habitat restoration efforts, similar to existing conditions, would continue to focus on removing non-native vegetation and thinning dense shrubs to support native ecosystems and improve public safety. The Nature Center, Balboa Boulevard Entrance Plan, and infrastructure improvements are designed to enhance existing infrastructure within the Park's developed areas without obstructing or substantially altering natural viewsheds. As such, impacts would be **less than significant**, and no project specific mitigation is required.

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

No Impact. There are no designated state scenic highways in the vicinity of the Park. The nearest eligible scenic highway is the SR 1 segment from I-5 near San Juan Capistrano to SR 19 near Long Beach, which traverses the coastline approximately 1 mile to the south of the Park at its closest point (Caltrans 2025). Due to the presence of intervening development and vegetation, the Park is not visible from SR-1 and as such, equipment and staging activities associated with construction of the proposed project would not be within the viewshed of motorists on SR-1. Similarly, once construction is completed, proposed project components within the Park boundaries would not be visible to SR-1 motorists located along the coast. **No impact** would occur, and no project specific mitigation is required.

c) *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less-than-Significant Impact. Per PRC Section 21071, an "urbanized area" is defined as "(a) An incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons. [or] (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." The Park is located in the incorporated City of Costa Mesa, that had an estimated January 1, 2025, population of 110,321 persons (California Department of Finance 2025). By definition, the proposed project is located in an urbanized area. Therefore, the project's potential impacts to existing visual character or quality are assessed through consideration of potential conflicts with zoning or other regulations governing scenic quality.

Table 4.1-1, Consistency Analysis with Applicable Scenic Quality Regulations, identifies applicable scenic quality regulations from the City’s Zoning Ordinance and General Plan and presents an analysis of consistency with regard to the Project/Master Plan.

Table 4.1-1 Consistency Analysis with Applicable Scenic Quality Regulations

Policy/Regulation	Consistency Analysis
City of Costa Mesa Zoning Ordinance	
Talbert Regional Park is zoned for Institutional and Recreation Use	Consistent. The proposed project would include the implementation of Park improvements (e.g., new and elevated trails, construction of a nature center, new emergency vehicle access ramp off Balboa Boulevard and connecting access ramp to the nearby Banning Channel Bikeway) and habitat restoration, which would not change the overall use of Talbert Regional Park, and would continue to provide recreational opportunities.
City of Costa Mesa General Plan	
Land Use Element	
Policy LU-2.7 Permit the construction of buildings over two stories or 30 feet only when it can be shown that the construction of such structures will not adversely impact surrounding developments and deprive existing land uses of adequate light, air, privacy, and solar access.	Consistent. The proposed Nature Center would be a single-story structure that is approximately 500 square feet in size, replacing an existing restroom building. The building’s low-profile and location within an existing disturbed area of Talbert Regional Park that is situated approximately 0.25 miles from the nearest residential structure/development ensures that it would not adversely impact surrounding developments or deprive adjacent uses of light, air, privacy, or solar access.
Policy LU-2.8 Limit building height to four stories above grade south of the I-405 Freeway, except for special purpose housing such as elderly, affordable, or student housing, unless otherwise approved by a General Plan amendment. (A four-story/five-level parking structure with roof deck parking on the fifth level is considered a four-story structure.)	Consistent. The Park is located south of the I-405 Freeway. The proposed Nature Center would be below the four-story height limit and designed to be compatible with the surrounding park environment.
Goal LU-3: Development that Maintains Neighborhood Integrity and Character	Consistent. See response to Policy LU-2.7, above. In addition, the proposed project would include the implementation of Park improvements, none of which would potentially impact or degrade existing integrity or character of neighborhoods in the surrounding area.
Policy LU-3.8 Ensure that new development reflects existing design standards, qualities, and features that are in context with nearby development and surrounding residential neighborhoods.	Consistent. The proposed improvements reflect the existing natural and recreational character of Talbert Regional Park and are compatible with the existing park context, features, and nearby residential areas.
Policy LU-3.10 Minimize effects of new development on the privacy and character of surrounding neighborhoods.	Consistent. The proposed improvements are confined to existing park lands and do not introduce new uses or structures that would affect the privacy or character of surrounding neighborhoods.

Table 4.1-1 Consistency Analysis with Applicable Scenic Quality Regulations

Policy/Regulation	Consistency Analysis
<p>Policy LU-3.13 Prohibit construction of buildings which would present a hazard to air navigation, as determined by the Federal Aviation Administration (FAA).</p>	<p>Consistent. The proposed Nature Center building would be located on the site of the existing park restroom building (the restrooms would be demolished to accommodate the new Nature Center which would include restrooms). The new structure would feature a metallic roof with a low reflectivity finish to minimize potential for glare. Based on the location of the structure, the small footprint of the 500 square foot building and the use of a low reflectivity finish, the structure would not present a hazard to air navigation.</p>
<p>Goal LU-4: New Development that Is Sensitive to Costa Mesa’s Environmental Resources</p>	<p>Consistent. The proposed project would include the implementation of Park improvements (e.g., new and elevated trails, construction of a nature center, new emergency vehicle access ramp off Balboa Boulevard and connecting access ramp to the nearby Banning Channel Bikeway) and habitat restoration, which would not change the overall use of Talbert Regional Park. The majority of proposed project related impacts would occur in existing areas of linear disturbance and new impacts to sensitive vegetation/areas would be limited to the creation of a proposed east-west trail that would improve in-park recreational opportunities and provide an addition, formal connection through park to the existing Banning Channel Bikeway. The proposed trail would generally follow existing contours (minimizing need for grading) and existing linear disturbances/previously impacted corridors.</p>
<p>Policy LU-4.2 Avoid conversion of areas particularly susceptible to erosion and sediment loss (e.g., steep slopes) and/or establish development guidelines that identifies these areas and protects them from erosion and sediment loss</p>	<p>Consistent. The proposed trail improvements are designed to address existing drainage and ponding issues and once constructed, would reduce erosion and sediment loss. Proposed access ramps would formalize and provide for safe entry points into the park from Balboa Boulevard and the Banning Channel Bikeway and appropriate BMPs would be installed to aid in drainage/protect adjacent areas from risk of erosion and sedimentation.</p>
<p>Policy LU-4.4 Promote site development that limits impact on and protects the natural integrity of topography, drainage systems, and water bodies, and protect the integrity of the bluff crest.</p>	<p>Consistent. The proposed project would include raised trails (18 inches raised) to improve drainage and protect natural topography. No grading or development would occur near bluff crests. Proposed access ramps would formalize and provide for safe entry points into the park from Balboa Boulevard and the Banning Channel Bikeway and appropriate BMPs would be installed to aid drainage/protect adjacent areas from risk of erosion and sedimentation.</p>

Table 4.1-1 Consistency Analysis with Applicable Scenic Quality Regulations

Policy/Regulation	Consistency Analysis
<p>Policy LU-4.6 Incorporate the principles of sustainability into land use planning, infrastructure, and development processes to reduce greenhouse gas emissions consistent with State goals.</p>	<p>Consistent. The proposed project would include the implementation of Park improvements (e.g., new and elevated trails, construction of a nature center, new emergency vehicle access ramp off Balboa Boulevard and connecting access ramp to the nearby Banning Channel Bikeway) and habitat restoration, which would not change the overall use of Talbert Regional Park. Proposed project components do not include facilities that would generate substantial greenhouse gas emissions.</p>
<p>Community Design Element</p>	
<p>Policy CD-1.5 Encourage electric and communication lines to be placed underground and electrical substations and telephone facilities to be screened to minimize visual impacts from sidewalks, streets, and adjacent properties. Support utility undergrounding through conditions of project approval, preparation of undergrounding plans, and the formation of assessment districts.</p>	<p>Consistent. The proposed extension of electrical power from the existing restroom building area to the maintenance yard in North Talbert would be done via underground trenching.</p>
<p>Policy CD-1.5 Encourage electric and communication lines to be placed underground and electrical substations and telephone facilities to be screened to minimize visual impacts from sidewalks, streets, and adjacent properties. Support utility undergrounding through conditions of project approval, preparation of undergrounding plans, and the formation of assessment districts.</p>	<p>Consistent. Electrical service to the maintenance yard would be extended through underground trenching within existing disturbed areas, minimizing visual impacts and preserving the park’s natural appearance.</p>
<p>Policy CD-1.6 Promote linkages between separate districts using bike trails, pedestrian paths, common medians or parkway landscaping, and other location-appropriate physical improvements. Through conditions of approval, public improvement projects, and other measures, support development of new connections and the enhancement of existing connections between districts.</p>	<p>Consistent. While the proposed project does not include connections between separate districts, it does include facilities for enhanced park access. Specifically, the proposed Balboa Boulevard access ramp would introduce ADA compliant access from Balboa Boulevard into adjacent South Talbert. In addition, proposed improvements include a new east-west trail that would enhance east-west access through the park and connect to a new access ramp from the existing Banning Channel Bikeway.</p>
<p>Policy CD-5.1 Preserve and optimize natural views and open spaces in Costa Mesa.</p>	<p>Consistent. The proposed trail improvements and habitat restoration would enhance and expand access to natural views. The proposed improvements (e.g., new and elevated trails, construction of a nature center, new emergency vehicle access ramp off Balboa Boulevard and connecting access ramp to the nearby Banning Channel Bikeway) and habitat restoration, would not change the overall use of Talbert Regional Park. Thus, existing open space (i.e., Talbert Regional Park) would be preserved.</p>

Table 4.1-1 Consistency Analysis with Applicable Scenic Quality Regulations

Policy/Regulation	Consistency Analysis
<p>Policy CD-5.2 Control the visual impacts of new development on natural views of the coast and the wetlands.</p>	<p>Consistent. The proposed project includes a 500 square foot Nature Center that would be located on the developed site of the existing restrooms in North Talbert. The proposed Nature Center structure would have a similar vertical profile as the existing restrooms building and therefore, visual impacts resulting from the new structure would be controlled and minimized. Proposed trail improvements and restoration efforts would maintain and enhance views of nearby wetlands and natural areas. Specifically, the proposed trail in South Talbert would provide more proximate views to wetlands occurring near the trail alignment.</p>
<p>Policy CD-5.3 Develop open space corridors and trails along the edges of Costa Mesa where feasible and connect these trails to existing and potential future trails throughout the City.</p>	<p>Consistent. The proposed trail improvements and new access ramps would connect Talbert Regional Park to the Banning Channel Bikeway, enhancing the regional trail network. Further, the proposed ramp off Balboa Boulevard would enhance access into the park and would provide for as-needed emergency vehicle access into the park.</p>
<p>Policy CD-5.4 Continue to preserve natural open space, including restoration of the natural areas of Talbert Regional Park.</p>	<p>Consistent. The proposed project would include the continuation of existing habitat restoration in Talbert Regional Park, supporting the long-term preservation of natural open space and visitor access.</p>
<p>Policy CD-7.1 Ensure that new and remodeled structures are designed in architectural styles that reflect the City’s eclectic quality yet are compatible in scale and character with existing buildings and the natural surroundings within residential neighborhoods. Continue to update and maintain the Costa Mesa Residential Guidelines.</p>	<p>Consistent. The proposed Nature Center would be designed with material and finished that reflect the park’s natural surroundings and are compatible with the scale and character of the existing restroom structure and the primary one-story scale of residential development near Talbert Regional Park.</p>
<p>Policy CD-7.3 Ensure that California native plants are used to support the local ecology and save water. Develop landscaping guidelines that reflect the local community.</p>	<p>Consistent. As proposed, the Master Plan calls for continuation of existing, permitted restoration practices including the removal of non-native vegetation throughout South Talbert, and at the Placentia Drain within North Talbert. Further, the planting of native coastal sage and riparian tree species is planned within South Talbert to expand the existing mitigation/restoration areas. Lastly, the Master Plan includes a preliminary plant palette focused on appropriate native species for the various habitat areas in Talbert Regional Park.</p>
<p>Open Space and Recreation Element</p>	
<p>Goal OSR-1: Balanced and Accessible System of Parks and Open Spaces Provide a high-quality environment through the development of recreation resources and preservation of open space that meets community needs in Costa Mesa.</p>	<p>Consistent. The proposed improvements would enhance recreational resources/opportunities and while a new trail is proposed and would result in impacts to existing habitat/open space, park uses would not ultimately change and the provision of open space would continue.</p>

Table 4.1-1 Consistency Analysis with Applicable Scenic Quality Regulations

Policy/Regulation	Consistency Analysis
Objective OSR-1A: Maintain and preserve existing parks, and strive to provide additional parks, public spaces, and recreation facilities that meet the community’s evolving needs.	Consistent. The proposed project would maintain and enhance Talbert Regional Park through improved and new amenities, and improved access, meeting the evolving community needs.
Policy OSR-1.1: Maintain a system of Neighborhood and Community Parks that provide a variety of active and passive recreational opportunities throughout the City.	Consistent. The proposed project would enhance existing passive and active recreational opportunities through trail improvements and expansion.
Policy OSR-1.2: Provide parks and recreation facilities appropriate for the individual neighborhoods in which they are located and reflective of the needs and interests of the population they serve.	Consistent. The proposed improvements were developed through collaboration with local agencies and communities to reflect neighborhood needs and interests while also preserving open space and the existing Central/Coastal Subarea Orange County NCCP Plan Area Reserve – see Figure 3 of the Biological Resources Report.

The proposed project is a Master Plan document that would include the implementation of select Park improvements and habitat restoration, which would not change the overall use or character of the Park. In addition, the proposed project would not conflict with the existing zoning of the Park, would not result in the substantial degradation of the existing visual quality or character of the Park, and as shown in Table 4.1-1 above, would not result in conflicts with applicable local regulations concerning scenic quality. **No impact** regarding conflicts with scenic quality regulations would occur and no project specific mitigation is required.

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

Less-than-Significant Impact. The proposed project is a Master Plan document that includes access improvements, infrastructure improvements, and habitat restoration as shown in Figure 3. No nighttime work would occur during construction of the proposed project. The Park is located in an urban area with existing sources of nighttime lighting from nearby roadways and residences. The proposed improvements to the maintenance yard would include the installation of security lighting. The security lighting (which would be limited in number) would be hooded, directed downward, and only be turned on when needed by OC Parks staff or other authorized persons. Thus, maintenance yard lighting would not introduce a substantial amount of light or glare during operations and would not adversely affect day or nighttime views in the area. The proposed Nature Center building would include a metallic roof; however, the structure would not be visible from motorists along SR -1 or other, more proximate public roads in the area and a perceptible glare issue would not occur. Due to the proposed height of the nature center and use of low-reflectivity material for the roof, the structure’s roof would not generate substantial glare during daytime hours. Impacts would be **less than significant** and no project specific mitigation is required.

4.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
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 Production (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) ***Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

No Impact. The proposed project is a Master Plan document that includes access improvements, infrastructure improvements, and habitat restoration as shown in Figure 3. According to the California Important Farmland Finder database, the Park and its immediate surroundings are classified as “Other Land” (DOC 2025). The Park is not located on land classified as Farmland pursuant to the Farmland Mapping and Monitoring Program and would therefore not convert any Farmland to non-agricultural use. **No impact** would occur and as such, no project specific mitigation is required.

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

No Impact. The Park is zoned Institutional & Recreational (I&R) by the City of Costa Mesa. Surrounding the Park are areas also zoned Institutional & Recreational (I&R) including Fairview Park, Estancia High School, and Costa Mesa Golf Course, as well as lands zoned for residential uses (City of Costa Mesa 2016b) to the north and southeast. On the west, the Park is bordered by the Banning Channel Bikeway (which parallels the Santa Ana River). The Park is surrounded by existing residences, the Santa Ana River, park and educational uses, and no Williamson Act contracts or zoning for agricultural use are applicable to the Park. Therefore, the proposed project (which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration to enhance the existing park’s recreational value and habitat preservation) would not conflict with existing zoning for agricultural use or a Williamson Act contract. **No impact** would occur, and no project specific mitigation is required.

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

No Impact. The Park and surrounding areas are neither zoned for forest land, timberland or timberland production, nor do they contain any forest land or timberland. Therefore, the proposed project (which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration) would not conflict with or cause the rezoning or conversion of forest land or timberland. **No impact** would occur, and no project specific mitigation is required.

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

No Impact. Refer to response Threshold 4.2(c). **No impact** would occur, and no project specific mitigation is required.

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

No Impact. Refer to responses 4.2(a) through 4.2(d). The Park is located in an urban area with no existing agricultural uses, Farmland, or forest lands in the vicinity, nor does the Park contain any of those land types. As no Farmland or agricultural uses occur with the Park boundaries or in the vicinity and the proposed project is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration activities, the proposed project would not involve other changes that could convert Farmland to non-agricultural use or convert forest land to non-forest use. **No impact** would occur, and no project specific mitigation is required.

4.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
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 pollutant criteria 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less than Significant Impact. The Park is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, as well as the entirety of Orange County, and is within the jurisdictional boundaries of South Coast Air Quality Management District (SCAQMD).

SCAQMD administers SCAB’s Air Quality Management Plan (AQMP), which is a comprehensive document outlining an air pollution control program for attaining the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The 2022 AQMP (SCAQMD 2022) was adopted by the SCAQMD Governing Board in December 2022. The SCAQMD 2022 AQMP was developed to address the attainment of the 2015 national 8-hour ozone ambient air quality standard (70 parts per billion) for the SCAB and Coachella Valley. The 2022 AQMP provides actions, strategies, and steps needed to reduce air pollutant emissions and meet the ozone standard by 2037 (SCAQMD 2022).

The purpose of a consistency finding with regard to the AQMP is to determine if a project is consistent with the assumptions and objectives of the 2022 AQMP and if it would interfere with the region’s ability to comply with federal and state air quality standards. SCAQMD has established criteria for determining consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD CEQA Air Quality Handbook. These criteria are as follows (SCAQMD 1993):

Consistency Criterion No. 1: Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.

Consistency Criterion No. 2: Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion, project-generated criteria for air pollutant emissions have been estimated and analyzed for significance. Detailed results of this analysis are included in Appendix A, Air Quality and Greenhouse Gas Emissions CalEEMod Output Files.

The proposed project, which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration within the Park, would result in emissions of criteria air pollutants for which the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (EPA) have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Projects that emit these pollutants have the potential to cause, or contribute to, violations of these standards. The SCAQMD CEQA Air Quality Significance Thresholds, as revised in April 2019, set forth quantitative emission significance thresholds for criteria air pollutants, which, if exceeded, would indicate the potential for a project to contribute to violations of the NAAQS or CAAQS. Table 3.3-1 lists the revised SCAQMD Air Quality Significance Thresholds (SCAQMD 2023).

Table 4.3-1. South Coast Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (pounds per day)	Operation (pounds per day)
VOC	75	55
NO _x	100	55
CO	550	550
SO _x	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Lead ^a	3	3
Toxic Air Contaminants and Odor Thresholds		
Toxic air contaminants ^b	Maximum incremental cancer risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and Acute Hazard index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402 ¹	

Source: SCAQMD 2023.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); PM_{2.5} = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District.

- ^a The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
- ^b Toxic air contaminants include carcinogens and noncarcinogens.

¹ SCAQMD Rule 402 states "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Regarding NAAQS and CAAQS attainment status,² the SCAB is designated as a nonattainment area for federal and state O₃ and PM_{2.5} standards (CARB 2023; EPA 2025). The SCAB is also designated as a nonattainment area for state PM₁₀ standards; however, it is in attainment for federal PM₁₀ standards. The SCAB is designated as an attainment area for federal and state CO and NO₂ standards, as well as for state sulfur dioxide standards. The Orange County portion of the SCAB is designated as an attainment area for federal and state lead standards.

Construction of the proposed project is anticipated to begin in September 2027 and end in March 2028. Table 4.3-2, Estimated Maximum Daily Construction Criteria Air Pollutant Emissions, summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors associated with construction of the project. As shown, the project’s maximum daily emissions would not exceed the SCAQMD thresholds for any criteria air pollutant during construction.

Table 4.3-2. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	Pounds per Day					
Summer Emissions						
2027	1.55	21.59	19.04	0.08	4.90	2.15
2028	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Daily Summer Emissions	1.46	12.68	15.43	0.03	2.70	1.47
Winter Emissions						
2027	1.78	21.98	19.15	0.08	4.90	2.15
2028	3.16	26.88	33.96	0.06	2.05	1.25
Maximum Daily Winter Emissions	3.16	26.88	33.96	0.08	4.90	2.15
<i>SCAQMD Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); PM_{2.5} = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District.

The total values may not add up exactly due to rounding.

See Appendix A for detailed results.

¹ Estimates account for adherence to fugitive dust suppression requirements from SCAQMD Rule 403 which are factored into the CalEEMod “mitigated” outputs, even though compliance with these rules is not considered mitigation.

Project construction is anticipated to be completed in 2028. Table 4.3-3 summarizes the estimated maximum daily emissions associated with “operation” of the proposed project by source. As shown, the proposed project’s maximum daily operational emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} would not exceed the SCAQMD’s significance thresholds in opening year 2028.

² An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. These standards for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare are set by the U.S. Environmental Protection Agency and CARB, respectively. Attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards.

Table 4.3-3. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	Pounds per Day					
Summer Emissions						
Mobile	0.21	0.15	1.84	0.01	0.50	0.13
Area	0.02	<0.01	0.04	0.00	<0.01	<0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total Summer Emissions	0.23	0.15	1.88	0.01	0.5	0.13
Winter Emissions						
Mobile	0.22	0.15	1.87	0.01	0.50	0.13
Area	0.01	N/A	N/A	N/A	N/A	N/A
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total Daily Winter Emissions	0.23	0.15	1.87	0.01	0.5	0.13
<i>SCAQMD Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes:

VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); PM_{2.5} = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District; <0.01 = reported value less than 0.01.

The total values may not add up exactly due to rounding.
See Appendix A for complete results.

As presented above in Tables 4.3-1 through 4.3-3, the proposed project would not generate construction or operational criteria air pollutant emissions that exceed the SCAQMD’s thresholds, and the project would therefore be consistent with Criterion No. 1.

The second criterion regarding the project’s potential to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase is primarily assessed by determining consistency between the project’s land use designations and potential to generate population growth. This is because the assumptions in AQMP are based on the maximum population at full build out under the applicable regional and general plan designations. In general, projects are considered consistent with, and would not conflict with nor obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for its 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal 2020) (SCAG 2020), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2020).³

³ Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board (CARB), the California Department of Transportation (Caltrans), and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled (VMT) and driving speeds. SCAG’s socioeconomic and transportation activities projections in their Connect SoCal 2020 are integrated in the 2022 AQMP (SCAQMD 2022).

According to the City's General Plan Land Use Map and Zoning Map, the General Plan land use designation for the Park is Public/Institutional and is zoned as Institutional & Recreational (City of Costa Mesa 2016a; 2016b). The project would be consistent with the existing land use designation, zoning, and uses on-site. The project would not generate population or employment growth. As a result, the project would be consistent with Criterion No. 2.

As the project would not conflict with Consistency Criteria 1 or 2, impacts relating to the project's potential to conflict with or obstruct implementation of the SCAQMD 2022 AQMP would be **less than significant**, and no project specific mitigation is required.

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

Less Than Significant Impact. In the context of air quality and pollution, "attainment" means the area/geographic region meets the NAAQS for specific criteria pollutants such as ozone, particulate matter, carbon monoxide, and others. In contrast, "nonattainment" refers to an area wherein one or more criteria air quality pollutants do not meet the NAAQS.

Air pollution has largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in determining whether a project's individual emissions would have a cumulatively significant impact on air quality. If a project's emissions would exceed the SCAQMD significance thresholds, the project is considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003a).

A quantitative analysis was conducted to determine whether the proposed project might result in emissions of criteria air pollutants that may cause exceedances of the NAAQS or CAAQS or cumulatively contribute to existing nonattainment of ambient air quality standards. Criteria air pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide, particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀; coarse particulate matter), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}; fine particulate matter), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O₃, as well as CO, sulfur oxides (SO_x), PM₁₀, and PM_{2.5}.

As discussed above and presented in Tables 4.3-2 and 4.3-3, the proposed project would result in emissions of criteria air pollutants for which the CARB and EPA have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Table 4.3-1 lists the revised SCAQMD Air Quality Significance Thresholds (SCAQMD 2023). If the project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 4.3-1, then the project would result in a cumulatively considerable net increase for O₃, which is a pollutant for which the SCAB is in nonattainment status. These emission-based thresholds for O₃ precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O₃ impacts to occur) because O₃ itself is not emitted directly, and the effects of an individual project's emissions of O₃ precursors (i.e., VOCs and NO_x) on O₃ levels in ambient air cannot be reliably or meaningfully determined through air quality models or other quantitative methods.

CalEEMod Version 2022.1.1.29 was used to estimate emissions from construction and operation of the project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction and operational activities from a variety of land use projects, including parks. The following discussion quantitatively evaluates project-generated construction and operational emissions and impacts that would result from implementation of the proposed project.

Construction Emissions

Construction of the proposed project, which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration within the Park, is anticipated to include site preparation for the overall site; grading; site preparation for restoration; trenching; improvement activities related to the Balboa Boulevard Entrance Plan, Nature Center construction, Infrastructure Improvements (existing trails, maintenance yard, wayfinding, habitat restoration) and paving. These construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing from architectural coatings) and off-site sources (e.g., vendor trucks, haul trucks, and worker vehicle trips). Specifically, entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM₁₀ and PM_{2.5} emissions. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5}. Construction emissions can vary substantially from day to day depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions.

Estimated construction mobile source emissions from on-road vehicles were based on CalEEMod defaults and information provided by the County. In cases where CalEEMod assumed no vendor trips, a minimum of four daily one-way vendor trips were assumed for each phase to provide a conservative estimate of likely vehicle trip related emissions. Per the County, the project does not require demolition of structures. However, the analysis assumed approximately 42,000 cubic yards of fill required for the new trail alignment.

County-provided information supplemented by CalEEMod default assumptions were also assumed for heavy-duty offroad construction equipment, including default values for equipment mix, horsepower, and load factor. It was assumed that offroad equipment would be operating at the site five days per week, up to a maximum of 9 hours per day. Detailed construction equipment modeling assumptions are provided in Appendix A, Air Quality and Greenhouse Gas Emissions CalEEMod Output Files.

Emissions generated during construction (and operation) of the project are subject to the rules and regulations of the SCAQMD. Rule 403 (Fugitive Dust)⁴ requires the implementation of measures to control the emission of visible fugitive/nuisance dust, such as wetting soils that would be disturbed. It was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55%

⁴ SCAQMD Rule 403 requires implementation of various best available fugitive dust control measures for different sources for all construction activity sources within its jurisdictional boundaries. Dust control measures include, but are not limited to, maintaining stability of soil through pre-watering of site prior to clearing, grubbing, cut and fill, and earth-moving activities; stabilizing soil during and immediately after clearing, grubbing, cut and fill, and other earth-moving activities; stabilizing backfill during handling and at completion of activity; and pre-watering material prior to truck loading and ensuring that freeboard exceeds 6 inches. While SCAQMD Rule 403 requires fugitive dust control beyond watering control measures, compliance with Rule 403 is represented in CalEEMod by assuming twice daily watering of active sites (55% reduction in PM₁₀ and PM_{2.5} [CAPCOA 2024]).

reduction of fugitive dust (CalEEMod default value), to represent compliance with SCAQMD standard dust control measures in Rule 403. Compliance with SCAQMD standard dust control measures is also referenced in PDF-BIO-3.

Construction of the proposed project is anticipated to begin in September 2027 and end in March 2028. Table 4.3-2, Estimated Maximum Daily Construction Criteria Air Pollutant Emissions, summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors associated with construction of the project. As shown, the project's maximum daily emissions would not exceed the SCAQMD thresholds for any criteria air pollutant during construction.

Operational Emissions

Operation of the project would generate VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from mobile sources, area sources, including use of consumer products, landscape maintenance equipment and energy sources. As CalEEMod does not specifically include some of the proposed land use types, surrogate land uses were selected and would best represent the anticipated activities.⁵ Area and energy source emissions were estimated based on CalEEMod default assumptions for operation of the surrogate land uses. For emissions from mobile sources, the project would result in 69 daily trips. For further detail on the assumptions and results of the operational emissions analysis, please refer to Appendix A, Air Quality and Greenhouse Gas Emissions CalEEMod Output Files.

Proposed project construction is anticipated to be completed in 2028. Table 4.3-3 summarizes the estimated maximum daily emissions associated with "operation" of the proposed project by source. As shown in Table 4.3-3, the proposed project's maximum daily operational emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} would not exceed the SCAQMD's significance thresholds in opening year 2028.

As previously discussed, the SCAB has been designated as a federal nonattainment area for O₃ and PM_{2.5}, and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}. However, as indicated in Tables 4.3-2 and 4.3-3, project-generated construction and operational emissions would not exceed the SCAQMD emission-based significance thresholds for VOCs, NO_x, PM₁₀, or PM_{2.5}. The SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. As discussed in Threshold 3.3(a), the proposed project would be consistent with the 2022 AQMP, which is intended to bring the SCAB into attainment for all criteria pollutants. In addition, the regional emissions of PM₁₀, PM_{2.5}, and O₃ precursors VOCs and NO_x calculated for the proposed project would be less than the applicable SCAQMD regional emissions significance thresholds that are designed to assist the region in attaining compliance with the applicable CAAQS and NAAQS. The SCAQMD does not consider any individual project with emissions that are below the SCAQMD significance thresholds to be cumulatively considerable and consequently would not result in a significant impact to cumulative regional emissions.

Therefore, the proposed project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be **less than significant** during construction and operation. Accordingly, no project specific mitigation is required.

⁵ The surrogate CalEEMod land uses include City Park for the improvement activities on-site.

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

Less Than Significant Impact. The proposed project would not expose sensitive receptors to substantial pollutant concentrations, as evaluated below.

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The closest sensitive receptors to the Park are single-family residences located approximately 30 feet east of the Park, adjacent to Balboa Boulevard.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the proposed project that result from proposed project activities. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2008a). The proposed project is located within Source-Receptor Area 18, North Coast Orange County. This analysis applies the SCAQMD LST values for a 1.5-acre site within Source-Receptor Area 18 with a receptor distance of 25 meters (82 feet), which is the minimum distance in the SCAQMD's LST guidance.

Proposed project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with off-road equipment exhaust and fugitive dust generation. According to the Final Localized Significance Threshold Methodology, "off-site mobile emissions from the proposed project should not be included in the emissions compared to the LSTs" (SCAQMD 2008a). Trucks and worker trips associated with the proposed project are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways since emissions would be relatively brief in nature and would cease once the vehicles pass through the main streets. Therefore, off-site emissions from trucks and worker vehicle trips are not included in the LST analysis. The maximum daily on-site emissions generated from construction of proposed project components are presented in Table 4.3-4, Construction Localized Significance Thresholds Analysis and are compared to the SCAQMD localized significance criteria for Source Receptor Area 18 to determine whether project-generated on-site emissions would result in potential LST impacts. As shown, proposed construction activities would not generate emissions in excess of site-specific LSTs; therefore, localized impacts for the proposed project would be less than significant.

Table 4.3-4. Construction Localized Significance Thresholds Analysis

Phase	NO _x	CO	PM ₁₀	PM _{2.5}
	Pounds per day			
2027	13.89	15.26	2.43	1.40
2028	26.24	31.95	1.12	1.02
Maximum Daily On-site Construction Emissions	26.24	31.95	2.43	1.40
<i>SCAQMD LST Criteria</i>	<i>111.5</i>	<i>804.5</i>	<i>5.5</i>	<i>4.0</i>
Threshold exceeded?	No	No	No	No

Notes: NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); PM_{2.5} = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

The values shown are the maximum summer or winter daily emissions results from CalEEMod.

The total values may not add up exactly due to rounding.

See Appendix A for detailed results.

Localized significance thresholds are shown for a 1.5-acre disturbed area corresponding to a distance to a sensitive receptor of 25 meters in Source Receptor Area 18 (North Coastal Orange County).

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed “CO hotspots.” The transport of CO is extremely limited, as it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS E) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

At the time that the SCAQMD Handbook (1993) was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP⁶ (SCAQMD 2003b) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection in 2002; the maximum 8-hour CO concentration was 3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day. The proposed

⁶ SCAQMD’s CO hotspot modeling guidance has not changed since 2003.

project would generate one maintenance trip per day (substantially less than the 10,000 vehicles per day threshold) which would not result in substantial CO exposure to sensitive receptors in the vicinity of the proposed project. Based on these considerations, the proposed project would result in a **less than significant** impact to air quality with regard to potential CO hotspots.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illnesses, or that may pose a present or potential hazard to human health. As discussed under the LST analysis, the nearest sensitive receptors to the Park are the residences located approximately 30 feet east of the Park.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. “Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic adverse health effects as a determinant for significance of exposure of TACs. A Hazard Index is understood as the “sum of the hazard quotients [the ratio of the predicted exposure concentration to the reference exposure level] for substances that affect the same target organ or organ system” (OEHHA 2015) and is the industry standard methodology of estimating the potential for non-carcinogenic health effects from exposure to TACs. The greatest potential for TAC emissions during construction would be diesel particulate matter (DPM) emissions from heavy equipment operations and use of heavy-duty trucks.

DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts; however, no short-term, acute relative exposure level has been established for DPM. Construction of the proposed project would last approximately 7 months, after which project-related TAC emissions would cease. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual receptor; however, such assessments should also be limited to the period/duration of activities associated with the project. This construction schedule of 7 months represents a short duration of exposure (2% of a 30-year exposure), while cancer and chronic risk from DPM are typically associated with long-term exposure. Thus, the proposed project would not result in a long-term source of TAC emissions.

Exhaust PM₁₀ is typically used as a surrogate for DPM, and as shown in Table 4.3-4, which presents total on-site PM₁₀ from fugitive dust and exhaust, project-generated construction PM₁₀ emissions are anticipated to be minimal, and well below the SCAQMD threshold. In addition, sensitive receptors are located approximately 30 feet from the nearest active proposed project construction areas, which would reduce exposure to TACs as dispersion increases with distance from the emission source. Due to the relatively short period of exposure and minimal DPM emissions on site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

No residual TAC emissions and corresponding cancer health risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the project. CARB has published

the Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005), which identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as “schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities.” The Air Quality and Land Use Handbook is a guide for siting of new sensitive land uses, and CARB recommends that sensitive receptors not be located downwind or in proximity to such sources to avoid potential health hazards. The enumerated facilities or sources include the following: high-traffic freeways and roads, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and large gas dispensing facilities. The proposed project would not include any of the above-listed land uses associated with generation of TAC emissions. For these reasons, the proposed project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the proposed project, and impacts would be **less than significant**, and no project specific mitigation is required.

Health Effects of Criteria Pollutants

Construction and operation of the proposed project would generate criteria air pollutant emissions. However, due to the nature of the proposed project and the short duration of construction, which would last approximately 7 months, the proposed project would not exceed the SCAQMD mass-emission thresholds, as shown in Tables 4.3-2 and 4.3-3 above.

The SCAB is designated as nonattainment for O₃ under both the NAAQS and CAAQS. Thus, existing O₃ levels in the SCAB are at unhealthy levels during certain periods. Health effects associated with O₃ exposure include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2025a). The contribution of VOCs and NO_x to regional ambient O₃ concentrations is the result of complex photochemistry. The increases in O₃ concentrations in the SCAB due to O₃ precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O₃ concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O₃ NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project’s emissions of O₃ precursors is speculative. Because the proposed project would not involve activities that would result in O₃ precursor emissions (i.e., VOCs or NO_x) that would exceed the SCAQMD thresholds, as shown in Tables 3.3-2 and 3.3-3, the proposed project is not anticipated to substantially contribute to regional O₃ concentrations and its associated health impacts during construction or operation.

In addition to O₃, NO_x emissions contribute to potential exceedances of the NAAQS and CAAQS for NO₂.⁷ Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2025b). As shown in Tables 3.3-2 through 3.3-4, proposed project construction and operations would not exceed the SCAQMD NO_x thresholds, and existing ambient NO₂ concentrations would be below the NAAQS and CAAQS. Thus, the proposed project is not expected to result in exceedances of the NO₂ standards or contribute to associated health effects.

⁷ NO₂ is a constituent of NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2025c). CO hotspots were discussed previously as no impact. Thus, the project's CO emissions would not contribute to the health effects associated with this pollutant.

The SCAB is designated as nonattainment for PM₁₀ under the CAAQS and nonattainment for PM_{2.5} under the NAAQS and CAAQS. Health effects associated with PM₁₀ include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2025d). As with O₃ and NO_x, and as shown in Tables 4.3-2 through 4.3-4, the proposed project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the SCAQMD's thresholds. Accordingly, the proposed project's PM₁₀ and PM_{2.5} emissions are not expected to cause an increase in related regional health effects for this pollutant.

In summary, the project, which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration within the Park, would not result in a potentially significant contribution to regional or localized concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health effects associated with those pollutants. Therefore, impacts would be **less than significant**, and no project specific mitigation is required.

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

Less than Significant Impact. The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, and architectural coatings. As supported by the U.S. EPA in their *Near-Roadway Air Pollution and Health: Frequently Asked Questions* (EPA 2014) and *User's Guide for the AMS/EPA Regulatory Model (AERMOD)* (U.S. EPA 2024), such odors disperse rapidly and during construction, odors would disperse rapidly from mobile sources at the Park and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints typically include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Park is a regional park, and the project, which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration within the Park, would not change the existing use characteristics of the property such that it would increase or alter potential odors on-site. Furthermore, the maintenance and restoration activities that are part of the proposed project are subject to regulation by SCAQMD Rule 402 (see footnote on page 28 of this MND that presents the entirety of Rule 402), which regulates nuisance odors and other objectionable emissions. Rule 402 prohibits the discharge from any source of air contaminants or other material, which would cause injury, detriment, nuisance, or annoyance to people or the public. Therefore, operational impacts would be **less than significant** regarding the proposed project resulting in other

emissions (such as those leading to odors) adversely affecting a substantial number of people. Accordingly, no project specific mitigation is required.

4.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game 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, regulations, or by the California Department of Fish and Game 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"/>

The following analysis is based on the Biological Resources Report, prepared by Dudek in support of the proposed project (Appendix B). The report describes the biological conditions of the Park in terms of vegetation/land cover types, flora, wildlife, and wildlife habitats based on biological surveys and focused species surveys conducted in 2019, 2020, 2022, and 2025. The report documents the existing conditions on the Park (for vegetation communities, a 500-foot buffer was included around the Park boundary, hereafter referred to as the study area);

provides the results of focused species surveys; and quantifies potential direct and indirect impacts to biological resources that would result from implementation of the proposed project; discusses those impacts in terms of biological significance in view of federal, state, and local laws and policies; and specifies measures to avoid, minimize, and/or mitigate any significant impacts that would occur to biological resources as a result of proposed project implementation.

Project design features (PDFs) will be incorporated during implementation of the proposed project to avoid and minimize potential direct and indirect effects of construction on the study area. These PDFs include regulatory requirements and elements incorporated into the Master Plan development procedure to ensure compliance with applicable regulatory requirements and elements of the County's General Plan and Master Plan of Parks and Recreation and associated natural resource conservation goals.

- **PDF BIO-1.** Sediment and erosion control measures would be developed and implemented in accordance with RWQCB Construction General Permit requirements to reduce the potential for the project to result in increased siltation of, or release of pollutants into creeks and their tributaries. Best management practice (BMP) categories employed would include erosion control, sediment control, and non-stormwater good housekeeping.
- **PDF BIO-2.** The footprint of disturbance would be limited to the maximum extent feasible, such as limiting access to via pre-existing access routes to the greatest extent possible. Parking, staging, storage, excavation, and disposal site locations would be confined to the smallest areas possible and be positioned in previously disturbed areas to the greatest extent practical.
- **PDF BIO-3.** To reduce fugitive dust resulting from project construction and to minimize adverse air quality impacts, the project would employ dust control measures in accordance with the Air Quality Management District's Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction
- **PDF BIO-4.** To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 2 feet deep would be covered with tarp, plywood, or similar materials at the close of each working day to prevent animals from being trapped. Ramps may be constructed of earth filled or wooden planks within deep-walled trenches to allow animals to escape. Before such holes or trenches are backfilled, they would be thoroughly inspected for trapped animals. If trapped animals are observed, escape ramps or structures would be installed immediately to allow escape. If the trapped animal is injured and cannot use escape ramps or structures, a qualified biologist would be contacted to identify the appropriate next steps.
- **PDF BIO-5.** All construction pipes, culverts, and similar structures that are stored at the construction site for one or more overnight periods would be thoroughly inspected for burrowing owls and nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved. An option is to cap the ends of any stored pipes to prevent any animals from entering. If an animal is discovered inside a pipe, that section of pipe would not be moved until the project biologist or designated representative has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated out of harm's way by an approved biologist.
- **PDF BIO-6.** The project will include a Habitat Restoration Plan which will guide the restoration activities for the project and will detail the proposed methods of restoration, including application type and planting palette. Additionally, the plan will include performance standards to assess the success of the project compared to baseline conditions and inform adaptive management. The Habitat Restoration Plan will be approved by the resource agencies to ensure compliance with allowed uses within the Central-Coastal Subregion NCCP/HCP Reserve and maintenance/improvement of habitat function for covered species.

- **PDF BIO-7.** No invasive non-native plant species shall be planted, seeded, or otherwise introduced as part of the project. Plant material shall be native species appropriate to the site. A qualified biologist shall review landscape plans before approval.
 - **PDF BIO-8.** Equipment would be cleaned prior to transport to the Park to prevent potential non-native plant species and other foreign matter, such as sediment and debris, from entering the site.
- a) ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less-than-Significant Impact with Mitigation. Endangered, rare, or threatened species, as defined in CEQA Guidelines section 15380(b) (14 CCR 15000 et seq.), are referred to as “special-status species” in this analysis and include (1) endangered or threatened species recognized in the context of the California Endangered Species Act and the federal Endangered Species Act; (2) plant species with a California Rare Plant Ranking (CRPR) (CNPS 2025 (lists 1 through 4)); (3) California Species of Special Concern and Watch List species, as designated by the California Department of Fish and Wildlife (CDFW) (CNDDDB 2025); (4) mammals and birds that are Fully Protected species, as described in Fish and Game Code, Sections 4700 and 3511; (5) Birds of Conservation Concern, as designated by the U.S. Fish and Wildlife Service (USFWS 2021); and (6) plant and wildlife species that are “covered” under the Orange County Central-Coastal Subregion Natural Communities Conservation Plan/Habitat Conservation Plan (OC Central-Coastal Subregion NCCP/HCP) (County of Orange 1996).

Special Status Plant Species

Special-status plant surveys were conducted to determine the presence or absence of plant species that are considered endangered, rare, or threatened under CEQA Guidelines section 15380 (14 CCR 15000 et seq.). Special-status plants were identified in the Park during focused rare plant surveys conducted in 2020 and 2025. A list of all special-status plant species known to occur in the vicinity of the study area (the Newport USGS 24k quadrangle map and surrounding six topographic quadrangles) and plant species covered under the Central-Coastal Subregion NCCP/HCP, with their habitat requirements, potential to occur in the study area, and survey observations, is provided in Appendix B, Biological Resources Technical Report. Evaluations for each of these special-status species’ occurrence in the study area vicinity is provided, as is their potential to occur in the study area based on known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. Special-status plant species that were observed or have at least moderate to high potential to occur in the study area are discussed in further detail below, within the focused rare plant survey results. The Potential to Occur tables in Appendix B include special-status plant species that have low potential or are not expected to occur in the study area; therefore, these species are not further included in this analysis because no direct, indirect, or cumulative impacts are expected based on the negative surveys and evaluation that these species do not have a moderate or high potential to occur in the study area.

A total of 193 species of native or naturalized plants, 95 native (49%) and 98 non-native (51%) were identified during the spring and summer focused rare plant surveys conducted within the Park in 2020 and in 2025. No federal or state-listed plant species were identified during the focused rare plant surveys. However, six plant species with a California Rare Plant Rank (CRPR 1 through 4) by California Native Plant Society (the California Native Plant Society) and CDFW were observed on the study area: Lewis’s evening primrose (*Camissoniopsis lewisii*; CRPR 3), southern tarplant (*Centromadia parryi* ssp. *australis*; CRPR 1.B.1), decumbent goldenbush (*Isocoma menziesii* var. *decumbens*; CRPR 1B.2), San Diego marsh-elder (*Iva hayesiana*; CRPR 2B.2), mud nama (*Nama stenocarpa*; CRPR 2B.2), southwestern spiny rush (*Juncus*

acutus ssp. *leopoldii*; CRPR 4.2); Coulter's matilija poppy (*Romneya coulteri*; CRPR 4.2, fully covered under OC Central-Coastal Subregion NCCP/HCP), and Southern California black walnut (*Juglans californica*, CRPR 4.2). Plants ranked 1 through 3 by CRPR are considered sensitive by CDFW; as such, southwestern spiny rush, southern California black walnut, and Coulter's Matilija poppy are not considered sensitive species by CDFW. These special-status plant species are described in further detail in Appendix B.

Vegetation clearing and grading for the infrastructure improvements (new trails and access ramps), would result in significant direct impacts to one rare plant, southern tarplant (CRPR 1B.1). Tarplant fields are ranked by CDFW as a sensitive native natural community (S2); southern tarplant is ranked 1B.1 by CRPR and is considered rare or endangered in California and elsewhere. As such, project-related impacts to these species would be considered significant. In addition to PDF-BIO-2 (limitation of disturbance footprint to the maximum extent feasible), PDF-BIO-3 (implementation of dust control measures), PDF-BIO-7 (avoidance of use invasive non-native plant species in replanting and restoration plans) and PDF-BIO-8 (cleaning of equipment prior to transport to the site to prevent potential non-native plant species), Mitigation Measure (MM) BIO-1, which entails replacing (at a minimum 1:1 ratio) existing populations of southern tarplant that are proposed to be impacted by vegetation clearing and grading activities, would be implemented to offset the loss of southern tarplant and would reduce direct impacts to special-status plants to a level that is **less than significant**. Since this species' preferred habitat is disturbed areas, such as the edge of existing trails, a concerted effort will need to be made to identify locations within the Park that are suitable for seeding with southern tarplant. To the extent that southern tarplant is re-established in areas adjacent to improved trails following construction, these areas can be counted towards the 1:1 mitigation ratio.

Special Status Wildlife Species

Special-status wildlife species are defined as follows:

- Have been designated as either rare, threatened, or endangered by CDFW or the USFWS and are protected under either the California Endangered Species Act (California Fish and Game Code, Section 2050 et seq.) or federal Endangered Species Act (16 U.S.C. 1531 et seq.); or meet the CEQA definition for endangered, rare, or threatened (14 CCR 15380(b),(d));
- Are candidate species being considered or proposed for listing under these same acts;
- Are fully protected by the California Fish and Game Code Sections 3511, 4700, 5050, or 5515;
- Are of expressed concern to resource/regulatory agencies or local jurisdictions. This includes those wildlife that are considered a state Species of Special Concern; are on CDFW Watch List; are designated as a federal Bird of Conservation Concern; or are considered a state Special Animal; or
- Are listed as Covered Species in the Central-Coastal Subregion NCCP/HCP (County of Orange 1996).

A list of all special-status wildlife species known to occur on or within the vicinity of the study area (the Park and surrounding six topographic quadrangles) and wildlife species covered under the Central-Coastal Subregion NCCP/HCP, with their habitat requirements, potential to occur in the study area, and survey observations, is provided in Appendix B. Appendix C includes special-status wildlife species that have low potential or are not expected to occur in the study area; therefore, these species are not further analyzed in this report because no direct or indirect impacts are expected based on evaluation that these species do not have a moderate or high potential to occur in the study area. Special-status wildlife species that were observed or have at least moderate to high potential to occur are discussed in further detail in Appendix B.

Protocol surveys for coastal California gnatcatcher (*Poliioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and burrowing owl (*Athene cunicularia*) were conducted in 2020. Updated focused surveys were conducted in 2025 for the above special-status species; in addition, photograph-only focused surveys for Crotch's bumble bee were conducted. As a result of these focused surveys, coastal California gnatcatcher, least Bell's vireo, and burrowing owl were all found and are considered present in the study area. Other special-status wildlife species directly observed during field surveys within the study area include Cooper's hawk, California gull, double-breasted cormorant, white-faced ibis, Costa's hummingbird, rufous hummingbird, white-tailed kite, prairie falcon, osprey, yellow-breasted chat, and yellow warbler. The results of the southwestern willow flycatcher focused surveys were negative and as such, this species is considered absent from the Park.

Construction of the proposed project may result in significant direct impacts to 14 special-status wildlife species that are considered present on-site: burrowing owl, coastal California gnatcatcher, least Bell's vireo, Cooper's hawk (*Astur cooperii*), California gull (*Larus californicus*), double-breasted cormorant (*Nannopterum auritum*), white-faced ibis (*Plegadis chihi*), Costa's hummingbird (*Calypte costae*), rufous hummingbird (*Selasphorus rufus*), white-tailed kite (*Elanus leucurus*), prairie falcon (*Falco mexicanus*), osprey (*Pandion haliaetus*), yellow warbler (*Setophaga aestiva*), and yellow breasted chat (*Icteria virens*). Additionally, least bell's vireo and prairie falcon were observed on site in 2025, while coastal California gnatcatcher was not. Note that red-shouldered hawk was observed on the Park, and although not listed by CDFW or USFWS, it is protected by the MBTA as well as fully covered under the OC Central-Coastal Subregion NCCP/HCP. The County of Orange is a signatory to the OC Central-Coastal Subregion NCCP/HCP and therefore, the County is required to comply with the OC Central-Coastal Subregion NCCP/HCP, which inherently protects against adverse impacts to covered species through the measures included in the NCCP/HCP and Regulatory Agency oversight. Additionally, the OC Central-Coastal NCCP/HCP provides the County take coverage for covered species or habitats that may be impacted by the project.

Project-related impacts to these species may occur during vegetation clearing and grading for key improvements and infrastructure improvements particularly during the general avian nesting season of February through August. California gnatcatcher, least Bell's vireo, and prairie falcon are covered species under the OC Central-Coastal Subregion NCCP/HCP and therefore, with implementation of PDF-BIO-6 (i.e., Resource Agency confirmed compliance with the Central-Coastal Subregion NCCP/HCP), impacts to these species are less than significant.

Burrowing owl was incidentally observed near the western boundary of South Talbert during the jurisdictional delineation survey, just outside the Park boundary, but was not observed during any of the focused surveys conducted in 2020 and 2025. However, due to the continued presence of suitable habitats in the Park there is a potential for burrowing owl to move onto the Park in the future. Therefore, if this species is found on site prior to the start of construction the proposed project may result in a significant direct impact to burrowing owl during grading and vegetation clearing, particularly if the proposed project occurs during the species' breeding season. Proposed project implementation of PDF-BIO-2 (limitation of the disturbance footprint to the maximum extent feasible), PDF-BIO-4 (covering of all excavated, steep-walled holes or trenches more than 2 feet deep at the close of each working day), PDF-BIO-5 (thorough inspection of all pipes, culverts, and similar structures that are stored at the construction site for one or more overnight periods for burrowing owls and nesting birds), and MM-BIO-2, which consists of pre-construction clearance surveys and if necessary based on observed presence of the specie prior to construction and implementation of additional avoidance and mitigation measures, will reduce potential impacts to burrowing owl to a level that is **less than significant**.

Cooper's hawk, California gull, double-breasted cormorant, white-faced ibis, Costa's hummingbird, rufous hummingbird, white-tailed kite, prairie falcon, osprey, yellow warbler, and yellow breasted chat are all protected species by the Migratory Bird Treaty Act and the State Fish and Game Code. Project-related direct and indirect impacts may occur to these species during vegetation clearing and grading activities that commence during the general avian breeding season of February through August. Therefore, direct and indirect impacts to these species would be considered significant. Proposed project implementation of PDF-BIO-2 (limitation of the disturbance footprint to the maximum extent feasible) and MM-BIO-3, which consists of a pre-construction clearance survey and if necessary based on observed presence of special-status species prior to construction, additional avoidance measures including but not limited to the establishment of buffers around known locations of identified special status species, would reduce potential project-related impacts to these seven special-status species to a level that is **less than significant**.

Besides the special-status wildlife species mentioned above, the Park provides suitable nesting habitat for a number of bird species known to occur in the region that are protected by the Migratory Bird Treaty Act and the State Fish and Game Code. These species may be directly and indirectly impacted during vegetation clearing activities that commence during the general nesting season of February through August. Project-related impacts to protected bird species and their nests are considered significant and require mitigation. Proposed project implementation of PDF-BIO-2 (limitation of the disturbance footprint to the maximum extent feasible) and MM-BIO-4, which consists of a pre-construction nesting bird survey and if necessary based on observed presence of nesting migratory birds prior to construction, additional avoidance measures including but not limited to the establishment of buffers around nests will reduce potential impacts to nesting birds to a level that is **less than significant**.

MM-BIO-1 **Rare Plant Restoration.** In order to replace individual southern tarplant populations in the Park, restoration activities as part of the project shall revegetate the site with both species at a minimum 1:1 ratio. For southern tarplant, the 1:1 ratio shall be calculated based on area occupied by the species. Revegetation can either be accomplished through seeding restoration areas with a native seed mix containing both species and/or planting container plants. Prior to project impacts, existing populations of both species that are proposed to be impacted will be identified and counted to determine the number of seed or container plants needed and suitable area for plant establishment. The methods and quantity of the restoration effort for these two species will be included in the Restoration Plan for the project. The Restoration Plan shall include monitoring and maintenance procedures, performance standards to ensure self-sustaining populations have been established, and adaptive management/remedial measures if restoration is not successful.

MM-BIO-2 **Burrowing Owl Pre-Construction Surveys.** Prior to the start of grading and vegetation clearing activities within suitable habitat areas on the Park, a pre-construction clearance survey for burrowing owls shall be conducted according to survey protocol outlined in the 2012 CDFW Staff Report on Burrowing Owl Mitigation. A minimum of two surveys will be conducted within 14 days prior to the start of the project and another within 24 hours of initiating ground-disturbing activities. If burrowing owl is found on site additional avoidance and mitigation measures will be required. If burrowing owl occurs in an area that cannot be avoided by the project, additional land conservation and/or relocation may be required, which will be determined through consultation with CDFW.

MM-BIO-3 Pre-Construction Surveys for Special-Status Species. One pre-construction clearance survey shall be conducted no more than 14 days prior to initiation of site preparation and grading activities. A qualified biologist shall walk the entire survey area to determine if any special-status wildlife is observed or detected. Additional measures may be required for observed species on site, such as establishing a buffer around known locations and/or conducting monitoring during construction near occupied areas to ensure no project activities result in loss of an active nest and incidental take does not occur.

MM-BIO-4 Pre-Construction Nesting Bird Surveys and Avoidance. Vegetation clearing and grading activities shall avoid the migratory bird nesting season (typically February 1 through August 31) to reduce any potential significant impacts to birds that may be nesting in the Park, including yellow warbler, yellow-breasted chat, Cooper's hawk, least Bell's vireo, coastal California gnatcatcher, burrowing owl, California gull, white-faced ibis, double-breasted cormorant, Costa's hummingbird, rufous hummingbird, osprey, prairie falcon, and white-tailed kite. To maintain compliance with the Migratory Bird Treaty Act and California Fish and Game Code, if ground-disturbing and/or vegetation clearance activities are scheduled to occur during the avian nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist within the project impact footprint and a 500-foot buffer where legal access is granted around the disturbance footprint to determine the presence or absence of protected migratory birds and active nests. Surveys shall be conducted within 3 days prior to initiation of activity in accordance with the Migratory Bird Treaty Act (16 USC 703-712) and the State Fish and Game Code Sections 3503, 3503.5, and 3513.

If an active nest is detected during the nesting bird survey, the nest shall be flagged and mapped on the construction plan, along with appropriate avoidance buffers established around the nest as determined by a qualified biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The buffer shall be of a distance to ensure avoidance of adverse effects to the nesting bird by accounting for topography, ambient conditions, species, nest location, and activity type. All nests shall be monitored as determined by the qualified biologist until nestlings have fledged and dispersed, or it is confirmed that the nest has been unsuccessful or abandoned. The qualified biologist shall halt all construction activities within proximity to an active nest if it is determined that the activities are harassing the nest and may result in nest abandonment or take. The qualified biologist shall also have the authority to require implementation of avoidance measures related to noise, vibration, or light pollution if indirect impacts are resulting in harassment of the nest. No project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged, and the nest is no longer active.

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

Less-than-Significant Impact with Mitigation. Thirty-five vegetation communities and land covers (including disturbed forms) were mapped in the study area based on general physiognomy and species composition, including 28 native or naturalized vegetation types and 7 non-native land covers. Of the 28

native or naturalized vegetation communities, 7 are considered sensitive by the California Native Plant Society (CRPR 1-3). The 35 vegetation communities and land cover types are described as follows; their acreages are presented in Appendix B.

The proposed project will permanently impact five of the seven sensitive vegetation communities observed throughout the Park: American bulrush marsh, California sycamore-coast live oak, Menzies’s goldenbush scrub, pickleweed mats, and tar plant fields (see Appendix B, Figure 7). The proposed project would result in direct and permanent impacts to 0.61 acres of vegetation communities and land cover types that are considered sensitive by CDFW, which is considered a significant impact. As such, project-related impacts to these communities would require mitigation or on-site habitat restoration to pre-project conditions to comply with CEQA and the OC Central-Coastal Subregion NCCP/HCP. Implementation of PDF-BIO-2 (limitation of the disturbance footprint to the maximum extent feasible), PDF-BIO-3 (implementation of dust control measures), PDF-BIO-6 (implementation of a Habitat Restoration Plan), PDF-BIO-7 (avoidance of invasive non-native plant species in replanting and restoration plans), PDF-BIO-8 (cleaning of equipment prior to transport to the site to prevent potential non-native plant species), and Mitigation Measure MM-BIO-5, which entails restoration and enhancement of impacted sensitive natural communities at a minimum 1:1 ratio, would reduce impacts to sensitive vegetation communities to a level that is **less than significant**. Project-related impacts to native habitats are not considered sensitive, or habitats covered under the OC Central-Coastal Subregion NCCP/HCP such as coastal sage scrub, are not considered significant and do not require mitigation. However, the proposed project will restore and enhance all native habitats on the Park as part of the proposed project which will result in a net increase in habitat value for native and sensitive natural communities located on the Park.

MM-BIO-5 **Restoration of Sensitive Natural Communities.** The proposed project shall restore and enhance native habitat communities on the Park to a level greater than what currently exists in the Park. The 0.61 acre of impacted sensitive natural communities shall be restored at a minimum 1:1 ratio through planned restoration activities as part of the project. The project’s Restoration Plan shall detail the location and amount of restoration proposed to offset project-related impacts to sensitive natural communities.

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

Less-than-Significant Impact with Mitigation. The Park supports 13 features that are considered waters of the U.S. and state, and an additional 4 features that are also under the jurisdiction of CDFW and the California Coastal Commission (CCC). Table 4.4-1 below summarizes the extent of each regulatory agency’s jurisdiction within the Park and 500-foot study area buffer for each type of waters/wetlands.

Table 4.4-1. Jurisdictional Delineation Summary

Jurisdiction	Wetlands Vegetation Communities/Water Types	Park (On site) Acres	Survey Area (Off site) Acres	Total Acres
Jurisdictional Waters of the U.S. and State				
USACE / RWQCB	Non-Wetland Waters			
	Ephemeral Drainage	0.20	0.25	0.45
	Intermittent Stream	1.26	15.47	16.52

Table 4.4-1. Jurisdictional Delineation Summary

Jurisdiction	Wetlands Vegetation Communities/Water Types	Park (On site) Acres	Survey Area (Off site) Acres	Total Acres
	Perennial Pond	2.82	1.35	4.17
	Perennial Stream	—	69.47	69.47
	<i>Non-Wetland Waters Subtotal</i>	4.22	86.54	90.76
Wetland Waters				
	Intermittent Stream	0.15	0.001	0.151
	Perennial Pond	2.82	0.53	3.35
	Wetland	17.02	4.34	21.36
	<i>Wetland Waters Subtotal</i>	19.99	4.87	18.77
USACE/RWQCB Waters Total*		24.19	91.25	115.44
CDFW and CCC Jurisdictional Waters				
CDFW / CCC Wetlands / Riparian Habitat	Wetland Waters			
	Lacustrine Emergent Wetland	—	1.71	1.71
	Palustrine Emergent (Forested Wetland and Salt Marsh)	28.1	18.96	47.04
	Streambed – Riparian	0.23	0.92	1.15
	<i>Wetland Waters Subtotal</i>	28.33	22.42	49.9
	Non-Wetland Waters			
	Unvegetated Streambed	1.23	85.63	86.86
	Freshwater Pond	2.82	0.72	3.54
	<i>Non-Wetland Waters Subtotal</i>	4.05	86.31	90.36
	CDFW/CCC Jurisdiction Total*		32.38	109.03

Note:

* Acreage may not total due to rounding.

Table 4.4-2 below presents a summary of impacts to jurisdictional aquatic resources within the Park as a result of proposed project implementation that would include access improvements, infrastructure improvements, and habitat restoration activities. As shown therein, the Park contains one feature considered non-wetland waters (ephemeral drainage), and one wetland features (Wetland 1) potentially subject to ACOE and RWQCB jurisdiction that would be impacted by the Project. Additionally, there is one non-wetland features (ephemeral drainage) and four wetland features (Wetland 2, 4, 5, and 6) that are potentially subject to CDFW and CCC jurisdiction that may be impacted by the Project. Total Project-related impacts to ACOE/RWQCB jurisdiction include 0.37 acres (2,896 linear feet), which include approximately less than 0.01 acre (103 linear feet) of direct impacts to non-wetland waters of the U.S./State associated with an unnamed ephemeral drainage, and approximately 0.37 acres (2,896 linear feet) of direct impacts to wetland waters of the U.S./State. Additionally, total project-related direct impacts to CDFW/CCC jurisdiction include approximately less than 0.01 acre (103 linear feet) of non-wetland, and approximately 0.87 acres (8,835 linear feet) of wetlands.

Table 4.4-2. Summary of Direct Impacts to Jurisdictional Aquatic Resources on the Park

Feature Name	Total Park (acres)	Temporary Impacts (Restoration) (acres/linear feet)	Permanent Impacts (acres/linear feet)
Waters of the United States and State (ACOE/RWQCB)			
Non-Wetland Waters			
Concrete Lined Channel	0.05	--	--
Unnamed Ephemeral Drainage	0.15	--	<0.01/103
Victoria Pond	2.82	--	--
Wetland Waters			
Wetland 1	2.98	--	--
Wetland 2	17.02	--	0.37/2,793
Waters of the United States and State (ACOE/RWQCB) Total*	24.19	-/-	0.37/2,896
CDFW/CCC Jurisdictional Waters			
Unvegetated Streambed (Concrete Lined Channel)	1.23	--	-/-
Riparian Streambed (Unnamed Drainage)	0.23	--	<0.01/103
Victoria Pond (Freshwater)	2.82	-/-	-/-
Wetland 1 (Forested Wetland)	2.89	-/-	-/-
Wetland 2 (Salt Marsh)	14.15	--	0.31/1,835
Wetland 4 (Salt Marsh)	0.30	--	<0.01/314
Wetland 5 (Forested Wetland)	7.65	--	0.13/2,586
Wetland 6 (Forested Wetland)	2.75	--	0.06/998
CDFW/CCC Jurisdiction Total*	32.02	-/-	0.87/8,835

Notes: ACOE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; OHWM = ordinary high-water mark; CDFW = California Department of Fish and Wildlife

* Totals may not sum due to rounding.

Project-related impacts to federal and state regulated waters are considered significant and require mitigation to offset impacts. In addition to PDF-BIO-1 (implementation of sediment and erosion control measures during construction, PDF-BIO-2 limitation of disturbance footprint to the maximum extent feasible), MM-BIO-6, which entails obtaining regulatory permits through which direct impacts would be mitigated via on-site restoration of habitat or purchase of off-site mitigation credits (final mitigation ratios would be determined through consultation with regulatory agencies), would be implemented. With applicable PDFs and MM-BIO-6, impacts to jurisdictional waters and wetlands would be **less than significant with mitigation**.

MM-BIO-6 **Regulatory Waters Permitting.** Direct impacts to jurisdictional waters shall be addressed through the regulatory application process to implement Section 401 and Section 404 of the Clean Water Act, the Porter-Cologne Water Quality Act, and Section 1602 of the California Fish and Game Code. Due to the amount of proposed project-related impacts to potentially jurisdictional aquatic resources it is anticipated that an Individual Permit from the ACOE will be required. An Individual Permit would also require compliance with

404(b)(1) Guidelines and mitigation to offset impacts and ensure no-net loss of wetlands and waters of the U.S. and State. Direct impacts to jurisdictional non-wetland waters shall be mitigated through either the on-site restoration of habitat or through the purchase of off-site mitigation credits. The applicant shall purchase credits through an agency-approved mitigation bank, in-lieu fee program, or other agreement. A minimum ratio of 3:1 for establishment or reestablishment credits shall be required for impacts to jurisdictional wetlands, as well as associated riparian habitat. However, the final mitigation ratio required shall be determined through consultation with the regulatory resource agencies during the permitting process. Finally, a standard Streambed Alteration Agreement shall be required from the CDFW for impacts to CDFW waters, as well as a Coastal Development Permit from the CCC.

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

Less-than-Significant Impact. Wildlife corridors are linear features and include aerial corridors for avian species that connect large patches of natural open space and provide avenues for dispersal or migration of animals, as well as dispersal of plants (e.g., via wildlife vectors). Wildlife corridors contribute to population viability in several ways: (1) they assure continual exchange of genes between populations, which helps maintain genetic diversity; (2) they provide access to adjacent habitat areas representing additional territory for foraging and mating; (3) they allow for a greater carrying capacity; and (4) they provide routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes.

Habitat linkages are patches of native habitat that function to join two larger patches of habitat. They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation. Although individual animals may not move through a habitat linkage, the linkage is a potential route for gene flow and long-term dispersal. Habitat linkages may serve both as habitat and avenues of gene flow for small animals such as reptiles, amphibians, and rodents. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat “islands” that function as steppingstones for dispersal and movement (especially for birds and flying insects).

The OC Central–Coastal Subregion NCCP/HCP does not identify specific habitat linkages but did include evaluation of habitat value for reserve design. The proposed project area includes some “medium” value habitat identified as a Reserve System but is generally isolated from large blocks of habitat. The proposed project area lies on the northern end of the central subregion; therefore, the OC Central–Coastal Subregion NCCP/HCP does not identify biological resources adjacent to the north of this area. To the south, the OC Central–Coastal Subregion NCCP/HCP identifies habitats associated with Newport Bay, approximately 3.5 miles from Talbert Regional Park, separated by urbanized areas within the City of Costa Mesa. There are upland and wetland habitats present on the adjacent property to the south. There are additional coastal wetlands approximately 1 mile and 2.5 miles to the southwest and west of the site, but these two are separated from the site by urbanized development within the City of Huntington Beach. Based on these characteristics, the potential for function of the study area as a wildlife corridor or habitat linkage is limited to potential linkages for migratory birds, shorebirds, and possibly some urban-adapted small and medium-sized mammals. Coyote would be the largest species expected to utilize this corridor.

Regarding Victoria Pond, while not designated as a major or critical stopover site within the Pacific Flyway corridor, it is likely used by migratory birds. However, the proposed project does not entail disturbance of/to Victoria Pond, and therefore no impact would result to Victoria Pond.

No significant direct or indirect permanent impacts would occur to wildlife movement or use of native wildlife nursery sites associated with proposed project activities. Existing nearby habitat linkages and wildlife corridor functions would remain intact while construction activities are conducted and following proposed project completion, particularly within the riparian areas that allow for local wildlife movement across the site. Construction activities would not likely result in permanent adverse impacts to wildlife movement because proposed restoration efforts are anticipated to improve habitat connectivity within the Park through increased hydrologic flow, vegetation clearing of invasive vegetation, and trail improvements. Riparian areas on site, specifically Victoria Pond and salt marsh habitats within South Talbert, may provide regional wildlife corridors and nesting areas for migratory birds and mammals. Coyote is the largest mammal that uses native habitats within the Park for local migration.

During construction activities, temporary disturbance to local species may occur, but would not substantially degrade the quality or use of the vegetation communities in the vicinity. Further, through implementation of PDF-BIO-2, the construction disturbance footprint would be limited to the maximum extent feasible, and PDF-BIO-6 would entail the implementation of a Habitat Restoration Plan (and would result in improved habitat quality within the Park). Some indirect impacts to localized wildlife movement could occur during construction activities due to construction-related noise. However, this impact would be temporary and would not be expected to significantly disrupt wildlife movement during and following construction activities.

Project-related long-term indirect impacts to wildlife corridors or habitat linkages would be less than significant as the opportunities for wildlife movement post-proposed project implementation would be improved from existing conditions after the project's restoration efforts are completed throughout the Park. Restoration and proposed project improvements to Talbert Regional Park (the Park) would positively impact multiple riparian habitats on site by clearing of invasive vegetation and improved tidal flow, which could allow increased wildlife movement locally through the area, particularly for species associated with salt marshes, riparian woodlands, and tidal wetlands.

Therefore, direct and indirect impacts on wildlife corridors and nursery sites resulting from the proposed project would be **less than significant and no project specific mitigation is required.**

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

No Impact. The proposed project is a Master Plan document that includes specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park. The Park occurs within the County of Orange and the City of Costa Mesa and therefore would be required to adhere to any County or City policies and municipal codes protecting biological resources, typically trees within the public right of way and parkways. After a review of County and City policies there are none that would apply to the protection of biological resources in the Park. The County's biological resource preservation policies are generally contained in specific plans. Beyond the Master Plan (i.e., the proposed project), there are no specific plans for the County that apply to the Park. There are no also generalized biological resource preservation ordinances within unincorporated County areas. Within the City of Costa Mesa, tree-related policies generally pertain to maintenance of landscape

and trees within City parks and parkways, none of which apply to the Park. Therefore, the proposed project would result in **no impact** on local policies or ordinances, and no mitigation is required. Accordingly, no project specific mitigation is required.

f) *Would the project 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. The entire Park boundary is located within the OC Central–Coastal Subregion NCCP/HCP. In general, the OC Central–Coastal Subregion NCCP/HCP evaluated a set of covered species and habitat (mostly focused on coastal sage scrub species including coastal California gnatcatcher (*Polioptila californica californica*) and coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)) and determined an acreage of covered species/habitat take that could be authorized because adequate conservation would be achieved through assemblage and management of a reserve as designated by the plan. Covered species/habitat within the Park includes coastal sage scrub. Wetlands and riparian habitats are not covered habitats, and least Bell’s vireo (*Vireo bellii pusillus*) is a conditionally covered species. The Park and proposed project are within the Central Subarea under the OC Central–Coastal Subregion NCCP/HCP as a designated Reserve (Talbert Regional Park) with the study area buffer designated as Urban or Existing Use (or authorized take areas).

Under the OC Central–Coastal Subregion NCCP/HCP, the list of participating landowners includes the County of Orange and Irvine Ranch Company, amongst others. These entities were granted an acreage of specific take authorization for specific projects/activities that would result in impacts both within the Urban (take authorized) areas and Reserve areas. OC Parks and OCPW are participating landowners in the OC Central–Coastal Subregion NCCP/HCP because they are part of the County of Orange. Therefore, take authorization for covered species is granted through the County’s participation in the OC Central–Coastal Subregion NCCP/HCP, and impacts to covered sensitive natural communities would be mitigated through payment of mitigation fees or other methods as provided in Sections 1.33 and 4.0 of the OC Central–Coastal Subregion NCCP/HCP Implementation Agreement. Selection of the mitigation fee option to address impacts to coastal sage scrub species is covered under the terms of the existing USFWS Section 10(a)(1)(B) incidental take permit and CDFW Management Authorization granted to the local government with jurisdiction over the proposed activity (i.e., the County) as part of the OC Central-Coastal Subregion NCCP/HCP. No additional approvals pursuant to the federal Endangered Species Act, the California Endangered Species Act, and the Natural Community Conservation Planning Act (NCCP Act) would be required.

The Park is located within the boundaries of the OC Central-Coastal Subregion Plan of the OC Central–Coastal Subregion NCCP/HCP and the Applicant is a signatory to the OC Central–Coastal Subregion NCCP/HCP, the proposed project would receive take coverage for project-related impacts to covered species and vegetation communities as part of its participation in the OC Central-Coastal Subregion NCCP/HCP. Furthermore, the Park provides for passive recreation that, in accordance with Section 5.8.3 of the OC Central–Coastal Subregion NCCP/HCP, is compatible with coastal sage scrub protection and management and because the Park is included within the OC Central–Coastal Subregion NCCP/HCP habitat reserve, access and recreational uses are periodically reviewed to determine overall consistency with reserve management policies, practices and priorities. For special-status species and sensitive vegetation communities not fully covered under the OC Central–Coastal Subregion NCCP/HCP, proposed project impacts to these biological resources are subject to local, state, and federal policies/regulations. Impacts to covered habitats would be reduced through on-site restoration or through the purchase of off-site

mitigation credits. Additionally, because the County is a Participating Landowner, take associated with Planned Activities considered and contemplated by the NCCP/HCP is authorized for covered species without payment of the mitigation fee.

These measures are substantially consistent with construction-related minimization measures required for participating landowners under the OC Central-Coastal Subregion NCCP/HCP. Table 4.4-3 demonstrates that the PDFs and mitigation measures discussed above are aligned and consistent with the OC Central-Coastal NCCP/HCP measures.

Table 4.4-3. Compliance with OC Central-Coastal Subregion NCCP/HCP Construction Related Minimization Measures

OC Central-Coastal Subregion NCCP/HCP Measure	PDF or Mitigation Measure
1. To the maximum extent practicable, no grading of CSS habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures" are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures and emergency facility repairs. In the event of such public health and safety circumstances, landowners or public agencies/utilities will provide USFWS/CDFW with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens and any other CSS Identified Species that are not otherwise flushed and will carry out the following' measures only to the extent as practicable in the context of the public health and safety considerations.	MM-BIO-3, MM-BIO-4
2. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of CSS habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of CSS, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities, and the locations of any such species shall be clearly marked and identified on the construction/grading plans.	MM-BIO-5
3. A monitoring biologist, acceptable to USFWS/CDFG will be on site during any clearing of CSS. The landowner or relevant public agency/utility will advise USFWS/CDFW at least seven (7) calendar days (and preferably fourteen (14) calendar days) prior to the clearing of any habitat occupied by Identified Species to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing/capture activities. The monitoring biologist will flush Identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the monitoring biologist to assure that Identified bird species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.	MM-BIO-3, MM-BIO-4
4. Following the completion of initial grading/earth movement activities, all areas of CSS habitat to be avoided by construction equipment and personnel will be marked with temporary fencing other appropriate markers clearly visible to	MM-BIO-5, PDF-BIO-2

Table 4.4-3. Compliance with OC Central-Coastal Subregion NCCP/HCP Construction Related Minimization Measures

OC Central-Coastal Subregion NCCP/HCP Measure	PDF or Mitigation Measure
construction personnel. No construction access, parking or storage of equipment or materials will be permitted within such marked areas.	
5. In areas bordering the NCCP Reserve System or Special Linkage/Special Management areas containing significant CSS identified in the NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations will be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble will not be deposited on adjacent CSS identified in the NCCP/HCP for protection. Preconstruction meetings involving the monitoring biologist, construction supervisors and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures.	PDF-BIO-1, PDF-BIO-2
6. CSS identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.	PDF-BIO-3

Therefore, with implementation of PDF and Mitigation Measures listed above in Table 4.4-3, the proposed project would comply with construction related minimization measures of the OC Central-Coastal Subregion NCCP/HCP and impacts would be reduced to a level **less than significant**.

4.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

The following analysis is based on a Cultural Resources Inventory Report, which includes the results of a California Historical Resources Information System (CHRIS) records search, and pedestrian surveys of the proposed project area conducted by Dudek in support of the proposed project (Appendix C).

a) ***Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?***

No Impact. The proposed project is a Master Plan document that includes access improvements, infrastructure improvements, and habitat restoration activities occurring within the existing boundaries of the Park. See Section 3 above for additional details.

On October 22, 2019, Dudek cultural resources staff conducted a cultural resources record search through the CHRIS database at the South-Central Coastal Information Center (SCCIC) at California State University, Fullerton (Appendix C). An update to the original records search was conducted by a Dudek archaeologist on October 14, 2025. The search provided information on any documented cultural resources and previous archaeological investigations within 0.5 miles of the Park. In addition to a review of previously prepared site records and reports, the records search included a review of historical maps of the proposed project area, ethnographies, the National Register of Historic Places, the California Register of Historic Resources, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and Archaeological Determinations of Eligibility.

The SCCIC records search identified 10 previously recorded cultural resources within a 0.5-mile radius of the proposed project area, none of which are located within the proposed project area. These included six (6) prehistoric archaeological resources, two (2) historic-era built environment resources, one (1) historic-era archaeological resource, and one (1) multicomponent archaeological resource. Dudek Archaeologists conducted a Phase I pedestrian survey on November 22, 2019. To assess current site conditions, Dudek archaeologist conducted an updated reconnaissance-level archaeological resources pedestrian survey of the proposed project area on October 29, 2025. Standard archaeological procedures and techniques consistent with the Secretary of the Interior's Standards and Guidelines for a cultural resources inventory were employed during the survey. When possible, 10-meter interval survey transects were conducted and oriented in cardinal direction. Where visible, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock, imported marine shell), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic-era artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as rodent/reptile burrows and back dirt piles, cut banks, and drainages were also visually inspected for exposed subsurface materials. During the reconnaissance-level pedestrian survey, exposed ground surfaces, cut banks and drainages, rodent/reptile burrows and back dirt piles, and other areas of increased ground visibility were opportunistically inspected for observable cultural materials or features. No cultural resources were identified within the proposed project area during the 2019 and 2025 pedestrian surveys.

Because no built environment resources were identified on the Park, **no impacts** on historical resources would result from the proposed project. Accordingly, no project specific mitigation is required.

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

Less than Significant with Mitigation Incorporated. As discussed above, based upon the records search conducted at the SCCIC, ten previously recorded cultural resources and two historic built environment resources were recorded within the 0.5-mile records search radius; however, none are within the Park.

As noted in Appendix C, a number of significant archaeological resources lie adjacent to the proposed project area. P-30-000165 (CA-ORA-165) is the recorded location of the ethnohistoric Gabrielino village of *Lukup*. This site is mentioned frequently in anthropological literature and has direct ethnohistoric links. The “Federal Cylinder Project” includes voice recordings of a Native American man named Salvador Cuevas who sang a song that originated from this village. The Federal Cylinder Project records the following information from Salvador Cuevas: “Song of To-mami-yo-wit. No one composed it, but it was given by Chung-itch-nish himself. This is in the old dead language of the coast. Loo-coop was large rancheria S. of Santa Anna near the ocean. This came from there” (Gray and Schupman Jr. 1990, pg. 209).

The concept of a village being a precise location of settlement is not accurate for all place named areas (Kroeber 1925). Hunter-gatherer settlement may have focused on specific landforms that convey a singular place, while at other times settlement occurred over a broader area that shared a single name. The village of *Lukup* likely referred to a broader area covering the bluffs and banks of the Santa Ana River and included the aboriginal sites identified in this records search. Archaeologically, deciphering the sites that can be associated with the ethnohistoric village requires definition of temporally consistent archaeological deposits that date to the pre- and post-Mission historic period (i.e., post AD 1769). For the purposes of this analysis, a conservative approach tentatively links all the identified aboriginal sites into the broader village concept associated with the place name *Lukup*.

Archaeological research at the sites identified in the records search has focused primarily on CA-ORA-58 (CA-ORA-58), the Banning/Norris Site (Fairview Site), located on the bluff just outside the eastern Park boundary (within approximately 150 feet of the Park) by Fairview Park. (Koerper and Desautels 1996). First reported in 1937, the site has undergone many excavation efforts and is considered one of the most important such sites in Southern California, having numerous burials and many unique and/or diagnostic artifacts. The site contains evidence of long-distance trade with Classic period Hohokam of the Sonoran Desert and was likely an important political and trade center during the Late Prehistoric period. The sites identified in the records search are located primarily on top of bluffs located east of the current Park. However, the distribution of sites is more likely related to the focus of archaeological research in those areas. No focused, subsurface archaeological exploration has occurred in the low-lying floodplain of the Santa Ana River to the west and inside of the Park.

Examination of the historic topographic maps, aerial photographs, and geomorphological context indicates that the proposed project area remains largely undeveloped, undisturbed, and underlain by native alluvial soils. The channelization of the Santa Ana River and development of the Banning Channel impacted the western margin of the proposed project area. Minor agricultural activity and habitat restoration after channelization affected likely only the top 1 to 2 feet of sediments. This suggests that the Park retains subsurface integrity.

Extensive archaeological deposits, most of which are likely related to the ethnohistoric village of *Lukup*, border the eastern margin of the Park, lining the bluffs. These deposits have high archaeological and tribal significance. The density of aboriginal occupation on the bluffs is a strong predictor of adjacent buried archaeological deposits in the Santa Ana flood plain east of the river channel. Floodplains next to major waterways (including marshes) in Southern California have been frequently demonstrated to contain significant, buried archaeological deposits, such as those found at Bolsa Chica (Couch et al. 2009). For these reasons, the Park is characterized as moderately sensitive for archaeological resources.

The Park is considered to have moderate sensitivity for archaeological resources, whether underneath vegetation or buried in floodplain deposits. As such, there is a moderate potential for the inadvertent discovery of archaeological resources during proposed project implementation and construction may result in impacts to unknown archaeological resources during ground-disturbing activities. Accordingly, MM-CUL-1 and MM-CUL-2 are provided to address potential impacts. MM-CUL-1 would require the preparation of a Worker Environmental Awareness Program (WEAP) that would inform all personnel working on the proposed project about the archaeological sensitivity of the area. MM-CUL-2 establishes formal halt work protocol (and additional measures) to adhere to should earthmoving activities encounter any cultural resources. With implementation of MM-CUL-1 and MM-CUL-2 impacts to unknown archaeological resources would be **less than significant with mitigation**.

MM-CUL-1 **Worker Environmental Awareness Program.** Prior to commencement of construction activities for all phases of project implementation, OC Parks shall retain a qualified archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to OC Parks for review and approval. All construction personnel and monitors shall be presented with the WEAP training by the qualified archaeologist prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. The WEAP shall define “tribal cultural resources” and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

MM-CUL-2 **Inadvertent Archaeological Discoveries.** In the event that any cultural resources are encountered during earthmoving activities, all work within 50 feet of the find shall be halted until a qualified archaeologist/archaeological principal investigator (archaeologist) can evaluate the findings and make recommendations. The archaeologist may evaluate the find in accordance with federal, State, and local guidelines, including those set forth in the California Public Resources Code (PRC) Section 21083.2 and as outlined by CEQA (14 CCR 15064.5[f]; PRC Section 21082), to assess the significance of the find and identify avoidance or other measures as appropriate. If suspected prehistoric or historical archaeological deposits are discovered during construction, all work within the immediate area of the discovery shall be redirected and the find must be evaluated for significance by a qualified archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for archaeology (National Park Service 1983). The work exclusion buffer may be adjusted as appropriate to allow work to feasibly continue at the recommendation of the archaeologist. Should it be required, temporary flagging shall be installed around this resource in order to avoid any disturbances from construction equipment. The potential for avoidance should be the primary consideration of this initial process.

If the archaeologist observes the discovery to be potentially significant under CEQA, additional efforts, such as the preparation of a monitoring plan shall be prepared by a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, and implemented upon approval by OCPW. The monitoring plan shall include the required archaeological resource treatment, testing, and/or data recovery procedures. If approved by OCPW and noted in the monitoring plan, an archaeological monitor shall be present during the remainder of the ground-disturbing activities for the Project. Archaeological monitoring may be adjusted (increase, decreased, or discontinued) at the recommendation of the archaeological principal investigator and based on inspection of exposed cultural material and the observed potential for soils to contain intact cultural deposits or otherwise significant archaeological material. The archaeological monitor shall be provided with a copy of the Cultural Resources Inventory Report and its pertinent appendices to inform their monitoring efforts. The archaeological monitor shall have the authority to temporarily halt work to inspect areas for potential cultural material or deposits.

Daily monitoring logs shall be completed by the onsite archaeological monitor. Within 60 days following completion of construction, the archaeologist shall provide an archaeological monitoring report to OCPW. This report shall include the results of the cultural monitoring program (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates all mitigation measures defined in the environmental document were appropriately met. Appendices shall include archaeological monitoring logs and documentation relating to any newly identified or updated cultural resources. This report shall be submitted to the SCCIC once considered final.

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

Less than Significant Impact. The proposed project is a Master Plan document that includes implementation of specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park.

No prehistoric or historic burials were identified within the Park during the CHRIS records search or pedestrian survey. In the event that previously unknown human remains are inadvertently encountered during construction activities, such resources would be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California PRC Section 5097.98, and the CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further excavation or disturbance of the Park or any nearby area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined, within two working days of notification of the discovery if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the NAHC within 24 hours. The NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant must then complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with OC Parks, the disposition of the human remains. Compliance with these regulations would ensure that impacts to human remains resulting from the proposed project would be **less than significant** and no project specific mitigation is required.

To formalize compliance, the following Regulatory Compliance Measure (RCM-CUL-1: Human Remains) is included to ensure consistent implementation.

RCM-CUL-1 Human Remains. In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County of Orange (County) Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the County shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the County of Orange (County) Public Works Department, or designee, shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.

4.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or 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 checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less than Significant Impact. Implementation of the proposed project (i.e., specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park) would result in energy use for construction and operation, including use of electricity and petroleum-based fuels. The electricity used for construction of the proposed project would be temporary and would make a negligible contribution to the Project’s overall energy consumption. The

proposed project is not anticipated to result in additional need for natural gas consumption. Refer to Section 3.17(b) for a discussion on vehicle miles traveled (VMT).

The Project's impact on energy resources is discussed separately below for the construction and operation phases. Energy consumption (electricity and petroleum consumption) was estimated using CalEEMod data from the air quality and GHG emissions assessment (Appendix A, Air Quality and Greenhouse Gas Emissions CalEEMod Output Files). The proposed project is not anticipated to use natural gas. For further detail on the assumptions and results of the energy analysis, please refer to Appendix A.

Construction Energy Use

Electricity

Electricity consumed during proposed project construction is anticipated to be minimal. Various construction activities that would potentially require electricity include the conveyance of water that would be used for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available Southern California Edison (SCE) electricity supplies and infrastructure. For example, during the 3-month period between September 2024 to December 2024, SCE generated 1.7 Terawatt-Hours (TWh) (GridInfo.com 2026). Therefore, the use of electricity during proposed project construction would not be wasteful, inefficient, or unnecessary.

Petroleum-Based Fuels

Petroleum-based fuel usage represents most energy consumed during construction. Petroleum fuels would be used to power off-road construction equipment on the Park, construction workers would travel to and from the Park, as well as delivery and haul truck trips (e.g., hauling of material to disposal facilities).

Fuel consumption from construction equipment and vehicles was estimated by converting the total carbon dioxide (CO₂) emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. For energy calculation purposes, all off-road equipment and hauling and vendor trucks are assumed to be diesel, while worker vehicles are assumed to be gasoline. Construction is anticipated to begin in September 2027 and last 7 months according to the County. The conversion factor for gasoline is 8.78 kilograms per metric ton CO₂ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO₂ per gallon (The Climate Registry 2023). The estimated diesel fuel usage from construction equipment for construction of the proposed project is shown in Table 4.6-1, Estimated Construction Fuel Use.

Table 4.6-1. Estimated Construction Fuel Use

Source	Fuel Use (gallons)	
	Diesel	Gasoline
Off-Road Equipment	23,986	—
On-Road Trucks	18,219	—
On-Road Workers	—	2,742
Total	42,205	2,742

Notes: Conversion factors from The Climate Registry (2023).
See Appendix A for complete results.

As shown in Table 4.6-1, construction of improvements associated with the proposed project is anticipated to consume 2,742 gallons of gasoline and 42,205 gallons of diesel over the construction period. The proposed project would be required to comply with the CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes, which incidentally reduces fuel consumption. Furthermore, the proposed project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that requires the vehicle fleet to reduce emissions by retiring, replacing, repowering older engines, or installing Verified Diesel Emissions Control Strategies, ensuring that the construction vehicles are as energy efficient as practicable. Therefore, impacts associated with petroleum-based fuels during construction would be less than significant.

Operational Energy Use

Electricity

The proposed project would require electricity for the maintenance yard lighting and Nature Center building. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. Electricity consumption associated with proposed project operation is based on the CalEEMod outputs presented in Appendix A.

CalEEMod default values for energy consumption for the proposed uses were applied for the proposed project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end-use categories subject to Title 24 requirements (end-uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Title 24 of the California Code of Regulations enhances and regulates California building standards. The most recent amendments to Title 24, Part 6, referred to as the 2022 standards, became effective on January 1, 2023. According to CalEEMod estimates, the proposed project would consume approximately 1,034 kilowatt-hours per year during operation. For context, in 2023, California used approximately 276,213 gigawatt-hours of electricity. Locally, in 2023, non-residential electricity demand in Orange County was approximately 19,578 gigawatt-hours (CEC 2025).

Petroleum

During operations, fuel consumption resulting from the proposed project would involve the use of motor vehicles traveling to and from the Park by one maintenance worker per day in addition to additional visitors to the park. As detailed further in Section 4.17, Transportation, the proposed project would result in 69 daily trips.

Petroleum fuel consumption associated with new motor vehicles traveling to and from the Park is a function of the VMT as a result of proposed project operation. As shown in Appendix A,, and as discussed in Section 4.3, *Air Quality*, and Section 4.8, *Greenhouse Gas Emissions*, the annual VMT attributable to the proposed project were estimated based on project-specific trip generation information and adjusted mileage assumptions. Similar to the construction worker and truck trips, fuel consumption from employees is estimated by converting the total CO₂ emissions from operation of the proposed project to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, approximately 95% of the fleet are assumed to run on gasoline, while the remaining 5% are assumed to run on diesel. In the first year of assumed operations (2028), the proposed project would consume approximately 8,970 gallons of gasoline, and 406 gallons of diesel from vehicle travel.

Summary

Over the lifetime of the project, the fuel efficiency of the vehicles being used by employees is expected to increase due to federal and state regulatory requirements for fuel efficiency and increasing preference for electric vehicles. As such, the amount of gasoline and diesel consumed during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California (CARB 2017). Additionally, in response to Senate Bill (SB) 375, CARB has adopted the goal of reducing per-capita GHG emissions from 2005 levels by 13% by the year 2035 for light-duty passenger vehicles in the SCAG planning area. This reduction would occur by reducing VMT through the integration of land use planning and transportation. As such, operation of the proposed project is expected to use decreasing amounts of petroleum over time, due to advances in fuel economy. For example, as of November 30, 2022, CARB adopted the Advanced Clean Cars II Regulations, which aim to reach 100% Zero Emissions Vehicles and Plug In Electric Hybrid vehicles for new vehicles sold in the state by 2035.

The proposed project would create additional electricity demand by adding an electrical line to the existing maintenance yard.

In summary, the project, which is a Master Plan document that entails access improvements, infrastructure improvements, and habitat restoration activities, would increase the demand for electricity at the Park and petroleum consumption in the region during construction and operation. However, as the proposed project would be consistent with current regulations and policies, the proposed project would not be wasteful, inefficient, and would not result in unnecessary energy resource consumption. The project's energy consumption demands during construction and operation would conform to the State's Title 24 standards such that the proposed project would not be expected to wastefully use gas and electricity. The proposed project would not directly require the construction of new energy generation or supply facilities or result in wasteful, inefficient, or unnecessary consumption of energy. Moreover,

vehicle usage associated with the proposed project would use less petroleum due to advances in fuel economy and potential reduction in VMT over time. Therefore, impacts would be **less than significant**, and no project specific mitigation is required.

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

Less than Significant Impact. The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency including the County of Orange Climate Action Plan Phase 2 (County of Orange 2026). As described in Section 3, Project Description, the proposed project would provide electricity via extension of existing electrical line from the existing restroom building in North Talbert to the existing maintenance yard located within Park boundaries (electrical and water would also be required for the proposed Nature Center building). This energy consumption would be minimal and necessary to accommodate existing maintenance operations on-site, and to facilitate the management of the existing park uses on-site. The proposed project would involve negligible long-term energy use, primarily related to electricity consumption and would generate a nominal amount greenhouse gas (GHG) emissions (refer to Section 4.8, Greenhouse Gas Emissions, of this IS/MND).

Upon completion of construction/habitat-restoration-related activities at the site, the project’s operational characteristics would be comparable to the existing condition and energy consumption would be limited to maintenance activities of the on-site park uses. The proposed project would also not conflict with CARB’s Climate Change Scoping Plan, which identifies several strategies to reduce GHG emissions through energy efficiency. As discussed in further detail in Section 4.8, the strategies identified in the CARB Climate Change Scoping Plan are primarily state actions requiring no involvement at the project level, meaning that the proposed project would inherently comply with them. As such, implementation of the proposed project would not conflict with applicable plans for energy efficiency, and the impacts during construction and operation would be **less than significant**, and no project specific mitigation is required.

4.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
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"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<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) **Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

and

ii) **Strong seismic ground shaking?**

Less-Than-Significant Impact. Talbert Regional Park, like all of southern California, is located within a seismically active region that contains major active faults. The proposed project, which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration activities within the Park boundaries, would likely be exposed to seismic ground shaking at multiple points in the future. The intensity of ground shaking at any specific location within the region depends on the characteristics of the earthquakes, the distance from the earthquake epicenter, and the local geologic and soil conditions. Earthquake fault zones are delineated boundaries encompassing active faults that constitute potential hazards to structures from surface faulting or fault creep (DOC 2018). The Park is not located within an Alquist-Priolo Earthquake Fault Zone; the nearest fault zone (Newport-Inglewood-Rose Canyon Fault Zone)

is located approximately 1.75 miles north of the Park (DOC 2022). Proposed project construction entails routine and standard practices which would not increase or exacerbate the potential for fault rupture to occur. Operation of the proposed project would not directly or indirectly increase or exacerbate the potential for fault rupture. The proposed project would contain no habitable structures or other structural development intended for human occupancy. Compliance with applicable seismic design requirements would reduce the potential risk to both people and structures with respect to strong seismic ground shaking. Therefore, the proposed project would not directly or indirectly cause potential adverse effects involving rupture of a known earthquake fault, and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less-than-Significant Impact. Liquefaction occurs when a buildup of pore water pressure in the affected soil layer to a point where a total loss of shear strength may occur during a seismic event, causing the soil to behave as a liquid. The Park is located within a liquefaction zone, as mapped by the California Department of Conservation (DOC 2022). Although the Park is mapped in an area that is subject to the hazard of liquefaction, it is primarily managed as open space and the proposed park improvements, that are relatively minor in scope, would not exacerbate existing risks of liquefaction within the Park. Therefore, liquefaction is not considered to be a hazard associated with the proposed project. Additionally, the proposed project (in particular, the proposed nature center structure) would undergo full design, which would include engineering design standards associated with addressing and minimizing liquefaction potential and the incorporation of pertinent geotechnical information to provide for the stabilization of soils. Therefore, the proposed project, which is a Master Plan document that consists of access improvements, infrastructure improvements, and habitat restoration activities within the Park boundaries, would not increase the risk from seismic-related ground failure, including liquefaction, and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

iv) Landslides?

No Impact. The proposed project entails specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park. Landslides typically occur on moderate to steep slopes that are affected by such physical factors as slope height, slope steepness, shear strength, and orientation of weak layers in the underlying geologic units contribute to landslide susceptibility. The Park and surroundings are generally flat and not located in a landslide zone, as mapped by the California Department of Conservation (DOC 2022). In addition, the proposed project does not propose and would not involve creation of manmade slopes that could be a source of landslides. As such, **no impact** associated with landslides would occur and as such, no project specific mitigation is required.

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

Less Than Significant Impact. Construction of proposed park improvements including the nature center, new trails, and access ramps would require earthwork activities that could potentially contribute to soil erosion or loss of topsoil if not properly implemented. Construction of the proposed project would result in more than 1 acre of land disturbance; therefore, the proposed project contractor would prepare and implement a site-specific SWPPP in accordance with SWRCB Order No. 2009-0008-DWQ NPDES General Permit No. CAS00002 (Construction General Permit), amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. One of the purposes of the SWPPP is to address potential pollutants and their sources, including sources of sediment and site erosion. Conditions of these existing regulations would include adherence to

sediment and stormwater pollutant control BMPs, such as covering of exposed soil stockpiles, sediment barriers, storm drain protection, and various other measures designed to minimize potential for soil erosion and loss of topsoil. Disturbed areas would be returned to existing conditions or stabilized by new field replacement, asphalt, or landscape plantings. Operation of the proposed project would not result in any significant changes to the existing condition that would affect erosion. Therefore, the proposed project would not result in substantial soil erosion or the loss of topsoil and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

- c) ***Would the project 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. The proposed project is a Master Plan document that includes specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park. As discussed above, the Park is located within a liquefaction zone (DOC 2022); however, the proposed project (in particular, the proposed nature center) requires additional geotechnical investigations to inform final design and construction of the structure to minimize potential geotechnical risks, including soil stability. Therefore, the proposed project would not exacerbate geotechnical hazards related to unstable soils and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

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

Less than Significant Impact. Expansive soils are clay-based and tend to increase in volume due to water absorption and decrease in water volume due to drying. A review of the U.S. Department of Agriculture Soil Map indicates that the soils found within the Park consist of loamy sand, sandy loam, and silt loam (USDA 2022). These soils are not clay-based; thus, no expansive soils are present within the Park and soil expansion would not pose a potential concern for implementation of proposed project components including specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park. Please also refer to the analysis presented under 4.7(c) above, for discussion of liquefaction risks. If such conditions are encountered, the proposed project (in particular, the proposed nature center and electrical utility trenching) would employ standard engineering protocols to limit the potential effects on project-related infrastructure. Therefore, impacts would be **less than significant**, and no project specific mitigation is required.

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

No Impact. The proposed project, that includes a Master Plan document with specific access improvements, infrastructure improvements, and habitat restoration activities, would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, **no impact** would occur, and no project specific mitigation is required.

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

Less than Significant Impact with Mitigation. The Park is located within the Peninsular Ranges Geomorphic Province (Norris and Webb 1990). This geomorphic province is characterized by northwest trending mountain ranges and valleys that extend over 900 miles from the tip of the Baja California Peninsula to the Transverse Ranges (i.e., the San Bernardino and San Gabriel Mountains in Southern California). Regionally, the Peninsular Ranges are bounded to the east by the Colorado Desert and extends west to include the continental shelf and offshore islands (Santa Catalina, Santa Barbara, San Nicholas, and San Clemente) (Norris and Webb 1990). Regional mountain ranges in the Peninsular Ranges Geomorphic Province include the Santa Ana, San Jacinto, and Santa Rosa Mountains. Geologically, these mountains are dominated by Mesozoic, plutonic igneous and metamorphic rocks that are part of the Peninsular Ranges Batholith (Southern California Batholith) (Jahns 1954).

More specifically, the Park is located within the Los Angeles Basin. The basin is a sedimentary region connected to an anomalous group of east west-trending mountains collectively known as Transverse Ranges. The present basin is a coastal lowland area whose floor is marked by elongated low ridges and groups of hills that are located on the eastern edge of the Pacific Plate (Jahns 1973). According to surficial geological mapping by Morton and Miller (2006) at a scale of 1:100,000, the study area is underlain by young alluvial fans and young axial-channel deposits (map units Qyf and Qya_s) that are Holocene in age. These Holocene deposits generally have low paleontological sensitivity at the surface because of their young age; however, because the age of sediments increases with depth below the ground surface, the paleontological sensitivity increases from the surface to the subsurface. The eastern extension of the proposed project is underlain by late to middle Pleistocene (~11,700 years ago – 774,000 years ago) (Cohen et al. 2022) old paralic deposits (map unit Qop). Pleistocene paralic deposits have high paleontological sensitivity throughout their extent.

A paleontological records search request was sent to the Natural History Museum of Los Angeles County (NHMLA) on February 1, 2022, and the results were received on February 6, 2022 (Appendix D, Paleontological Resources Record Search). According to the records search, there are no paleontological localities in the proposed project area, but there are fossil localities very near the same sedimentary deposits underlying the proposed project area (NHMLA 2022). The nearest locality to the proposed project area, LACM IP (Los Angeles County Museum Invertebrate Paleontology) 436, was recovered just west of the proposed project area across the Santa Ana River in deposits similar to those that occur at the surface in the easternmost portion of the proposed project area and at an unknown depth below the ground surface (bgs) throughout the majority of the proposed project area. The specimens consisted of unspecified invertebrates recovered from 35-40 feet bgs (NHMLA 2022). Further review of the paleontological records search indicated fossil yielding localities near the proposed project including LACM IP 241, LACM VP (Vertebrate Paleontology) 7422-7425, LACM VP 7366, LACM VP 7679, LACM IP 17427, LACM VP 7657-7659, LACM VP 5466, LACM VP 4254, LACM IP 17103, and LACM IP 17104. These localities included both invertebrate and vertebrate specimen including fossil legless lizard, tree frog, garter snake, kingsnake, ring-necked snake, salamander, skinks, alligator lizards, turtle, quail, vole, shrew kangaroo rat, deer mouse, bat, horse, bison, mammoth, school shark, eagle ray, croaker, sea duck, mussel, clam, and turban snail. The LACM recommended a full paleontological assessment of the proposed project be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards, which this study complies with.

No paleontological resources were identified within the proposed project area as a result of the institutional records search, and desktop geological and paleontological review, and the proposed Park is not anticipated to be underlain by unique geologic features. The majority of the proposed project area is mapped as being underlain by young alluvial fan deposits that are likely too young on the surface to yield significant paleontological resources; however, intact paleontological resources may be present within finer-grained soils of these deposits at depth and in undisturbed Pleistocene paralic deposits. Therefore, given the proximity of past fossil discoveries in the surrounding area and the potential for intact, undisturbed, fine-grained Pleistocene age deposits at depth, the proposed project is moderately to highly sensitive for supporting paleontological resources in areas underlain by old paralic deposits on the surface or deeper excavations into Holocene deposits. In the event that intact paleontological resources are located beneath the proposed Park, ground-disturbing activities associated with construction of the proposed project, such as grading during site preparation and trenching for utilities, have the potential to destroy a unique paleontological resource or site. Without mitigation, the potential damage to paleontological resources during construction would have a potentially significant impact. However, with implementation of MM-GEO-1, which consists of the preparation of a Paleontological Resources Impact Mitigation Program by a certified Orange County paleontologist, impacts would be reduced to below the level of significance. Impacts of the proposed project are considered **less than significant with mitigation** incorporated during construction.

MM-GEO-1 Prior to the commencement of any grading or ground disturbing activities on-site, the County of Orange shall retain a certified Orange County paleontologist. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) (2010) and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Park based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, paleontological methods (including sediment sampling for microfossils), reporting, and collections management. The qualified biologist shall attend the preconstruction meeting and a qualified paleontological monitor shall be on-site during all rough grading and other significant ground-disturbing activities (including augering) in area underlain by old paralic deposits and below a depth of 5 feet in areas underlain by young alluvial fan deposits.

4.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
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) **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than Significant Impact. Greenhouse Gases (GHGs) are those gases that absorb infrared radiation (i.e., trap heat) in the Earth's atmosphere. The trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere), is referred to as the "greenhouse effect", and is a natural process that contributes to the regulation of the Earth's temperature, creating a livable environment on Earth. The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. Human activities that generate and emit GHGs into the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. This rise in temperature has led to large-scale changes to the Earth's system (e.g., temperature, precipitation, wind patterns, etc.), which are collectively referred to as climate change. Global climate change has a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5). The primary GHGs that would be emitted by project-related construction and operations include CO₂, CH₄, and N₂O.⁸

The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare each GHG's ability to trap heat in the atmosphere relative to another gas. The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO₂ equivalent (CO₂e). Consistent with CalEEMod Version 2022.1.1.29, this GHG emissions analysis assumed the GWP for CH₄ is 25 (i.e., emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the IPCC's Fourth Assessment Report (IPCC 2007).

The proposed project is a Master Plan document that includes specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing Park boundaries. As discussed in Section 4.3, *Air Quality*, the Park is located within the jurisdictional boundaries of the SCAQMD. In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document—Interim CEQA Greenhouse Gas Significance Threshold (SCAQMD 2008b). This document, which is built on the California Air Pollution Control Officers Association's previous guidance, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO₂e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (SCAQMD 2010). The 10,000 MT

⁸ Emissions of hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride are generally associated with industrial activities, including the manufacturing of electrical components and heavy-duty air conditioning units and the insulation of electrical transmission equipment (substations, power lines, and switch gears.). Therefore, emissions of these GHGs were not evaluated or estimated in this analysis because the project would not include these activities or components and would not generate hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride in measurable quantities.

CO₂e per-year threshold, which was derived from GHG reduction targets established in Executive Order S-3-05, was based on the conclusion that the threshold was consistent with achieving an emissions capture rate of 90% of all new or modified stationary source projects.

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land-use development projects. The most recent proposal issued by SCAQMD, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

- Tier 1.** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2.** Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3.** Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO₂e per-year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO₂e per year), commercial projects (1,400 MT CO₂e per year), and mixed-use projects (3,000 MT CO₂e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO₂e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4.** Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of Assembly Bill (AB) 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO₂e per-service population for project-level analyses and 6.6 MT CO₂e per-service population for plan-level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5.** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.” The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency’s discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009).

To determine the proposed project’s potential to generate GHG emissions that would have a significant impact on the environment, its GHG emissions were compared to the SCAQMD 3,000 MT CO_{2e} per year screening threshold recommended for non-industrial projects.

Construction Greenhouse Gas Emissions

Construction of the proposed project would result in GHG emissions, which are primarily associated with off-road construction equipment, on-road haul and vendor trucks, and worker vehicles. The SCAQMD recommends that “construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies” (SCAQMD 2008b). Thus, the total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions for comparison with the GHG significance threshold of 3,000 MT CO_{2e} per year. Therefore, the determination of significance is addressed in the operational emissions discussion following the estimated construction emissions.

CalEEMod Version 2022.1.1.29 was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.3, *Air Quality*. Construction of the proposed project is anticipated to commence in September 2027 and be completed by March 2028. On-site sources of GHG emissions include off-road equipment, and off-site sources include haul trucks, vendor trucks, and worker vehicles. Table 4.8-1 presents the GHG emissions resulting from construction of the project. For further detail on the assumptions and results of this analysis, please refer to Appendix A.

Table 4.8-1. Estimated Annual Construction GHG Emissions

Construction Phase	CO ₂	CH ₄	N ₂ O	R	CO _{2e}
	Metric Tons per Year				
2027	285.95	0.02	0.03	0.16	294.98
2028	170.66	0.01	<0.01	0.03	172.08
Total Construction GHG Emissions					467.06
Amortized Emissions (30-year project life)					15.57

Notes: GHG = greenhouse gas; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; R = refrigerants; CO_{2e} = carbon dioxide equivalent; <0.01 = reported value less than 0.01.
See Appendix A for complete results.

Operational Greenhouse Gas Emissions

CalEEMod Version 2022.1.1.29 was used to estimate potential project-generated operational GHG emissions from mobile sources, area sources (landscape maintenance equipment), water use and wastewater generation, solid waste (i.e., CO_{2e} emissions associated with landfill off-gassing), and refrigerants. As explained in Section 4.3, mobile source emissions were estimated based on project-specific trip generation estimates for, and area source emissions were estimated using CalEEMod default values for the proposed uses. Regarding solid waste, to estimate potential GHG emissions associated with landfill off-gassing, CalEEMod default values were applied. Similarly, to estimate potential GHG emissions from supply, conveyance, treatment, and distribution of water and wastewater treatment, CalEEMod default values were applied. For additional details see Section 4.3 for a discussion of operational emission calculation methodology and assumptions, specifically for mobile sources, as well as Appendix A. The proposed project is assumed to begin operation by 2028 after completion of construction. Table 4.8-2

shows the estimated annual GHG emissions from operation of the proposed project. As discussed above, total annual operational emissions were combined with amortized construction emissions and compared to SCAQMD’s recommended threshold of 3,000 MT CO₂e per year for non-industrial projects.

Table 4.8-2. Estimated Annual Operational GHG Emissions

Emission Source	CO ₂	CH ₄	N ₂ O	R	CO ₂ e
	Metric Tons per Year				
Mobile	82.90	<0.01	<0.01	0.10	84.08
Area	0.02	<0.01	<0.01	—	0.02
Energy	0.16	<0.01	<0.01	—	0.16
Solid Waste	0.02	<0.01	<0.01	—	0.03
Water Use	26.82	0.02	<0.01	—	26.99
Refrigerants	—	—	—	0.00	0.00
Total Operational GHG Emissions					111.28
<i>Amortized 30-year Construction Emissions¹</i>					<i>15.57</i>
Project Operations + Amortized Construction Total					126.85
<i>SCAQMD Threshold</i>					<i>3,000</i>
Threshold Exceeded?					No

Notes: GHG = greenhouse gas; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; R = refrigerants; CO₂e = carbon dioxide equivalent; <0.01 = reported value less than 0.01.

See Appendix A for complete results.

The total values may not add up exactly due to rounding.

¹ See Table 4.8-1.

As shown in Table 4.8-2, estimated annual project-generated GHG emissions would be approximately 111 MT CO₂e per year due to proposed project operation only. Estimated annual project-generated operational GHG emissions in 2028 plus amortized construction emissions (16 MT CO₂e per year) would be approximately 127 MT CO₂e per year. Therefore, the proposed project would result in a minimal increase in GHG emissions and would not exceed the SCAQMD threshold of 3,000 MT CO₂e per year. The project’s GHG contribution would not be cumulatively considerable and **is less than significant**. Accordingly, no project specific mitigation is required.

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

Less than Significant Impact. The proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and would result in less-than-significant impacts, as described below. Accordingly, no project specific mitigation is required.

In February 2026, Orange County Board of Supervisors approved the County’s Final Climate Action Plan (also referred to as Climate Action Plan Phase 2; County of Orange 2026). In addition to the Final Climate Action Plan, the proposed project has been compared to the applicable GHG reduction measures of CARB’s *Climate Change Scoping Plan*, and SCAG’s 2024-2050 RTP/SCS (SCAG 2024). These plans support the statewide goals of AB 32 and SB 32, which are also discussed below.

- The City of Costa Mesa is in the process of preparing a Climate Action and Adaptation Plan (CAAP); however, as of February 2026, City staff were in the policy development stage of plan preparation. The City anticipates finalizing the CAAP in Summer 2026 (City of Costa Mesa 2026).

Potential to Conflict with the County of Orange Final Climate Action Plan

The County's Climate Action Plan (CAP) serves the County's 22 departments and respective buildings and activities, nearly 19,000 employees, and unincorporated communities so that all residents have access to carbon neutral benefits. The CAP was completed in two phases, the Preliminary CAP and the Final CAP (Phase 2).

The CAP includes a detailed quantification/inventory of GHGs that establishes an accurate baseline for forecasting emissions both with and without CAP implementation, while also accounting for future growth. Emissions inventories are calculated for municipal operations (referred to as municipal inventory) and activities of residents in unincorporated areas (referred to as community inventory). The Final CAP includes two sets of targets for reducing GHG emissions associated with municipal operations – one set for landfill emissions and another for all other sectors (County of Orange 2026). GHG reduction targets presented in the Final CAP were chosen for the years 2030 and 2045 to align with State climate legislation SB 32 and AB 1279. Non-landfill emission targets are as follows:

- By 2030, reduce non-landfill GHG emissions from County of Orange operations by 47 percent below 2018 (equivalent to 48 percent below 1990 levels as stipulated by Assembly Bill 1279 from 2022).
- By 2045, reduce non-landfill GHG emissions from County of Orange operations by 92 percent below 2018 (equivalent to 85 percent below 1990 levels as stipulated by Assembly Bill 1279 from 2022).

The Final CAP organizes measures to reduce emissions into 6 priority sectors including energy, mobility, resource recovery and waste, environmental justice, resilience, and natural resources. For mobility, measures are aimed at the County's extensive fleet of vehicles and on- and off-road equipment and broad goals include expansion of the County-owned EV charging infrastructure, reduced VMT for County employees and County-owned fleet, and decarbonization of the County-owned fleet (County of Orange 2026). Natural resource measures include improved water supply reliability, protected and enhanced surface and beach water quality, and restored and projected ecosystems (County of Orange 2026). It is important to note that the Final CAP clarifies that many of the natural resource measures are not quantifiable and instead provide meaningful co-benefits that support climate resilience, sustainability, and resource conservation (County of Orange 2026). In addition, the Final CAP notes that all measures are for planning purposes only and do not commit the County to any specific project or physical change (County of Orange 2026).

While the majority of CAP measures are not directly applicable to the Project, Natural Resources measure C-NR4 ("Restore and Protect Ecosystems, Native Habitat and Natural Resources") is directly applicable. The proposed project is consistent with the Final CAP action items associated with Measure C-NR4. Specifically, continued habitat restoration and invasive species management activities within the Park would help preserve biodiversity, increase habitat for native terrestrial species, remove invasive species that are a danger to habitat, and preserve and enhance open space. Furthermore, proposed habitat restoration activities and invasive species management included in the proposed project is consistent with Final CAP Action Items C-NR4.1 ("Support increasing the habitat for native terrestrial and aquatic species prioritizing linkages that enhance ecological connectivity"), C-NR4.2 ("Support removal of invasive species

that are a danger to habitat, water supply, ecosystem function, or other economic or beneficial use”), and C-NR4.4 (“Support preservation and enhancement of open space that supports biodiversity and climate resilience”). Lastly and because the proposed project includes proposed improvements to an existing park that would generate minimal new trips, the proposed project would not conflict with mobility measures and associated action items aimed toward decarbonization of the County-owned fleet.

Potential to Conflict with the CARB Scoping Plan

The California State legislature passed the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) to provide initial direction to limit California’s GHG emissions to 1990 levels by 2020 and initiate the state’s long-range climate objectives. Since the passage of AB 32, the state has adopted GHG emissions reduction targets for future years beyond the initial 2020 horizon year. For the project, the relevant GHG emissions reduction targets include those established by SB 32 and AB 1279, which require GHG emissions be reduced to 40% below 1990 levels by 2030 and 85% below 1990 levels by 2045, respectively. In addition, AB 1279 requires the state to achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter.

As defined by AB 32, CARB is required to develop the Scoping Plan, which provides the framework for actions to achieve the state’s GHG emission targets. The Scoping Plan is required to be updated every 5 years and requires CARB and other state agencies to adopt regulations and initiatives that will reduce GHG emissions statewide. The first Scoping Plan was adopted in 2008 and was updated in 2014, 2017, and most recently in 2022. Although the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used as the sole basis for project-level evaluations, it is the official framework for the measures and regulations that will be implemented to reduce California’s GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with the statutes if it would meet the Scoping Plan policies and would not impede attainment of the goals therein.

CARB’s 2017 Climate Change Scoping Plan update was the first to address the state’s strategy for achieving the 2030 GHG reduction target set forth in SB 32 (CARB 2017), and the most recent CARB 2022 Scoping Plan for Achieving Carbon Neutrality update outlines the state’s plan to reduce emissions and achieve carbon neutrality by 2045 in alignment with AB 1279 and assesses progress the state is making toward the 2030 SB 32 target (CARB 2022). As such, given that SB 32 and AB 1279 are the relevant GHG emission targets, the 2017 and 2022 Scoping Plan updates that outline the strategy to achieve those targets are the most applicable to the project.

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), measures to increase the stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and measures to increase the stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022). Many of the measures and programs included in the Scoping Plan, while not applicable to the project, would result in the reduction of project-related GHG emissions with no action required at the project-level, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of

transportation fuels (Low Carbon Fuel Standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy).

The 2045 carbon neutrality goal required CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions. However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the state's natural and working lands will not be sufficient to address residual GHG emissions, and achieving carbon neutrality will require research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture). Given that the specific path to neutrality will require development of technologies and programs that are not currently known or available, the project's role in supporting the statewide goal would be speculative and cannot be wholly identified at this time.

Because the proposed project would include proposed improvements to an existing park and minimal new trips, the proposed project would not conflict with the applicable strategies and measures in the 2017 Scoping Plan and 2022 Scoping Plan, respectively. As mentioned above, several Scoping Plan measures would result in reductions of project-related GHG emissions with no action required at the project-level, including those related to reduced fossil fuel use.

Potential Conflict with the Southern California Association of Governments' 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG 2024–2050 RTP/SCS is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375. In addition to demonstrating the Region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2024–2050 RTP/SCS includes strategies, which are intended to be supportive of implementing 2024-2050 RTP/SCS and reducing GHGs: focus growth near destinations and mobility options, promote diverse housing choices, leverage technology innovations, support implementation of sustainability policies, and promote a green region (SCAG 2024).

The key 2024–2050 RTP/SCS strategies are not applicable to the proposed project, which does not include residential or substantial employment growth as the proposed project operation and maintenance would be served by existing County employees and the proposed project would serve an existing community in the location of an existing park. Additionally, the Park is an existing use, and its use would continue as-is with (or without) implementation of the project. Regarding the SCAG's goal of promoting a green region, SCAG aims to accomplish this through efforts such as supporting local policies for renewable energy production and promoting more resource efficient development (e.g., reducing energy consumption) to reduce GHG emissions. As discussed under Section 3.8(a) above, the proposed project would not consume substantial energy or result in substantial associated GHG emissions. Overall, the proposed project would not conflict with or impede implementation of the SCAG 2024-2050 RTP/SCS.

Potential to Conflict with California Senate Bill 32

SB 32 requires the California Air Resources Board (CARB) to ensure that statewide GHG emissions are reduced to 40% below their 1990 levels by 2030. The California Governor issued EO S-3-05, GHG Emission, in June 2005, which established the following reduction targets:

- 2010: Reduce GHG emissions to 2000 levels
- 2020: Reduce GHG emissions to 1990 levels
- 2050: Reduce GHG emissions to 80% below 1990 levels.

The SCAQMD uses EO S-3-05 as the basis for their screening level, and EO S-3-05 includes the long-term goal to reduce GHG emissions to 80% below 1990 levels by 2050. Any project that is consistent with SCAQMD’s thresholds would also be consistent with the goal of SB 32 (to reduce GHG emissions to 40% below 1990 levels by 2030). Therefore, projects that meet the current interim emissions targets/thresholds established by SCAQMD would also be on track to meet the reduction targets for 2030. As shown in Table 4.8-2 above, the proposed project is not anticipated to generate GHG emissions during construction or operation that would exceed the SCAQMD’s recommended threshold of 3,000 MT CO₂e per year for non-industrial projects. The recommended threshold is set in order to achieve emission reduction targets. Furthermore, all post-2020 reductions in GHG emissions are addressed via regulatory requirements at the state level, and a project would be required to comply with these regulations as they come into effect.

Overall, the proposed project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent applicable and required by law. As mentioned above, several Scoping Plan measures would result in reductions of project-related GHG emissions with no action required at the project-level, including those related to energy efficiency, reduced fossil fuel use, and renewable energy production by the utility. As demonstrated above, the proposed project would not conflict with the County of Orange Final CAP, CARB’s 2017 or 2022 Scoping Plan updates and with the state’s ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals. Impacts associated with applicable GHG plans, policies, or regulations would be **less than significant**. Accordingly, no project specific mitigation is required.

4.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
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"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

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

Less Than Significant Impact. The proposed project is a Master Plan document that would implement access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park. Hazardous substances that would be used during construction would include gasoline, diesel fuel, lubricating oil, adhesive materials, grease, solvents, and architectural coatings. Materials may be stored at the Park maintenance yard during construction. Similarly, operation and maintenance of the proposed project would also require routine use of common hazardous substances. These materials are not considered extremely hazardous and are used routinely throughout urban environments for both construction projects and structural improvements. Further, these materials would be stored, transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment. With adherence to state and local regulations, impacts associated with routine transport, use, storage, and disposal of hazardous materials would be **less than significant** and no project specific mitigation is required.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant Impact. As discussed in response to Threshold Section 4.9(a), construction would involve commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, grease, and

adhesive materials. These materials are not considered acutely hazardous pursuant to 40 CFR Part 260 Subpart B and are used routinely throughout urban environments for both construction and operation of projects and small-scale structural improvements. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. With adherence to state and local regulations, impacts associated with reasonably foreseeable upset and accident conditions would be **less than significant** and no project specific mitigation is required.

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

Less Than Significant Impact. The proposed project is a Master Plan document that would implement access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park. The nearest school is the Waldorf School of Orange County, located at 2350 Canyon Dr, Costa Mesa, CA, 92627, approximately 0.2 miles east of Talbert Regional Park (specifically, the North Talbert parcel).

As discussed in response to Threshold Section 4.9(a), construction would involve commonly used hazardous substances including gasoline, diesel fuel, lubricating oil, grease, and adhesive materials. These materials are not considered acutely hazardous pursuant to 40 CFR Part 260 Subpart B and are used routinely throughout urban environments for both construction and operation of projects and small-scale structural improvements. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. With adherence to state and local regulations, impacts would be **less than significant**, and no project specific mitigation is required.

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

No Impact. According to the DTSC's EnviroStor database, there are no clean-up sites located within or near the Park (DTSC 2025). Other state and local government agencies are required to provide additional hazardous materials and release information for the Cortese List. The State Water Resources Control Board (SWRCB)'s GeoTracker database identifies leaking underground storage tanks, waste discharge sites, oil and gas sites, and other waste or cleanup sites. A review of GeoTracker did not identify any sites or facilities within or adjacent to the proposed project area (SWRQCB 2025). The nearest identified site with open-site assessment statuses is Newport Banning Ranch LLC (ID#SL0605921271), a Cleanup Program Site, located approximately 0.6 miles southwest of the Park. These hazardous materials sites are located at adequate distances from the Park such that they would not affect a worker hazard for construction crews (the proposed project entails access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park). Therefore, **no impact** would occur. Accordingly, no project specific mitigation is required.

- 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 nearest airport is John Wayne Airport, located approximately 4.4 miles northeast of the Park. The Park does not fall within the airport environs land use plan for this nearby airport (ALUC 2008). There are two helispots in South Talbert (see Exhibit 5.1 Emergency Access Plan, in the Park Master Plan) that are provided to ensure firefighting crews can access fires in the Park quickly and effectively (use of the helispots is infrequent and typically is limited to emergency fire events). The proposed project is not located within 2 miles of a public use airport, nor is it located within an airport land use plan. As such, there would be no excessive noise or safety hazards affecting the project, and **no impact** would occur. Accordingly, no project specific mitigation is required.

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

Less-than-Significant Impact. The proposed project is a Master Plan document that would implement access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park. Construction of the proposed project would require temporary closure of areas under active construction. Construction of the proposed project would not require the partial or full closure of roadways and would not prevent emergency access to the Park or the surrounding area. Furthermore, the proposed project includes the construction of a new emergency vehicle access ramp off Balboa Boulevard that would improve emergency access and response to the park. Implementation of the proposed project does not require any amendments or revisions to the County's Local Hazard Mitigation Plan or the City of Costa Mesa's Local Hazard Mitigation Plan (City of Costa Mesa 2022) and would not result in any interference of adopted emergency response or evacuations. Therefore, impacts would be **less than significant**, and no project specific mitigation would be required.

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

No Impact. The Park is located within a Local Responsibility Area (LRA) and is not located within a Very High Fire Hazard Severity Zone (VHFHSZ) within an SRA (CAL FIRE 2025). However, North Talbert is primarily mapped within a High Fire Hazard Severity Zone and South Talbert is mapped as within a Moderate Fire Hazard Severity Zone (CAL FIRE 2025). The proposed project, which is a Master Plan document that entails access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park, would not contain habitable structures or other structural development intended for human occupancy. While a Nature Center is proposed, this structure would be located at the site of the existing restrooms building in North Talbert and would be built consistent with all relevant building codes and safety standards. As such, the proposed project would not expose people or structures to significant risk of loss, injury, or death involving wildfires. **No impact** would occur, and no project specific mitigation is required.

4.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 or 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 type="checkbox"/>	<input checked="" 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 off-site;	<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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-than-Significant Impact. The proposed project is a Master Plan document that would implement access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park.

The Clean Water Act (CWA) is the primary federal law regulating water quality and protecting water resources. Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) to regulate discharge of pollutants into water resources. In California, SWRCB and Regional Water Resource Quality Control Boards (RWQCBs) administer the NPDES permitting programs. The regulating agency for the Park is the Santa Ana RWQCB, which administers the Construction General Permit. The Construction General Permit applies to development projects that would disturb over 1 acre of land and require the implementation of best management practices (BMPs) to prevent stormwater runoff from the construction site. In addition to the Construction General Permit, development in Costa Mesa would be subject to Costa Mesa Municipal Code Title 8, Chapter III, Section 8-32 (Control of Runoff), which prevents or reduces runoff from new development, significant redevelopment, or grading.

Construction activities associated with the proposed project would disturb more than one acre of land and thus would be subject to the Construction General Permit and any BMPs required by the permit to reduce or prevent runoff from the Park to nearby surface water. BMPs would be applied to all earthwork/ground disturbing activities, such as grading for trail improvements, construction of access ramps, and trenching for electric utilities. Therefore, construction would not violate water quality standards or substantially degrade water quality.

Operation of the proposed project would not result in any new sources of runoff. The proposed project would include construction of the Nature Center, new access ramps into the park from Balboa Boulevard and the Banning Channel Bikeway, new and elevated trails, extension of existing electrical service to the park maintenance yard, installation of wayfinding features, and continuation of habitat restoration practices. Paving would occur for a limited area (900 square feet) at the Balboa Boulevard entrance, otherwise the proposed project would not introduce new paved or impervious surfaces. For the access ramp construction, standard BMPs such as soil stabilization methods would be implemented. Therefore, the proposed project would not result in violation of water quality standards or degradation of water quality. Impacts would be **less than significant**, and no project specific mitigation is required.

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

Less-than-Significant Impact. The proposed project is a Master Plan document would implement access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park.

The Mesa Water District provides water resources to the City. The Mesa Water District receives water from two main sources, the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District (OCWD) and a backup source of imported water from the Municipal Water District of Orange County (MWDOC). The proposed project is not anticipated to result in an increase in water demand during operation compared to current conditions because the proposed project does not propose new activities that would substantially increase demand on groundwater resources.

In addition, the proposed project would not result in any addition of substantial impervious surfaces as part of the proposed improvements. Thus, the proposed project would not affect groundwater recharge at the Park. Therefore, the proposed project would not impede sustainable groundwater management of the basin, and impacts would be **less than significant**, and no project specific mitigation is required.

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

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

Less-than-Significant Impact. The proposed project would not alter the course of a stream or river on the Park. The proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park, would include ground-disturbing construction activities (e.g., site preparation, grading, trail improvements, and access ramp construction). These activities may alter the drainage pattern on site during construction, when earth is moved and infrastructure is put in place. Because the proposed project would be disturbing over 1 acre of land, it would be subject to the Construction General Permit, and associated BMPs which would reduce and prevent erosion and siltation from exposed soils during construction activities. During operation, the proposed improvements would not result in substantial alteration of the existing drainage pattern on site because the improvements would occur in the same location as the existing facilities. While the proposed project would expand the total footprint of the trails, these areas would be pervious, and they would not substantially alter drainage patterns nor result in substantial erosion or siltation. Regarding the paved access ramp at the Balboa Boulevard entrance, the ramp would be constructed of compacted natural soil and in addition to standard BMPs would be installed to minimize potential for erosion and surface water runoff. Therefore, construction and operation activities would not result in substantial alterations to the drainage pattern that would result in substantial erosion or siltation. Impacts would be **less than significant**, and no project specific mitigation is required.

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

Less-than-Significant Impact. As noted above, the proposed project does not propose any substantial new paved surfaces as part of the proposed project which could be a source of surface runoff. The proposed access ramp off Balboa Boulevard and the proposed trails would install dirt for accessibility, which is a porous material that would allow infiltration, and would not result in an increase in surface runoff. Therefore, the proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

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

Less-than-Significant Impact. The Park is not currently served by a stormwater drainage system. Stormwater is absorbed by the natural habitat or follows natural drainage patterns to the Santa Ana River and other natural bodies of water. The proposed project would not include the addition of stormwater drainage infrastructure, and the proposed project would not be anticipated to result in a change to the quantity of runoff water as a result of the proposed improvements. Operation of the proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park, would not result in any new uses to the Park, nor would it result in an increase in visitors to the Park. As such, it is anticipated that the proposed project would not introduce any new sources of polluted runoff to the Park. Therefore, impacts would be **less than significant**, and no project specific mitigation is required.

iv) *Impede or redirect flood flows?*

Less-than-Significant Impact. As noted above, the proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park, does not propose any substantial new paved surfaces as part of the proposed project which could impede or redirect flood flows. The proposed improvements at the existing staging area and entrances and the proposed trails would install dirt for accessibility, which is a porous material that would allow infiltration, and would not result in an increase in surface runoff. Therefore, the proposed project would not substantially impede or redirect flood flows, and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

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

Less-than-Significant Impact. The City of Costa Mesa General Plan states that although the City lies approximately 1 mile from the Pacific Ocean and thus is susceptible to flooding from tsunamis, the potential for tsunamis affecting the City is negligible (City of Costa Mesa 2015). Additionally, the General Plan states that the absence of any large bodies of water within the City and the location of high bluffs adjacent to Newport Bay reduce the possibility of damage from seiche effects.

The General Plan Figure S-5 Local Flooding Hazards depicts areas at risk of flood hazard based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (City of Costa Mesa 2015). The proposed Park is located in an area mapped as a 500-Year Flood Zone, meaning a flood hazard area subject to inundation by the 1% annual chance flood.

The proposed project would not introduce new sources of pollution to a flood zone. As previously noted, the proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities, would not change existing uses or result in an increase in visitors to the Park that would result in an increase in potential pollutants on site that could be at risk if Park inundation were to occur. In addition, and during construction, the proposed project contractor would prepare and implement a site-specific SWPPP in accordance with SWRCB Order No. 2009-0008-DWQ NPDES General Permit No. CAS00002 (Construction General Permit), amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. One of the purposes of the SWPPP is to address potential pollutants and their sources, including sources of sediment and site erosion. Therefore, the proposed project would not risk release of pollutants due to site inundation. Impacts would be **less than significant**, and no project specific mitigation is required.

e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less-than-Significant Impact. The City is underlain by the Lower Santa Ana River Groundwater Basin. Groundwater levels are managed within a safe basin operating range to protect the long-term sustainability of the OC Basin and to protect against land subsidence. OCWD regulates groundwater levels in the OC Basin by regulating the annual amount of pumping. The proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities, would not entail or require groundwater pumping and would comply with all applicable water quality control plans and groundwater management plans. The proposed project would comply with all RWQCB policies and regulations, applicable water quality management plans, applicable NPDES requirements, Costa Mesa Municipal Code Title 8, and

standard conditions of approval. Therefore, impacts would be **less than significant**, and no project specific mitigation is required.

4.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
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) *Would the project physically divide an established community?*

No Impact. The proposed project entails specific access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park. The physical division of an established community typically refers to the construction of a linear feature (such as a major highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying area. The proposed project would be located entirely within the existing Park. The proposed project would include park improvements that would not impede movement within the community. **No impacts** would occur, and no project specific mitigation would be required.

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

No Impact. The proposed project would include access improvements, infrastructure improvements, and habitat restoration. Operation and maintenance of the proposed project would not substantially differ from existing park use and maintenance protocol and would not result in a change to existing land uses. Potential environmental impacts associated with the implementation of the proposed project are analyzed throughout this MND. Where necessary, the proposed project will incorporate applicable mitigation measures to reduce environmental impacts. Therefore, it would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, **no impacts** would occur and project specific mitigation for land use impacts are required.

Approximately 97 acres of the Park (South Talbert) are within the delineated Coastal Zones Affecting Costa Mesa (see Conservation Element, Figure CON-2: Coastal Zones; City of Costa Mesa 2015). As the proposed project entails specific access improvements, infrastructure improvements, and habitat restoration activities and would maintain existing recreation use and does not propose changes to land use or zoning designation (the Park would continue to function as publicly accessible and permanently preserve open space), no conflicts with the City’s responsibilities to address and protect its coastal resources would occur.

4.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The State Geologist divides state lands into various Mineral Resource Zones (MRZs) that reflect potential for the presence of minerals or potential for mineral resource extraction. The proposed project, which includes access improvements, infrastructure improvements, and habitat restoration activities within the existing boundaries of the Park, is located in an area classified as MRZ-3, which denotes “areas of undetermined mineral resource significance” (City of Costa Mesa 2016c). Mineral extraction does not currently occur at the Park. While no mineral deposits have been identified on the Park, the proposed project would not prevent the future extraction of mineral resources should this option be pursued by OCPW. There would be **no impact** on the loss of availability of a known mineral resource.

b) *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. The 2015-2035 City of Costa Mesa General Plan EIR states that neither the City’s General Plan nor any other City planning documents identify any locally important mineral resources within the City (City of Costa Mesa 2016c). As such, the proposed project would not result in an impact related to the loss of availability of a locally important mineral resource recovery site. The proposed project would include access improvements, infrastructure improvements, and habitat restoration activities. Thus, there would be no impact, and no project specific mitigation is required.

4.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
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 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise and Vibration Characteristics

Noise

Noise is defined as unwanted sound. Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The dBA scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period (Leq), the statistical sound level, the day-night average noise level (Ldn), and the Community Noise Equivalent Level (CNEL). Each of these descriptors uses units of dBA. Table 4.13-1 provides examples of A-weighted noise levels from common sounds. In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level.

Table 4.13-1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—

Table 4.13-1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Diesel truck at 15 meters (50 feet), at 80 kilometers per hour (50 mph)	80	Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural nighttime	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013

Note: dBA = A-weighted decibel.

L_{eq} is a sound energy level averaged over a specified period (typically no less than 15 minutes for environmental studies). L_{eq} is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors. L_{max} is the highest root mean square (RMS) sound pressure level within the measuring period.

Unlike the L_{eq} metrics, L_{dn} and CNEL metrics always represent 24-hour periods, usually on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). “Time weighted” refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 dB to 1 dB and, as such, are often treated as equivalent to one another.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square amplitude is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Decibel notation is commonly used to measure root mean square. The decibel notation acts to compress the range of numbers required to describe vibration.

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise. Sensitive receptors in the vicinity of the Park include residential uses located to the north and east of the Park, and two schools (Waldorf School of Orange County and Estancia High School) to the east. These schools are located 0.15 mile and 0.27 mile to the east, respectively of the eastern boundary of North Talbert (and are buffered from the Park by the western, mesa portion of Fairview Park). These sensitive receptors represent the nearest sensitive land uses with the potential to be impacted by construction and operation of the proposed project.

Existing Noise Conditions

Noise measurements were conducted in the vicinity of the Park on October 7, 2022, to characterize the existing noise levels. Table 4.13-2 provides the locations, dates, and times the noise measurements were taken. The noise measurements were taken using a Soft dB Piccolo sound level meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute standard for a Type 2 (General Use) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Table 4.13-2. Measured Noise Levels

Receptors	Location	Date	Time	L _{eq} (dBA)	L _{max} (dBA)
ST1	East of Park, at Fairview Park	10/07/2022	11:32 - 11:47 a.m.	48	57.1
ST2	East of Park, adjacent to residences along Nancy Lane	10/07/2022	11:59 a.m. - 12:14 p.m.	48.2	58.8
ST3	East of Park, at Vista Park and adjacent to residences along Pacific Avenue	10/07/2022	12:21 - 12:36 p.m.	54.8	62.5

Table 4.13-2. Measured Noise Levels

Receptors	Location	Date	Time	L _{eq} (dBA)	L _{max} (dBA)
ST4	Northeast of Park, adjacent to residences along Sea Bluff Drive	10/07/2022	12:43 - 12:58 p.m.	50.8	66.4
ST5	East of Park, adjacent to residences along Starfish Court	10/07/2022	1:28 - 1:43 p.m.	57.4	73.9
ST6	East of Park, adjacent to residences along Balboa Street	10/07/2022	1:08 - 1:23 p.m.	50	67.2

Source: Appendix E.

Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; L_{max} = maximum sound level during the measurement interval.

Six short-term noise measurement locations (ST) were conducted in the vicinity of the Park, as shown in Figure 7: Noise Measurement Locations. The measured L_{eq} and maximum noise levels are provided in Table 4.13-2. The field noise measurement data sheets are provided in Appendix E. The primary noise sources at the sites identified in Table 4.13-2 consisted of traffic on local and distant roadways; other, secondary noise sources included distant aircraft, distant landscaping activity noise, birds and rustling leaves. As shown in Table 4.13-2, the measured sound levels ranged from approximately 48 dBA L_{eq} at measurement locations ST1 and ST2 to approximately 57 dBA L_{eq} at ST5.

- a) ***Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

Less-than-Significant Impact. Potential impacts related to the proposed project would be primarily related to construction of the proposed key improvements. Operation and maintenance of the proposed project would be much the same as under existing conditions, and substantial levels of noise would not be generated.

The City's General Plan Noise Element addresses land use compatibility. The Noise Element states that an exterior community noise equivalent level greater than 70 dBA is normally unacceptable for residential and recreational uses (City of Costa Mesa 2016d).

Noise from non-transportation sources is regulated by the City's Municipal Code, Title 13, Chapter XIII (City of Costa Mesa 2010). The City's Municipal Code establishes allowable hours for construction and exterior and interior noise standards. With the exception of emergency machinery or work, construction activities are allowable only on Monday through Friday, 7 a.m. to 7 p.m., and on Saturday 9 a.m. to 6 p.m. Construction activities are prohibited on Sunday and on specified federal holidays. Construction equipment, vehicles, and work are exempt from interior and exterior noise level standards, provided that construction activities take place within the allowable time period (City of Costa Mesa 2010).

Noise in residential areas is regulated by the exterior noise standards in Table 4.13-3.

Table 4.13-3. City of Costa Mesa Exterior Noise Standards

Time of Day	Sound Level (dBA)
7 a.m. to 11 p.m.	55
11 p.m. to 7 a.m.	50
It is unlawful for noise levels to exceed:	
Noise level standards for a period of 30 minutes (cumulative) within a 1-hour period	
Noise level standards plus 5 dBA for a period of 15 minutes (cumulative) within a 1-hour period	
Noise level standards plus 10 dBA for a period of 5 minutes (cumulative) within a 1-hour period	
Noise level standards plus 15 dBA for a period of 1 minute (cumulative) within a 1-hour period	
Noise level standards plus 20 dBA for any period of time	

Source: City of Costa Mesa 2010.

Short-Term (Construction) Noise

The nearest sensitive receptors that would potentially be impacted by noise generated during construction of the proposed project are residential uses located at varying distances from the noise-generating activities associated with the various proposed project components (such as Balboa Boulevard access ramp, construction of the Nature Center, etc.). Outdoor uses at Fairview Park and the two nearby schools are more distant than the nearest sensitive receptors and therefore would experience fewer noise impacts than the nearest sensitive receptors as noise impacts decrease with distance.

Construction noise and vibration are temporary phenomena. Construction noise and vibration levels vary from hour to hour and day to day, depending on the equipment in use, the operations being performed, and the distance between the source and receptor.

Equipment that would be in use during construction would include, in part, graders, backhoes, concrete saws, rubber-tired dozers, loaders, cranes, forklifts, cement mixers, pavers, rollers, and air compressors. The typical maximum noise levels for various pieces of construction equipment at a distance of 50 feet are presented in Table 4.13-4. Note that the equipment noise levels presented in Table 4.13-4 are maximum noise levels. Typically, construction equipment operates in alternating cycles of full power and low power, producing average noise levels less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 4.13-4. Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (dBA at 50 Feet)
Air compressor	81
Backhoe	85
Concrete pump	82
Concrete vibrator	76
Crane	83
Truck	88
Dozer	87
Generator	78
Loader	84

Table 4.13-4. Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (dBA at 50 Feet)
Paver	88
Pneumatic tools	85
Water pump	76
Power hand saw	78
Shovel	82
Trucks	88

Source: FHWA 2008.

Notes: dBA = A-weighted decibels.

The maximum noise levels at 50 feet for typical construction equipment would be 88 dBA for the equipment typically used for this type of development project, although the hourly noise levels would vary. Construction noise in a well-defined area typically attenuates at approximately 6 dB per doubling of distance. Proposed project construction would take place both near and far from adjacent, existing noise-sensitive uses. For example, construction near the southern Park boundary would take place within approximately 30 feet of existing residences during Balboa Boulevard access improvement work, but during most of the construction of other proposed project components, construction would be several hundred feet away from noise-sensitive receptors.

A spreadsheet-based version of the Federal Highway Administration’s Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use. (Although the model was funded and promulgated by the Federal Highway Administration, the RCNM is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are often used for other types of construction.) Input variables for the RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. No topographical or structural shielding was assumed in the modeling. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis.

Using the Federal Highway Administration’s RCNM and provided construction information, the estimated noise levels from the major construction phases were calculated for the nearest noise-sensitive land uses, as summarized in Table 4.12-5. RCNM inputs and outputs are provided in Appendix E.

Table 4.13-5. Construction Noise Model Results Summary

Location / Project Component	Construction Activity	Nearest Receivers	Source to NSR Distance (ft.)	Predicted 1-hour L_{eq}
Overall Site	Site Preparation, Grading	Residences to E and N	50	84
Balboa Boulevard Access Improvements	Grading	Residences to E	50	84
Trail Alignment	Trail Alignment	Residents of E and N	50	82

Table 4.13-5. Construction Noise Model Results Summary

Location / Project Component	Construction Activity	Nearest Receivers	Source to NSR Distance (ft.)	Predicted 1-hour L_{eq}
15' Existing Trail, Raised 18"	Scraping, Grading	Residences to NE	150	71
4' Proposed Single Track Trail	Scraping, Grading	Residences to SE	1,360	55
Vegetative Thinning	Site Preparation	Residences to E	540	62
Existing Maintenance Yard with Proposed Lighting	Trenching	Residences to NE	780	50
Balboa Boulevard Access Ramp	Paving	Residences to E	50	76

Source: Appendix E

Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibel

As shown in Table 4.12-5, noise levels from proposed project construction would range from approximately 50 dBA L_{eq} during trenching work of the proposed 4-foot single track trail and trenching work for the proposed electrical services to the existing maintenance yard, to approximately 84 dBA L_{eq} during grading for the proposed Balboa Boulevard access improvements. As previously discussed, noise from construction activities is exempt from City of Costa Mesa noise ordinance standards, provided that the work takes place between the hours of 7 a.m. to 7 p.m. Monday through Friday and 9 a.m. to 6 p.m. on Saturdays. Construction activities are prohibited on Sundays and on specified federal holidays (City of Costa Mesa 2010). Construction work associated with the proposed project is not expected to occur outside the permitted hours. Thus, short-term noise from construction at nearby residential land uses and other sensitive receptor locations would have a less than significant impact.

Although it would constitute a less than significant impact, noise associated with construction of the proposed project has the potential to adversely affect adjacent noise-sensitive uses through annoyance and disruption of conversations. In order to minimize potential annoyance, the following Project Design Features (PDFs) will be implemented during construction. With the implementation of PDF-NOISE-1 impacts would be further reduced beyond the already **less than significant** levels that the proposed project is anticipated to generate. Accordingly, no project specific mitigation is required for noise generated during construction of the project.

PDF-NOISE-1 To minimize noise from project construction, the following procedures shall be followed:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.
- Construction noise reduction methods, such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and using electric air compressors and similar power tools rather than diesel equipment, shall be used where feasible.
- During construction, stationary construction equipment shall be placed so that noise is directed away from or shielded from sensitive noise receptors where feasible.
- During construction, stockpiling and vehicle staging areas shall be located as far as practicable from noise-sensitive receptors.

- Construction shall be restricted to weekdays between 7 a.m. and 7 p.m., and Saturdays between 9 a.m. and 6 p.m. No construction shall occur on Sundays or on federal holidays. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the job superintendent. In the event that the City of Costa Mesa receives a complaint, appropriate corrective actions shall be implemented, and a report of the action shall be provided to the reporting party.

Long-Term (Operational) Noise

Less-than-Significant Impact. The proposed project includes the development of a Nature Center within the northeastern corner of the North Talbert parcel, replacing the existing restroom structure. The Nature Center would be approximately 500 square feet in size and constructed of concrete with a stucco finish and a metal roof. It would include indoor amenities such as a small classroom area, restrooms, and interpretive signage to serve as an educational resource for park visitors.

As part of the operational components of the Nature Center, heating, ventilation, and air conditioning (HVAC) systems would be installed. For purposes of this analysis, it is assumed that two (2) 2-ton Carrier condenser units would be utilized, each with a manufacturer-rated sound pressure level (SPL) of 68 dBA at 3 feet, based on typical product data (Carrier 2012). Please see Appendix E for quantitative details of the inputs and outputs that form the basis of the following assessment presentations.

An Excel-based outdoor sound propagation model was used to predict the operational noise associated with the Nature Center HVAC units, applying the following conservative assumptions:

- Treatment of exposed rooftop air-cooled condensing units as point-type sound emission sources; and
- Point-source sound propagation (i.e., 6 dB per doubling of distance) that conservatively ignores acoustic absorption from atmospheric and ground surface effects.

Based on preliminary measurements, the closest existing offsite noise-sensitive receptor to the proposed Nature Center site is approximately 1300 feet away. At this distance, applying the 6 dB per distance doubling rule, the cumulative operational noise level from the two condenser units would reduce to well below 35 dBA L_{eq} at the nearest receptor. This is well below typical exterior daytime and nighttime noise standards, including the City's nighttime threshold of 50 dBA L_{eq} (City of Costa Mesa Municipal Code Section 13-280).

Additionally, the proposed Nature Center is located within a larger open space setting, further minimizing the potential for noise intrusions to nearby sensitive receptors. Given the limited scale of the Nature Center, the use of standard HVAC equipment, and the substantial distance to residential uses, operational stationary noise from the proposed Nature Center would result in a **less-than significant** impact.

Other noise associated with the proposed project is anticipated to be similar to existing conditions. Access to the regional park would be limited to 7:00 a.m. to sunset, seven days a week, as it is currently. Park capacity would not significantly increase with implementation of the project. Compared to the traffic volumes on the nearby arterial roadways (i.e., 28,000 average daily trips [ADT] on Victoria Avenue, 7,000 ADT on West 19th Street/Balboa Boulevard), the incremental increase in traffic noise would not be

measurable or audible. Additionally, maintenance activities (such as trail maintenance, trash pickup and facilities repairs) would not differ significantly from the activities conducted currently. Therefore, operational noise as a result of the proposed project would be **less than significant** and no project specific mitigation is required.

b) *Would the project result in generation of excessive ground borne vibration or ground borne noise levels?*

Less than Significant Impact. The proposed project includes access improvements, infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park. Construction activities may expose people to excessive ground borne vibration or ground borne noise, causing a potentially significant impact. Caltrans has collected ground borne vibration information related to construction activities (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inch/second begin to cause annoyance. Heavier pieces of construction equipment, such as bulldozers, have peak particle velocities of approximately 0.089 inch/second or less at a distance of 25 feet (FTA 2018).

Ground borne vibration typically attenuates over short distances. At the distance from the nearest noise or vibration-sensitive land use (residences to the east of the Balboa Boulevard Access Improvements proposed project component) of approximately 50 feet and with the anticipated construction equipment, the peak particle velocity would be approximately 0.031 inch/second. At the closest sensitive receptors, vibration levels would be less than the vibration threshold of potential annoyance of 0.1 inch/second. Most construction would take place at distances of several hundred feet away from the nearest noise or vibration-sensitive land uses, and the vibration levels would be substantially lower; at a distance of 300 feet for example, the resultant vibration level from typical heavy construction equipment would be approximately 0.002 inch/section.

Construction can also affect nearby buildings by inflicting damage from vibration. However, construction vibration associated with this proposed project would not result in structural building damage. Building damage typically occurs at vibration levels of 0.5 inch/second or greater for buildings of reinforced-concrete, steel, or timber construction. The heavier pieces of construction equipment used for this proposed project would include backhoes, front-end loaders, and flat-bed trucks. Pile driving, blasting, or other special construction techniques would not be used for construction of the Project; therefore, excessive ground borne vibration and ground borne noise with the potential to adversely affect nearby buildings would not be generated. Once operational, the proposed project would not generate perceptible ground borne vibration. As such, no building damage would be expected to occur as a result of project-related vibration during construction or operation, and impacts would be **less than significant**. No project specific mitigation measures are required.

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. No private airstrips exist in the vicinity of the Park. The closest public airport to the Park is John Wayne Airport, which is located approximately 4.4 miles northeast of the Park. According to the Airport Environs Land Use Plan for John Wayne Airport, the proposed project outside the airport planning area is located approximately 3 miles away from the airport's 60 dBA CNEL noise contour (ALUC 2008). The Park is located outside of any airport impact zones, and as such, the project, which entails access improvements,

infrastructure improvements, and habitat restoration activities that would occur within the existing boundaries of the Park, would not result in a safety hazard for people residing in the proposed project area. Therefore, **no impacts** associated with exposing people residing or working in the proposed project to excessive noise levels would occur. Accordingly, no project specific mitigation is required.

4.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
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 people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The proposed project is a Master Plan document with the purpose of guiding the future improvement and maintenance of Park. The proposed project does not include the development of new homes or businesses; therefore, it would not directly induce substantial unplanned growth. The proposed project includes specific improvement projects (such as a new nature center, new and elevated trails, and new access into the park) as well as continuance of site-wide improvement programs (such as non-native plant removal) that would support the long-term goals of resiliency, safety, and accessibility. The proposed improvements would not expand or shrink the size of the existing Park facility, nor would they include the extension of existing roads. Existing access would be improved as part of the proposed project but would not be expanded beyond the Park boundaries. Similarly, electrical service would be extended from the existing restrooms to the existing maintenance yard, but this service would be utilized by the park only. Furthermore, the Park would continue to serve the nearby population, it would not introduce new services that would draw additional population to the area, either because of recreational opportunities or employment opportunities. As such, the proposed project would not indirectly induce substantial unplanned population growth and there would be **no impact**. Accordingly, no project specific mitigation is required.

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

No Impact. The proposed project would result in physical construction of proposed improvements within the boundaries of the existing Park facility. It would improve existing features of the Park and support resiliency efforts for the future maintenance of the Park. The proposed project would not remove housing or otherwise displace substantial numbers of existing people or housing. Thus, there would be **no impact**, and no project specific mitigation is required.

4.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XV. PUBLIC SERVICES

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

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Fire protection?

Less than Significant Impact. The proposed project would improve features within the existing Park facility to provide improved experiences for Park visitors. The proposed improvements include trails and improved emergency access from Balboa Boulevard to better accommodate emergency vehicles. Helispots are currently located in two areas in South Talbert and would be maintained as part of the proposed project.

The Park is served by the Costa Mesa Fire Department (Costa Mesa Fire & Rescue); the closest fire stations to the Park are Fire Station 4, located at 2300 Placentia Avenue, approximately 0.70 miles to the east of North Talbert, and Fire Station 3, located at 1865 Park Avenue, approximately 1.40 miles southeast of South Talbert. The Costa Mesa Fire Department would respond to medical or fire-related emergency events at the Park. Based on the anticipated average visitorship of 35 people a day, the proposed project is not expected to result in an increase in visitors to the Park and thus would not be expected to result in more emergency events that require fire department response than occur under current conditions. Therefore, as the Park is an existing recreational

facility/open space and the proposed project includes select access improvements, infrastructure improvements, and habitat restoration activities, the proposed project would not require the physical development of new or altered fire stations in order to maintain service ratios or response times. In addition, construction of the proposed project would not require the partial or full closure of roadways and would not prevent emergency access to the Park or the surrounding area. Should partial lane closure be required during construction of the Balboa Boulevard Access Improvement, the contractor would be required to prepare an appropriate Traffic Control Plan to safely guide traffic through the area. The impact would be **less than significant**, and no project specific mitigation is required.

Police protection?

Less than Significant Impact. The Park is served by the Costa Mesa Police Department (CMPD). The closest police station is located at 99 Fair Drive approximately 2.25 miles east of North Talbert. Patrol officers of the CMPD would respond to criminal or emergency events at the Park. Because the number of daily visitors is not anticipated to increase as a result of the proposed project, it is not anticipated there would be an increase in demand for police protection at the Park. As such, the proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities within the Park boundaries, would not require physical development of new or expanded police facilities to maintain service ratios or response times. The impact would be **less than significant**, and no project specific mitigation is required.

Schools?

No Impact. The proposed project does not include school facilities or residents that would contribute to demand for school services. The proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities within the Park boundaries, would not induce population growth such that there would be higher demand for schools in the surrounding area. Therefore, the proposed project would not require the physical development of schools. There would be **no impact**, and no project specific mitigation is required.

Parks?

Less than Significant Impact. The Park is itself a park and the proposed project is a master plan including physical improvements meant to enhance the facilities and improve the visitors' experience at the Park. This IS/MND documents the potential for the proposed project to result in substantial adverse physical effects from the physical development of facilities and components of the Park. As described in Sections 4.4, 4.5, 4.7, and 4.18 there would be potential physical impacts to biological, cultural, paleontological, and tribal cultural resources. However, with the implementation of the proposed mitigation measures as described in these sections, impacts would be reduced to a less than significant impact. The proposed project would not result in significant impacts related to all other environmental resource areas analyzed in this IS/MND.

There are also three nearby park facilities operated by the City of Costa Mesa: Canyon Park, Vista Park and Fairview Park. Canyon Park is east of South Talbert, adjacent to a residential area situated atop of a mesa. Vista Park is adjacent to Victoria Street at the southern tip of North Talbert. Fairview Park is adjacently east of North Talbert. Because the attendance at the Park is not expected to change as a result of the proposed project, it is not anticipated there would be any indirect effects on nearby park facilities, such as increased demand due to

additional visitors in the area. In addition, the Park would remain open during construction, so would not result in displaced park patrons that would choose to visit a nearby park instead.

As such, there would be **less than significant impacts** related to physical development of new or expanded Park facilities. Accordingly, no project specific mitigation is required.

Other public facilities?

No Impact. Other public facilities would include libraries and other recreational facilities. As previously stated, because the population is not expected to change as a result of the proposed project, and it would not displace patrons, there would be no adverse effects related to the physical development of new or expanded other public facilities. There would be **no impact**, and no project specific mitigation is required.

4.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<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) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Less than Significant Impact. The proposed Park is a regional park facility, and it is located near city-owned park facilities and bike trail facilities. The proposed project would involve the construction and implementation of key improvements and infrastructure improvements, which would enhance the Park patrons’ experience and improve habitat quality and resiliency. The Park would remain open during construction, so patrons would continue to use the facility, and would not seek out other nearby park facilities such as Canyon Park, Vista Park and Fairview Park. It is not anticipated that other nearby park facilities would experience an increase in visitors due to the construction of the project.

During project operation, the proposed project would provide improved facilities and would not anticipate an increase in use of the Park. Therefore, the proposed project would not result in substantial physical deterioration of a facility, and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

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 Park is a regional park and includes the construction and implementation of key improvements and infrastructure improvements as part of an update to the Park’s Master Plan. This IS/MND documents the potential for the proposed project to result in adverse physical effects on the environment from the construction or expansion of recreational facilities and components of the Park. As described in Sections 4.4, 4.5, 4.7, and 4.18 there would be potential physical impacts to biological, cultural, paleontological, and tribal cultural resources. However, with the implementation of the mitigation measures as described herein, in addition to the design features built into the proposed project, impacts would be reduced to a less than significant level. The proposed project would not result in significant impacts related to all other environmental resource areas analyzed in this IS/MND. As such, the impact would be **less than significant**, and no project specific mitigation is required.

4.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
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) 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 geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The section addresses the significance of thresholds for transportation. This section analyzes the potential impacts of the proposed project based on CEQA Guidelines Section 15064.3(b), which focuses on the currently adopted vehicle miles traveled metric for determining the significance of transportation impacts. The passage of Senate Bill (SB) 743 required the focus of transportation analysis change from level of service (LOS) or vehicle delay to VMT. The Park is located in County of Orange; therefore, the project’s VMT analysis is based on the County of Orange Transportation Implementation Manual (County of Orange 2021) and the Office of Land use and Climate Innovation’s (LCI) Technical Advisory on Evaluating Transportation Impacts under CEQA (State of California Governor’s Office of Planning and Research 2018). Note that the County’s Transportation Implementation Manual is also provided as Appendix I to this MND.

The Project's transportation analysis is contained solely within this section. No technical memorandum has been prepared as the Project's temporary increase in VMT during construction would not be significant. Further and as explained below in Threshold b, proposed project operations would generate less than 500 trips per day and pursuant to the County of Orange Transportation Implementation Manual, preparation of a detailed VMT analysis is not required if a project generates less than 500 average daily trips and impacts can be presumed to be less than significant. In addition, as operation of the proposed project would be screened out of VMT analysis per the County's "Small Project" screening threshold, the County's VMT Screening Application is not applicable to the project.

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

Less than Significant Impact. The Transportation Element of the Orange County General Plan (County of Orange 2025a) contains County policies on the development of transportation facilities necessary to accommodate the County's orderly growth. It includes goals, policies and implementation procedures for the Circulation Plan, Bikeways Plan, and Scenic Highways Plan in the County. The proposed project components include construction of a 500 square foot Nature Center, Balboa Boulevard emergency vehicle entrance (and improved stairwell off Balboa Boulevard), infrastructure improvements including trail improvements and habitat restoration activities. The proposed project would improve emergency and ADA access and enhance visitor experience for existing Park users. The proposed project does not propose any changes to the circulation system which would conflict with the County's Transportation Element or any program, plan or policy addressing the circulation system.

Roadway, Transit, Bicycle, and Pedestrian Facilities

The Park is encompassed by an existing roadway system which comprises of Victoria Street, Hamilton Avenue, Brookhurst Street, Placentia Avenue and Balboa Boulevard. Pedestrian connections are available from Fairview Park, Vista Park, from Arbor Street by traversing through Canyon Park, Victoria Street and via the Santa Ana River Trail Footbridge connecting to the Banning Channel Bikeway. On-site parking is not available and is not proposed for the Park as part of this project. There is limited street parking available for South Talbert along Balboa Boulevard at the terminus of West 19th Street. The improvement of the existing Balboa Boulevard entrance would accommodate direct vehicular access for emergency and maintenance vehicles only and would provide access to bikes and pedestrians.

The Orange County Transportation Authority (OCTA) services the Orange County regional area. Currently, Route 35 and Route 47, and Route 55 provide daily service to locations near the Park. Both routes have weekday and weekend service, with headways ranging from 30 minutes in the weekday peak period, to 90 minutes on Sundays. The closest bus stops to the proposed project are Pacific Avenue/Victoria Street (Route 35) and Placentia Avenue/19th Street (Routes 47 and 55). These stops are located approximately 0.35 miles to the east and 0.75 miles to the east, respectively, of the Park's eastern boundary (OCTA 2026).

Bicyclists and multi-modal users are able to access the South Talbert and wider Talbert Regional Park via the existing Banning Channel Bikeway that follows the Santa Ana River. Pedestrians are able to likewise access the site from sidewalks located along either side of Victoria Street. Other off-site pedestrian connections include a stairway within Fairview Park adjacent to the northeastern boundary in North Talbert. Canyon Park also includes a trail connection to South Talbert at the far side of Balboa Street. The South Talbert pedestrian circulation route would be improved as a raised, 15-foot-wide trail. Additionally, a new

4-foot-wide, 200-foot long, single-track trail (not raised) in North Talbert and a new, 15-foot wide, 2,020-foot-long trail (raised) in South Talbert is proposed to enhance connections within the existing network by providing formalized access to the existing Victoria Pond, more direct access to the nearby Banning Channel Bikeway. A new access ramp connecting the new, east-west trail in South Talbert to the Banning Channel Bikeway would also be constructed. This enhanced system would also accommodate requirements for both ADA and emergency access.

Therefore, the proposed project would involve the improvement of existing trails for pedestrian and bicyclist use throughout the site. These trails would temporarily be closed during improvements; however, trail improvements would occur in phases, and detours via other trails within the site will be provided. The proposed project would not result in closure or obstruction of the Banning Channel Bikeway, or pedestrian facilities outside of the Park. The proposed project would not affect the nearby bus stops or bus routes adjacent to the Park, because the proposed project would not result in construction activities within existing roadways. However, if any construction work affects the public right-of-way, encroachment and/or traffic control permits would be obtained by the contractor to ensure that access for all road users is maintained at all times.

The proposed project would not preclude implementation of any plans or policies regarding existing or proposed bicycle or pedestrian facilities in the area. As such, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

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

Less than Significant Impact. CEQA Guidelines Section 15064.3(b) focuses on the metric of vehicle miles traveled (VMT) pursuant to SB 743 for determining the significance of transportation impacts. The related updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. As stated in CEQA Guidelines Section 15064.3(c), the provisions of Section 15064.3 shall apply prospectively, and have been implemented statewide by July 1, 2020.

The CEQA Guidelines state that “generally, VMT is the most appropriate measure of transportation impacts” and define VMT as “the amount and distance of automobile travel attributable to a project.” It should be noted that “automobile” refers to on-road passenger vehicles, specifically cars and light trucks. LCI has clarified in the Technical Advisory and recent informational presentations that heavy-duty truck VMT is not required to be included in the estimation of a project’s VMT. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Based on the Technical Advisory (State of California Governor’s Office of Planning and Research 2018), the County’s Transportation Implementation Manual (TIM) has adopted VMT specific guidelines, screening criteria and thresholds (County of Orange 2021). While not applicable to the proposed project due to the Park being managed and operated by the County, the City of Costa Mesa’s Transportation Impact Analysis Guidelines allows City staff to confirm the screening potential of a development project (City of Costa Mesa 2020). Regarding the County TIM and City’s TIA Guidelines, a project that meets at least one of the screening criteria would be presumed to have a less than significant VMT impact due to project characteristics and/or location. Pursuant to the County’s TIM, the operation of the proposed project would be screened out of VMT analysis per “Small Project” screening threshold also explained below. The potential VMT generated by the short-term construction of the proposed project has been evaluated qualitatively per LCI guidance. Pursuant to the City’s TIA Guidelines, the operation of the proposed project would be screened out of VMT analysis per the “Step 3: Project Type Screening” due to the proposed project generating less than 110 daily vehicle trips (see Section 4.15, above).

Construction of this component would generate temporary construction-related traffic for a period of 7 months, and nominal maintenance traffic. As mentioned above, heavy vehicle traffic is not required to be included in the estimation of a project's VMT. Even though worker and vendor trips would generate VMT, once construction is completed, the construction-related traffic and VMT would cease and return to pre-construction conditions. The increase in VMT associated with the projects' construction is expected to be temporary and would therefore not cause a significant VMT impact. Additionally, the Air Quality analysis accounts for the worker and truck trips and VMT generated during the construction period (see Table 2-1 and Section 4.3). Once construction is complete, this proposed project is anticipated to entail occasional maintenance activities which would be same as existing conditions. Under existing conditions, the Park has one permanent employee who would continue to monitor visitor activities, conduct repairs, and collect trash, same as existing conditions.

Per the Technical Advisory (State of California Governor's Office of Planning and Research 2018), projects that "generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant" impact. Per County's TIM (County of Orange 2021) and substantial evidence included in its Attachment B, projects generating less than 500 trips per day are not required to conduct a detailed VMT analysis and impacts can be presumed to be less than significant. The Nature Center would primarily serve as an educational center for existing park visitors and may occasionally attract new visitors, however the new daily trip generation would be nominal and not exceed the threshold of small project screening. The Balboa Boulevard Entrance and other infrastructure improvements would improve emergency access, pedestrian circulation, ADA access, and wayfinding. These proposed project components would improve existing access and park user experience; and would not result in increasing the number of new daily trips or VMT.

Therefore, the construction and operation of the proposed project would not conflict or be inconsistent with CEQA Guidelines Sections 15064.3(b)(1) and 15064.3(b)(3) and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

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

Less than Significant Impact. The access to South Talbert is through two access points, one located on Balboa Boulevard, and one on Victoria Street. There are also three access points for bicyclists and pedestrians along the Banning Channel Bikeway. Access to North Talbert is available through Fairview Park, Vista Park, and Victoria Street. There are several existing access points along the Banning Channel Bikeway including one access point from the Santa Ana River Trail Footbridge. With the exception of the entrance ramp for emergency access at Balboa Boulevard, the proposed project does not propose constructing any new roadways or intersections.

Construction of the Nature Center, the Balboa Boulevard access improvements, and other infrastructure improvements would generate temporary construction trips by workers and haul trucks over a period of 7 months. Construction activities are not anticipated to require road closures in public rights-of-way; if needed, encroachment and/or traffic control permits would be implemented to ensure safe access and movement of all road users. Construction staging within the Park would ensure access to bicyclists and pedestrians is maintained to the extent feasible, appropriate signage shall be installed, and detours provided at appropriate locations near construction zones.

The proposed project does not propose any incompatible use in the area. The proposed project would not result in an increase in hazards due to a geometric design feature. Impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

d) Would the project result in inadequate emergency access?

Less than Significant Impact. Construction of the proposed project, which entails access improvements, infrastructure improvements, and habitat restoration activities, is not anticipated to require road closures in public rights-of-way. Construction staging would occur within the Park. However, prior to commencing work, if needed, encroachment and/or traffic control permits would be obtained by the applicant to ensure that adequate emergency access for all road users is maintained. The proposed project would be designed and constructed to local standards and comply with emergency access requirements of the fire department. Upon completion, the Park will continue to be accessible via the existing emergency and maintenance only vehicular access, and non-vehicular access points. Emergency access to the proposed project would be improved with the addition of the proposed Balboa Boulevard Entrance Ramp shown in Figure 4. Therefore, the construction or operation of the proposed project would not result in inadequate emergency access and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

4.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
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 type="checkbox"/>	<input checked="" 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 Resources 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)?**

No Impact. As discussed in Section 4.5, Cultural Resources, ten previously recorded cultural resources and two historic built environment resources were recorded within the 0.5-mile records search radius; however, none are within the Park. Therefore, **no impacts** associated with historical resources listed or eligible for listing in the CRHR or in a local register of historical resources would occur. Accordingly, no project specific mitigation is required.

- 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.**

Less than Significant Impact. On October 9, 2019, Dudek (on behalf of OC Parks) requested a Sacred Land File search from the NAHC (Appendix C). On October 23, 2019, the NAHC responded to the request indicating the result of the Sacred Land File search was positive and suggested OC Parks contact 17 tribes that may have interest in or knowledge of tribal cultural resources in the proposed project area. These tribes or tribal representatives include the Agua Caliente Band of Cahuilla Indians, the Juaneno Band of Mission Indians, the Juaneno Band of Mission Indians Acjechemen Nation (two representatives), Juaneno Band of Mission Indians, the Gabrieleno Band of Mission Indians – Kizh Nation, the Gabrieleno/Tongva San Gabriel Band of Mission Indians, the La Jolla Band of Luiseno Indians, the Gabrielino Tongva Indians of California Tribal Council, the Pala Band of Mission Indians, the Pechanga Band of Luiseno Indians, the Rincon Band of Luiseno Indians (two representatives), the San Luis Rey Band of Mission Indians, the Soboba Band of Luiseno Indians, and the Pauma Band of Luiseno Indians. OC Parks led the AB 52 efforts and led consultation with these tribes.

On December 7, 2022, the OCPW sent 4 letters to tribes who have requested to be notified of projects initiated by the County. The contacts did not respond, except for the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation), who requested further consultation. A consultation teleconference call occurred between the Kizh Nation and the County on February 21, 2023. Consultation resulted in the inclusion of Standard Condition (SC) measure TRC-1 for the proposed project to ensure proper documentation of any off-site fill material used for the Project.

As a part of this effort, the County shall implement the following SCs, and those measures associated with Section 4.5 to ensure proper treatment of potential Tribal Cultural Resources:

- SC TCR-1 Documentation of Fill Material. OCPW and OC Parks will document in the Project files the source of any off-site fill material used for the Project during construction.
- SC TCR-2 Unanticipated Discovery of Native American Resources. If unanticipated tribal cultural resources, archaeological resources or deposits are discovered during ground-disturbing

activities, OC Public Works shall implement the following measures. All work shall halt within a 50-foot radius of the discovery. OC Public Works shall retain a qualified professional archaeologist with knowledge of Native American resources to assess the significance of the find. If the resources are Native American in origin, OC Public Works shall coordinate with the Tribe regarding evaluation, treatment, curation, and preservation of these resources. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgment in consultation with OC Public Works. Work shall not continue within the no work radius until the archaeologist conducts sufficient research and evidence and data collection to establish that the resource is either (1) not cultural in origin; or (2) not potentially eligible for listing on the California Register of Historical Resources. If a potentially eligible resource is encountered, then the archaeologist and OC Public Works, as lead agency, in consultation with the Tribe, shall arrange for either: (1) avoidance of the resource, if possible; or (2) test excavations to evaluate eligibility, and if eligible, attempt to resolve adverse effects through implementation of appropriate mitigation, which may include, but shall not be limited to, salvage excavation, laboratory analysis and processing, research, curation, and preparation of a report summarizing the find. The assessment of eligibility shall be formally documented in writing as verification that the provisions in the CEQA for managing unanticipated discoveries and Public Resources Code Section 5024 have been met.

4.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
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 checked="" type="checkbox"/>	<input 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"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less than Significant Impact. The proposed project includes access improvements, infrastructure improvements, and habitat restoration activities. Regarding expanded utilities, the proposed improvements to the maintenance yard would include the extension of electric service to provide lighting. This service would be extended from the existing restrooms in North Talbert. Due to the limited size and minor demand for electric services these improvements would cause, the proposed improvements would not require an increase in required capacity. The other key improvements would not require the connection to, or expansion of, water, sewer, or other utility infrastructure. Therefore, impacts to the local wastewater conveyance and treatment would be **less than significant** and no project-specific mitigation measures are required.

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

Less than Significant Impact. The Park is served by the Mesa Consolidated Water District, which is a member of the Metropolitan Water District of Orange County (MWDOC). MWDOC adopted the 2020 Urban Water Management Plan (UWMP), which identifies sources of municipal water, demand forecasts, and water supply reliability assessment. The 2020 UWMP finds MWDOC can meet water demand forecasts for normal water year, single dry water year, and multiple dry water years based on projected population growth and development in the service area (Municipal Water District of Orange County 2021).

Water usage during construction activities would be minor for dust control and equipment washing; and would be imported to the site with water trucks. The proposed project would not result in population growth or an increase in employment opportunities such that there would be an associated increase in water demand, beyond what is accounted for in the 2020 UWMP projections for 2025-2045. For example, the 2020 UWMP projects a total water demand of 495,958 acre-feet for fiscal year ending 2030 and 502,014 acre-feet for fiscal year ending 2035 (Table 4-4: MWDOC’s Service Area Total Potable and Non-Potable Demand Projections for 2025-2045; Municipal Water District of Orange County 2021). Therefore, the proposed project would have sufficient water supplies to serve the proposed project during normal, dry, and multiple dry years and the impact would be **less than significant**. Accordingly, no project specific mitigation is required.

- c) ***Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

Less than Significant Impact. The proposed project includes access improvements, infrastructure improvements, and habitat restoration activities. The proposed project is served by the Costa Mesa Sanitary District (CMSD), which provides sewer services, and the Orange County Sanitation District (OCSD) which treats sewage. The OCSD's 2019 Strategic Plan assesses the projected demand for wastewater treatment facilities and capacity. The wastewater treatment plants operated by the OCSD receive a combined average daily treatment capacity of 184 million gallons (OCSD 2025). The proposed project would not result in an increase in wastewater generation. The proposed project would not result in population growth or an increase in employment opportunities such that there would be a substantial increase in demand for wastewater treatment capacity. Therefore, the proposed project would be adequately served by the existing wastewater treatment facilities, and the impact would be **less than significant**. Accordingly, no project specific mitigation is required.

- d) ***Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

Less than Significant Impact. CMSD provides solid waste services to the City. CMSD is required by the Integrated Waste Management Act of 1989 (AB 939) to divert at least 50 percent of all the City's solid waste and recycling from landfills. There are three solid waste landfill facilities that serve the County of Orange, located in Brea, Irvine, and San Juan Capistrano. The majority of waste in the City of Costa Mesa is likely disposed of at the Frank R. Bowerman Sanitary Landfill in Irvine. Frank R. Bowerman Sanitary Landfill has a maximum permit capacity of 266,000,000 cubic yards, with a remaining capacity of 205,000,000 (CalRecycle 2022).

The proposed project includes access improvements, infrastructure improvements, and habitat restoration activities. Construction activities are anticipated to generate a small amount of construction debris; however, with no demolition proposed beyond removal of the existing restrooms in North Talbert to accommodate the Nature Center, it is not anticipated the proposed project would result in generation of substantial solid waste during construction. Given that the proposed project would not result in an increase in visitors or add any new activities that would be anticipated to generate substantial amounts of solid waste, it is not anticipated the projected solid waste generation would increase compared to existing conditions at the Park. As such, the available capacity of the local solid waste facility would be sufficient for the operation of the proposed project. Additionally, the proposed project would not prevent the City or CMSD from meeting statewide waste-diversion goals. Impacts would be **less than significant**, and no project specific mitigation is required.

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

Less than Significant Impact. In addition to AB 939, there are several other state laws that regulate solid waste:

- AB 341 requires cities and counties to implement recycling programs, reduce refuse at the source, and compost waste to achieve the established 75 percent diversion of solid waste from landfills.

- AB 1826 requires businesses to recycle organic waste depending on the amount of waste generated per week.
- SB 1383 requires a 75 percent reduction of state-wide organic waste by 2025 in order to reduce associated greenhouse gases such as methane and other short-lived climate emissions.

The proposed project, which includes access improvements, infrastructure improvements, and habitat restoration activities, is anticipated to result in a small amount of construction-related solid waste and is not anticipated to result in an increase in solid waste generation during operation. Therefore, the proposed project would not conflict with, or prevent the City from achieving, the applicable regulations related to solid waste. Impacts would be **less than significant**, and no project specific mitigation is required.

4.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

In support of the analysis presented below, Dudek prepared a Fire and Fuel Modification Assessment for the proposed project (see Appendix F).

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

Less-than-Significant Impact. As discussed in response to Threshold 4.9 f), construction of the proposed project would require temporary closure of the affected areas within the Park. Construction of the proposed project would not require the partial or full closure of roadways and would not prevent emergency access to the Park or the surrounding area.

The County and City of Costa Mesa have adopted Local Hazard Mitigation Plans that include measures to mitigate the risks of natural disasters. Additionally, the County General Plan Safety Element includes a map of Very High Fire Hazard Severity Zones and Evaluation Routes within the Unincorporated Areas and the nearest County identified evacuation route to the Park is Highway 1 (State Route 1) which is approximately 0.88 mile south of the Park's southern boundary (County of Orange 2025b). While the County General Plan Safety Element includes evacuation-related policies applicable to residential development or development/areas immediately surrounding facilities storing, handling, or processing nuclear materials, these policies are not directly applicable to the proposed project as it is a recreational/Park use that is not adjacent to a facility handling nuclear material (County of Orange 2025b). The City's General Plan Safety Element includes a map of emergency evacuation route (see *Figure S-9: Public Safety Facilities and Emergency Evacuation Routes*; City of Costa Mesa 2015). The nearest City-identified evacuation route is Adams Avenue which is located approximately 0.33 miles to the north of the northern boundary of North Talbert (City of Costa Mesa 2015).

Implementation of the proposed project would not interfere with the Local Hazard Mitigation Plan or local emergency access. The proposed project would not add a substantial volume of traffic to local area roads and its continued use as a park facility would not introduce any new hazards or hazardous conditions during operations. Therefore, impacts would be **less than significant**, and no project specific mitigation is required.

b) ***Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

Less than Significant Impact. The Park is not located in a Very High Fire Hazard Severity Zone (VHFHSZ), which has been designated by CAL FIRE based on factors such as fuel, terrain/slope, weather and other relevant factors (CAL FIRE 2025). The Park is within a mapped HFHSZ (North Talbert) and a Moderate FHSZ (South Talbert) (CAL FIRE 2025). Within the Park, above sea level elevations range from approximately 62 feet within North Talbert to 8 feet within South Talbert. Bluffs rise approximately 80 feet above the Park along its northern and eastern boundaries, and the western portion of the Park is bordered by the concrete-lined Santa Ana River and Banning Channel.

The Park is generally covered with vegetation. The prevailing wind direction in the proposed project area for the majority of the year is from the west, with average monthly wind speeds ranging from 5.3 to 7.5 mph (WeatherSpark 2022). Average wind conditions in the proposed project area exhibit mild seasonal variation, and wind conditions at any given location may vary depending on topography and other factors. The proposed project area is subject to seasonal Santa Ana winds, which typically present the highest fire danger. There has been one wildfire on the Park that occurred in 2010; however there have been no other wildfires within a 5-mile radius, or within the City (CAL FIRE 2022).

The proposed project does not include permanent occupants, but the Park would be temporarily occupied during construction activities by construction workers. The construction of the proposed project would not influence prevailing winds or other factors that could exacerbate wildfire risk. However, the proposed project construction would introduce potential ignition sources to the Park including the use of vehicles, heavy machinery, and accidental human-caused ignitions or any potential hot work. Construction would include site preparation, grading, trenching, and construction of various improvements. The proposed project would be conducted in accordance with the local and state regulations governing fire protection and safety. The proposed project would comply with the California Fire Code and the California Building Code as modified and amended by the City to limit the potential for accidental ignitions related to construction activities.

Operation of the Park would include one permanent park employee, occasional maintenance trips and patrons using the Park for recreation. As stated in the Fire and Fuel Modification Assessment prepared for the proposed project (see Appendix F), given the climatic, vegetative, topographic characteristics, and local fire history of the area, the proposed project site is determined to be subject to periodic wildfires that may start on, burn toward, or spot onsite. However, as the proposed project is a Master Plan document and involves improvements to the existing Park (and would not involve a change to the existing uses), proposed Park improvements would exacerbate wildfire risks or expose Park occupants/users to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

- c) ***Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

Less than Significant Impact. The proposed project would involve improvements to and operation of an existing park. Specifically with regard to infrastructure, the proposed project includes improvements to existing trails and extension of electrical utilities to the existing yard as applicable via underground conduits. Construction of associated infrastructure would be conducted in accordance with local and state regulations governing fire safety.

Construction and operation of the proposed project would not directly require new or expanded infrastructure other than that which is planned as part of the project. As discussed in Section 4.19, no new water/wastewater facilities, or other service utilities beyond the in-park extension of electrical service to the maintenance yard would be required for the project. The activities involved with the installation or maintenance of associated infrastructure would require ground disturbance and the use of heavy machinery associated with trenching, grading, site work, and other construction and maintenance activities. However, the proposed project would be required to comply with all mitigation measures outlined within this IS/MND and contractors would utilize best practices to ensure the safe and efficient operation of heavy construction machinery and compliance with federal and state regulations governing the safe operation of construction equipment (including 29 CFR Part 1926 and Cal/OSHA Title 8, Subchapters 4, 5, and 7). No adverse physical effects beyond those already disclosed and mitigated would occur as a result of the implementation of the project's associated infrastructure. Therefore, with compliance with regulatory requirements, the installation and maintenance of associated infrastructure would not exacerbate wildfire risk or result in impacts to the environment beyond those already disclosed throughout this document, and impacts would be **less than significant**. Accordingly, no project specific mitigation is required.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant Impact. The Park is located within a liquefaction zone, as mapped by the California Department of Conservation (DOC 2022). The Park and surroundings are generally flat and not located in a landslide zone, as mapped by the California Department of Conservation (DOC 2022). However, the project, which includes access improvements, infrastructure improvements, and habitat restoration activities, does not include activities that would induce post-fire instability, such as prescribed burning.

Although, the Park is within a mapped HFHSZ (North Talbert) and a Moderate FHSZ (South Talbert) (CAL FIRE 2025), the Park and surrounding areas are relatively flat with bluff terrain occurring to the immediate east of the Park boundary. Proposed project improvements would be subject to the California Fire Code and the California Building Code. Additionally, the proposed project area would remain similar to existing conditions and would not include large expanses of exposed soil and has not been exposed to any wildfires within a 5-mile radius, or within the City (CAL FIRE 2022). Therefore, impacts associated with an increase in risk of flooding, landslides, or post-fire slope instability would be **less than significant**. Accordingly, no project specific mitigation is required..

4.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
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 substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?***

Less than Significant Impact With Mitigation Incorporated. The proposed project is a Master Plan document and includes access improvements, infrastructure improvements, and habitat restoration activities that would primarily occur within the existing boundaries of the Park (a new access ramp to the Banning Bikeway would occur offsite but immediately adjacent to the Park boundary).

As discussed in Section 4.4, through implementation of MM-BIO-1 through MM-BIO-6, the project would not result in significant impacts to biological resources. Specifically, MM-BIO-1 requires the replacement (at a minimum 1:1 ratio) of existing populations of southern tarplant (a rare plant pursuant to CRPR 1B.1) that are proposed to be impacted by the proposed project and MM-BIO-2 requires pre-construction clearance surveys for burrowing owl (a candidate for potential listing as a protected species under the California Endangered Species Act). If necessary based on observed presence of the specie prior to construction, MM-BIO-2 includes implementation of additional avoidance and mitigation measures to ensure adequate protection. MM-BIO-3 requires a pre-construction clearance survey and if necessary based on observed presence of special-status avian species protected under the Migratory Bird Treaty Act and State Fish and Game Code including Cooper's hawk, California gull, double-breasted cormorant, white-faced ibis, Costa's hummingbird, rufous hummingbird, white-tailed kite, prairie falcon, osprey, yellow warbler, and yellow breasted chat prior to construction, additional avoidance measures including but not limited to the establishment of buffers around known locations of identified special status species. Similarly, MM-BIO-4 requires a pre-construction nesting bird survey and if necessary based on observed presence of nesting migratory birds prior to construction, additional avoidance measures including but not limited to the establishment of buffers around nests. Furthermore, MM-BIO-5 requires the restoration and enhancement of Project-impacted vegetation communities and land cover types that are considered sensitive by CDFW at a minimum 1:1 ratio and MM-BIO-6 requires the Applicant obtaining regulatory permits through which direct impacts to federal and state regulated waters would be mitigated via on-site restoration of habitat or purchase of off-site mitigation credits.

As discussed in Section 4.5, through implementation of MM-CUL-1, MM-CUL-2, and RCM CUL-1, the proposed project would not result in significant impacts to cultural resources. MM-CUL-1 would require the preparation of a Worker Environmental Awareness Program (WEAP) that would inform all personnel working on the proposed project about the archaeological sensitivity of the area. MM-CUL-2 establishes formal halt work protocol (and additional measures) to adhere to should earthmoving activities encounter any cultural resources. Lastly, RCM-CUL-1 formally establishes protocol (including a stop work issuance within 50 feet of the discovery) that would be implemented should human remains are encountered on the Park during construction activities

In addition, and as discussed in Section 4.7, through implementation of MM-GEO-1 that consists of the preparation of a Paleontological Resources Impact Mitigation Program by a certified Orange County paleontologist, the proposed project would not result in significant impacts to paleontological resources. Specifically, the Paleontological Resources Impact Mitigation Program would outline requirements for preconstruction meeting attendance and worker environmental awareness training, and identify where monitoring is required within the Park based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, paleontological methods (including sediment sampling for microfossils), reporting, and collections management

Lastly and through consultation to area tribes, the County determined that implementation of SC TCR-1 and SC TCR-2 (and those measures associated with Section 4.5) would appropriately lessen potential for impacts to tribal cultural resources. Specifically, SC-TCR-1 requires the formal documentation of any off-site fill material used for the proposed project during construction and similar to MM-CUL-2, SC-TCR-2 establishes formal protocol that would be triggered should unanticipated native American resources be discovered/encountered during proposed project construction.

Therefore, with mitigation and conditions incorporated, the proposed project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)***

Less than Significant Impact with Mitigation Incorporated. When evaluating cumulative impacts, it is important to remain consistent with Section 15064(h) of the CEQA Guidelines, which states that an EIR must be prepared if the cumulative impact may be significant and the project’s incremental effect, though individually limited, is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Alternatively, a lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable through mitigation measures set forth in an MND or if a project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which a project is located.

The proposed project, which includes access improvements, infrastructure improvements, and habitat restoration activities primarily within the existing boundaries of the Park, would result in project-related biological resources, cultural resources, geological resources, and tribal cultural resources impacts that could be potentially significant without the incorporation of mitigation and standard or regulatory compliance measures. . Identified comparable projects in the area (comparable in terms of use, scope, and anticipated impacts) are limited to (1) the draft Master Plan Update for Fairview Park and (2) the draft Resource Management Plan (and Public Access Plan) for the Randall Preserve/Genga (previously Banning Ranch). Fairview Park is located within the City of Costa Mesa and is adjacent to a portion of the eastern edge of North Talbert. The Randall Preserve/Genga is situated to the immediate south of South Talbert. Similar to the draft Master Plan for the Park, the draft Master Plans for Fairview Park and Randall Preserve/Genga envision passive recreation use via trail networks, habitat restoration and enhancement activities, and invasive plant management (City of Costa Mesa 2025b, Coastal Corridor Alliance 2025). However, unlike the Park and (likely) the Randall Preserve/Genga, Fairview Park has and will maintain parking facilities and a model glider and train area within park boundaries and thus, likely receives greater

visitorship that the two more passive parks. It should also be noted that neither the Master Plan for Fairview Park nor the Master Plan for the Randall Preserve/Genga has an accompanying CEQA document and as such, the construction timeframe for plan implementation (and potential for overlap for construction of select improvements at the Park) is unknown (and overlap is unlikely). Thus, when coupled with foreseeable biological resources, cultural resources, geological resources, and tribal cultural resources impacts related to the implementation of Master Plans (and focused improvement, if proposed) for Fairview Park and the Randall Preserve/Genga throughout the broader proposed project area, the proposed project would potentially result in cumulative-level impacts if these significant impacts are left unmitigated.

However, with the incorporation of mitigation and conditions identified herein, the project's biological resources, cultural resources, geological resources, and tribal cultural resources impacts would be reduced to less-than-significant levels and would not considerably contribute to cumulative impacts in the greater proposed project region. In addition, these other related projects would presumably be bound by their applicable lead agency to (1) comply with the all applicable federal, state, and local regulatory requirements; and (2) incorporate all feasible mitigation measures, consistent with CEQA, to further ensure that their potentially cumulative impacts would be reduced to less-than-significant levels.

Although cumulative impacts are always possible, by incorporating all mitigation measures outlined herein, the proposed project would reduce its contribution to any such cumulative impacts to less than cumulatively considerable. Therefore, the proposed project would result in individually limited, but not cumulatively considerable, impacts.

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

Less than Significant Impact With Mitigation Incorporated. As evaluated throughout this document, with incorporation of mitigation and conditions, environmental impacts associated with the proposed project would be reduced to less-than-significant levels. Thus, the proposed project would not directly or indirectly cause substantial adverse effects on human beings. Impacts would be **less than significant with incorporation of mitigation**.

5 Mitigation Monitoring and Reporting Program

5.1 Introduction

CEQA requires a lead or responsible agency to adopt a mitigation monitoring and reporting program (MMRP) when approving or carrying out a project (Section 21081.6 of the California PRC). The purpose of this program is to ensure that the mitigation measures identified in an environmental document are implemented as detailed in the draft environmental document. As lead agency for the Project, Orange County Department of Public Works (OCPW) is responsible for implementation of this MMRP per the requirements of CEQA.

This MMRP was prepared to provide a consolidated monitoring guide to facilitate the implementation of the adopted mitigation measures and related compliance reporting. Once OCPW adopts the MMRP, the mitigation monitoring/reporting requirements will be incorporated into the appropriate permits and construction documents (i.e., engineering specifications, engineering and construction plans, etc.). In accordance with the aforementioned requirements, this MMRP lists each mitigation measure, describes the methods for implementation and verification, and identifies the responsible party or parties as detailed below in Section 5.3.

5.2 Monitoring and Reporting Procedures

The MMRP will be in place through all phases of the Project, including design, construction, and long-term management and will facilitate the implementation of mitigation measures proposed to avoid, minimize, or reduce significant environmental effects. OCPW will be responsible for administering the MMRP and ensuring that all parties, including Project contractors, comply with its provisions. OCPW also will ensure that monitoring is documented through systematic compliance verification and reporting and that deficiencies are promptly corrected.

5.3 Mitigation Monitoring and Reporting Program Implementation

This MMRP was prepared to verify compliance with individual mitigation measures proposed in the MND for the Project. Table 5-1 below identifies each mitigation measure by discipline and the entity responsible for its implementation. Certain inspections and reports may require preparation by qualified individuals and these are specified as needed. The timing and method of verification for each measure are also specified.

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
PDF BIO-1. Sediment and erosion control measures would be developed and implemented in accordance with RWQCB Construction General Permit requirements to reduce the potential for the project to result in increased siltation of, or release of pollutants into creeks and their tributaries. Best management practice (BMP) categories employed would include erosion control, sediment control, and non-stormwater good housekeeping.	Prior to and as needed during construction. This measure shall be included in construction plans and specifications for implementation during construction.	OCPW		
PDF BIO-2. The footprint of disturbance would be limited to the maximum extent feasible, such as limiting access to via pre-existing access routes to the greatest extent possible. Parking, staging, storage, excavation, and disposal site locations would be confined to the smallest areas possible and be positioned at previously disturbed areas to the greatest extent practical.	Prior to and as needed during construction. This measure shall be included in construction plans and specifications for implementation during construction.	OCPW		
PDF BIO-3. To reduce fugitive dust resulting from project construction and to minimize adverse air quality impacts, the project would employ dust control measures in accordance with the Air Quality Management District’s Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction	During construction (in particular, ground-disturbing activities). This measure shall be included in construction plans and specifications for implementation during construction.	OCPW		
PDF BIO-4. To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 2 feet deep would be covered with tarp, plywood, or similar materials at the close of each working day to prevent animals from being trapped. Ramps may be constructed of earth fill or wooden planks within deep-walled trenches to allow for animals to escape. Before such holes or trenches are backfilled, they would be thoroughly inspected for trapped animals. If trapped animals are observed, escape ramps or structures would be installed immediately to allow escape. If the trapped animal	During construction.	OCPW		

Table 5-1. Mitigation Monitoring and Reporting Program

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			Initials	Date
is injured and cannot use escape ramps or structures, a qualified biologist would be contacted to identify the appropriate next steps.				
PDF BIO-5. All construction pipes, culverts, and similar structures that are stored at the construction site for one or more overnight periods would be thoroughly inspected for burrowing owls and nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved. An option is to cap the ends of any stored pipes to prevent any animals from entering. If an animal is discovered inside a pipe, that section of pipe would not be moved until the project biologist or designated representative has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated out of harm’s way by an approved biologist.	During construction.	OCPW and Project Biologist		
PDF BIO-6. The project will include a Habitat Restoration Plan which will guide the restoration activities for the project and will detail the proposed methods of restoration, including application type and planting palette. Additionally, the plan will include performance standards to assess the success of the project compared to baseline conditions and inform adaptive management. The Habitat Restoration Plan will be approved by the resource agencies to ensure compliance with allowed uses within the Central-Coastal Subregion NCCP/HCP Reserve and maintenance/improvement of habitat function for covered species.	Prior to and as needed during construction. This measure shall be included in construction plans and specifications for implementation during construction.	OCPW and Resource Agencies		
PDF BIO-7. No invasive non-native plant species shall be planted, seeded, or otherwise introduced as part of the project. Plant material shall be native species appropriate to the site. A qualified biologist shall review landscape plans before approval.	Prior to and as needed during implementation of Habitat Restoration Plan. This measure shall be included in construction plans and specifications for implementation during construction.	OCPW and Resource Agencies		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
PDF BIO-8. Equipment would be cleaned prior to transport to the Park to prevent potential non-native plant species and other foreign matter, such as sediment and debris, from entering the site.	During construction. This measure shall be included in construction plans and specifications for implementation during construction.	OCPW		
MM-BIO-1 Rare Plant Restoration. In order to replace individual southern tarplant populations on the Park, restoration activities as part of the project shall revegetate the site with both species at a minimum 1:1 ratio. For southern tarplant, the 1:1 ratio shall be calculated based on area occupied by the species. Revegetation can either be accomplished through seeding restoration areas with a native seed mix containing both species and/or planting container plants. Prior to project impacts, existing populations of both species that are proposed to be impacted will be identified and counted to determine the amount of seed or container plants needed and suitable area for plant establishment. The methods and quantity of the restoration effort for these two species will be included in the Restoration Plan for the project. The Restoration Plan shall include monitoring and maintenance procedures, performance standards to ensure self-sustaining populations have been established, and adaptive management/remedial measures if restoration is not successful.	Following completion of construction, or at the earliest possible time that is appropriate to achieve plant establishment.	OCPW		
MM-BIO-2 Burrowing Owl Pre-Construction Surveys. Prior to the start of grading and vegetation clearing activities within suitable habitat areas on the Park, a pre-construction clearance survey for burrowing owl shall be conducted according to survey protocol outlined in the 2012 CDFW Staff Report on Burrowing Owl Mitigation. A minimum of two surveys will be conducted within 14 days prior to the start of the project and another within 24 hours of initiating ground-disturbing activities. If burrowing owl is found on site additional avoidance and mitigation measures will be required. If burrowing owl occurs in an area that cannot be avoided by the project, additional land conservation and/or relocation may be required, which will be determined through consultation with CDFW.	Prior to the start of grading and vegetation clearing activities within suitable habitat areas on the Park	OCPW		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
<p>MM-BIO-3 Pre-Construction Surveys for Special-Status Species. One pre-construction clearance survey shall be conducted no more than 14 days prior to initiation of site preparation and grading activities. A qualified biologist shall walk the entire survey area to determine if any special-status wildlife are observed or detected. Additional measures may be required for observed species on site, such as establishing a buffer around known locations and/or conducting monitoring during construction near occupied areas to ensure no project activities result in loss of an active nest and incidental take does not occur.</p>	No more than 14 days prior to initiation of site preparation and grading activities	OCPW		
<p>MM-BIO-4 Pre-Construction Nesting Bird Surveys and Avoidance. Vegetation clearing and grading activities shall avoid the migratory bird nesting season (typically February 1 through August 31) to reduce any potential significant impacts to birds that may be nesting in the Park, including yellow warbler, yellow-breasted chat, Cooper’s hawk, least Bell’s vireo, coastal California gnatcatcher, burrowing owl, California gull, white-faced ibis, double-breasted cormorant, Costa’s hummingbird, rufous hummingbird, osprey, prairie falcon, and white-tailed kite. To maintain compliance with the Migratory Bird Treaty Act and California Fish and Game Code, if ground-disturbing and/or vegetation clearance activities are scheduled to occur during the avian nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist within the project impact footprint and a 500-foot buffer where legal access is granted around the disturbance footprint to determine the presence or absence of protected migratory birds and active nests. Surveys shall be conducted within 3 days prior to initiation of activity in accordance with the Migratory Bird Treaty Act (16 USC 703-712) and the State Fish and Game Code Sections 3503, 3503.5, and 3513.</p> <p>If an active nest is detected during the nesting bird survey, the nest shall be flagged and mapped on the construction plan, along with appropriate avoidance buffers established around the nest as determined by a qualified biologist based on the species sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The buffer shall be of a distance</p>	Prior to vegetation clearing and grading activities	OCPW		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
to ensure avoidance of adverse effects to the nesting bird by accounting for topography, ambient conditions, species, nest location, and activity type. All nests shall be monitored as determined by the qualified biologist until nestlings have fledged and dispersed, or it is confirmed that the nest has been unsuccessful or abandoned. The qualified biologist shall halt all construction activities within proximity to an active nest if it is determined that the activities are harassing the nest and may result in nest abandonment or take. The qualified biologist shall also have the authority to require implementation of avoidance measures related to noise, vibration, or light pollution if indirect impacts are resulting in harassment of the nest. No project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged, and the nest is no longer active.				
MM-BIO-5 Restoration of Sensitive Natural Communities. The proposed project shall restore and enhance native habitat communities on the Park to a level greater than what currently exists on the Park. The 0.61 acre of impacted sensitive natural communities shall be restored at a minimum 1:1 ratio through planned restoration activities as part of the project. The project’s Restoration Plan shall detail the location and amount of restoration proposed to offset project-related impacts to sensitive natural communities.				
MM-BIO-6 Regulatory Waters Permitting. Direct impacts to jurisdictional waters shall be addressed through the regulatory application process to implement Section 401 and Section 404 of the Clean Water Act, the Porter-Cologne Water Quality Act, and Section 1602 of the California Fish and Game Code. Due to the amount of proposed project-related impacts to potentially jurisdictional aquatic resources it is anticipated that an Individual Permit from the ACOE will be required. An Individual Permit would also require compliance with 404(b)(1) Guidelines and mitigation to offset impacts and ensure no-net loss of wetlands and waters of the U.S. and State. Direct impacts to jurisdictional non-wetland waters shall be mitigated through either the on-site restoration of habitat or	Prior to construction	OCPW		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
through the purchase of off-site mitigation credits. The applicant shall purchase credits through an agency-approved mitigation bank, in-lieu fee program, or other agreement. A minimum ratio of 3:1 for establishment or reestablishment credits shall be required for impacts to jurisdictional wetlands, as well as associated riparian habitat. However, the final mitigation ratio required shall be determined through consultation with the regulatory resource agencies during the permitting process. Finally, a standard Streambed Alteration Agreement shall be required from the CDFW for impacts to CDFW waters, as well as a Coastal Development Permit from the CCC.				
MM-CUL-1 Worker Environmental Awareness Program. Prior to commencement of construction activities for all phases of Project implementation, OC Parks shall retain a qualified archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the OC Parks for review and approval. All construction personnel and monitors shall be presented, the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. The WEAP shall define “tribal cultural resources” and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.	Prior to commencement of construction activities for all phases of Project implementation	OCPW and Qualified Archaeologist		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
<p>MM-CUL-2 Inadvertent Archaeological Discoveries. In the event that any cultural resources are encountered during earthmoving activities, all work within 50 feet of the find shall be halted until a qualified archaeologist/ archaeological principal investigator (archaeologist) can evaluate the findings and make recommendations. The archaeologist may evaluate the find in accordance with federal, State, and local guidelines, including those set forth in the California Public Resources Code Section 21083.2 and as outlined by CEQA (14 CCR 15064.5[f]; PRC Section 21082), to assess the significance of the find and identify avoidance or other measures as appropriate. If suspected prehistoric or historical archaeological deposits are discovered during construction, all work within the immediate area of the discovery shall be redirected and the find must be evaluated for significance by a qualified archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for archaeology (National Park Service 1983). The work exclusion buffer may be adjusted as appropriate to allow work to feasibly continue at the recommendation of the archaeologist. Should it be required, temporary flagging shall be installed around this resource in order to avoid any disturbances from construction equipment. The potential for avoidance should be the primary consideration of this initial process.</p> <p>If the archaeologist observes the discovery to be potentially significant under CEQA, additional efforts, such as the preparation of a monitoring plan shall be prepared by a qualified archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for Archaeology, and implemented upon approval by OCPW. The monitoring plan shall include the required archaeological resource treatment, testing, and/or data recovery procedures. If approved by OCPW and noted in the monitoring plan, an archaeological monitor shall be present during the remainder of the ground-disturbing activities for the Project. Archaeological monitoring may be adjusted (increase, decreased, or discontinued) at the recommendation of the archaeological principal investigator and based on inspection of exposed cultural material and the observed potential for soils to contain intact cultural deposits or otherwise significant archaeological</p>	As needed during construction	OCPW and Qualified Archaeologist		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
<p>material. The archaeological monitor shall be provided a copy of the Cultural Resources Inventory Report and its pertinent appendices to inform their monitoring efforts. The archaeological monitor shall have the authority to temporarily halt work to inspect areas for potential cultural material or deposits.</p> <p>Daily monitoring logs shall be completed by the on-site archaeological monitor. Within 60 days following completion of construction, the archaeologist shall provide an archaeological monitoring report to OCPW. This report shall include the results of the cultural monitoring program (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates all mitigation measures defined in the environmental document were appropriately met. Appendices shall include archaeological monitoring logs and documentation relating to any newly identified or updated cultural resources. This report shall be submitted to the SCCIC once considered final.</p>				
<p>RCM-CUL-1 Human Remains. In the event that human remains are encountered on the Park, work within 50 feet of the discovery shall be redirected and the County of Orange (County) Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the County shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition</p>	As needed during construction	OCPW		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
of the remains. Prior to the issuance of grading permits, the County of Orange (County) Public Works Department, or designee, shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.				
MM-GEO-1 Prior to the commencement of any grading or ground disturbing activities on-site, the County of Orange shall retain a certified Orange County paleontologist. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) (2010) and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Park based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, paleontological methods (including sediment sampling for microfossils), reporting, and collections management. The certified paleontologist shall attend the preconstruction meeting and a qualified paleontological monitor shall be on-site during all rough grading and other significant ground-disturbing activities (including augering) in area underlain by old paralic deposits and below a depth of 5 feet in areas underlain by young alluvial fan deposits.	Prior to the commencement of any grading or ground disturbing activities	OCPW and Certified Paleontologist		
SC TCR-1 Documentation of Fill Material. OCPW and OC Parks will document in the Project files the source of any off-site fill material used for the Project during construction.	As needed during construction	OCPW and OC Parks		
SC TCR-2 Unanticipated Discovery of Native American Resources. If unanticipated tribal cultural resources, archaeological resources or deposits are discovered during ground-disturbing activities, OC Public Works shall implement the following measures. All work shall halt within a 50-foot radius of the discovery. OC Public Works shall retain a qualified professional archaeologist with knowledge of Native American resources to assess the significance of the find. If the resources are Native American in origin, OC Public Works shall coordinate with the Tribe regarding evaluation, treatment, curation, and	As needed during construction (specifically, during ground-disturbing activities)	OCPW		

Table 5-1. Mitigation Monitoring and Reporting Program

Mitigation Measure, Project Design Feature, or Other Measure	Timing	Party Responsible for Monitoring and Enforcement	Verification	
			Initials	Date
<p>preservation of these resources. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgment in consultation with OC Public Works. Work shall not continue within the no work radius until the archaeologist conducts sufficient research and evidence and data collection to establish that the resource is either: (1) not cultural in origin; or (2) not potentially eligible for listing on the California Register of Historical Resources. If a potentially eligible resource is encountered, then the archaeologist and OC Public Works, as lead agency, in consultation with the Tribe, shall arrange for either: (1) avoidance of the resource, if possible; or (2) test excavations to evaluate eligibility, and if eligible, attempt to resolve adverse effects through implementation of appropriate mitigation, which may include, but shall not be limited to, salvage excavation, laboratory analysis and processing, research, curation, and preparation of a report summarizing the find. The assessment of eligibility shall be formally documented in writing as verification that the provisions in the CEQA for managing unanticipated discoveries and Public Resources Code Section 5024 have been met.</p>				

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6.2 List of Preparers

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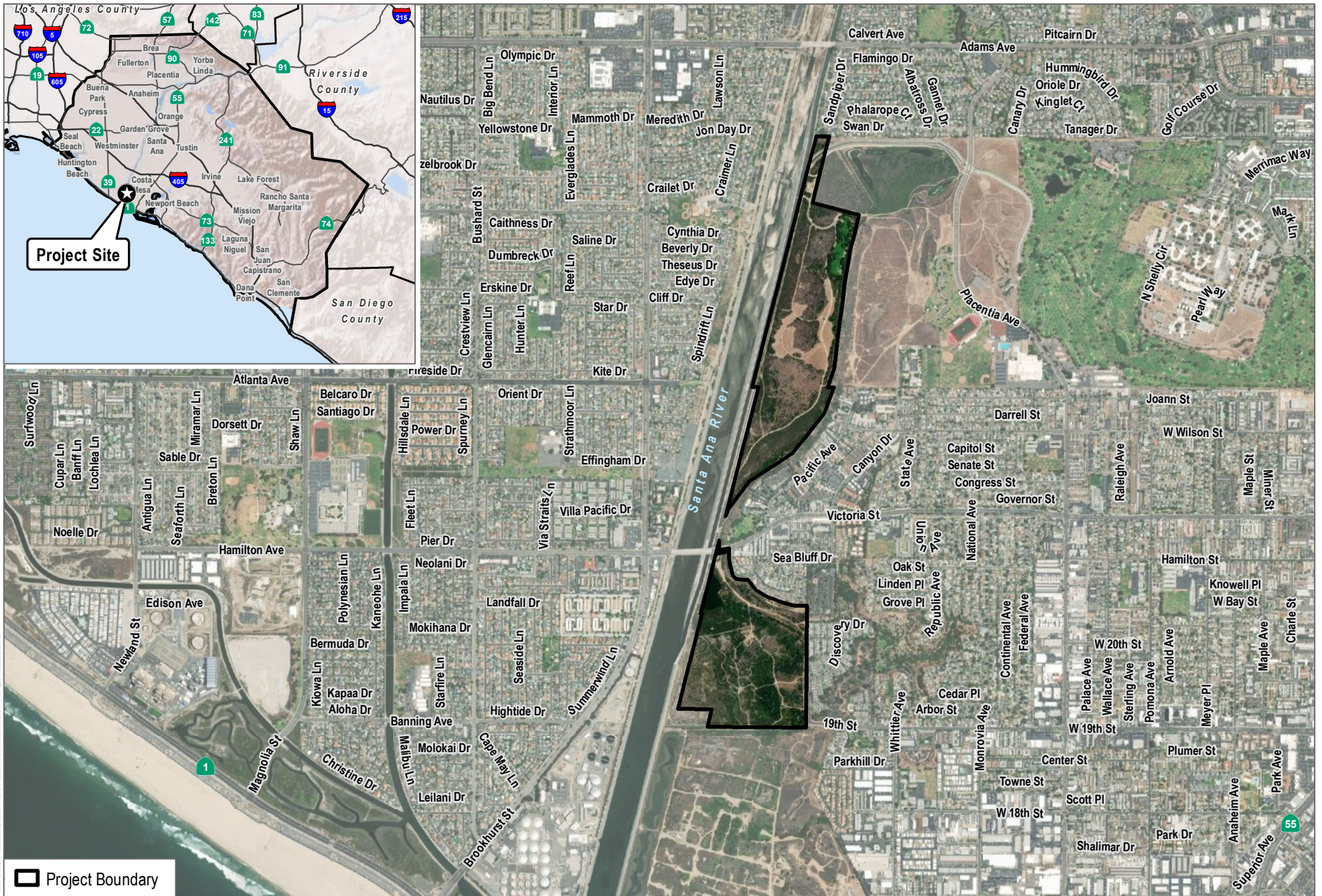
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County of Orange

Stephanie Clark, Deputy County Counsel

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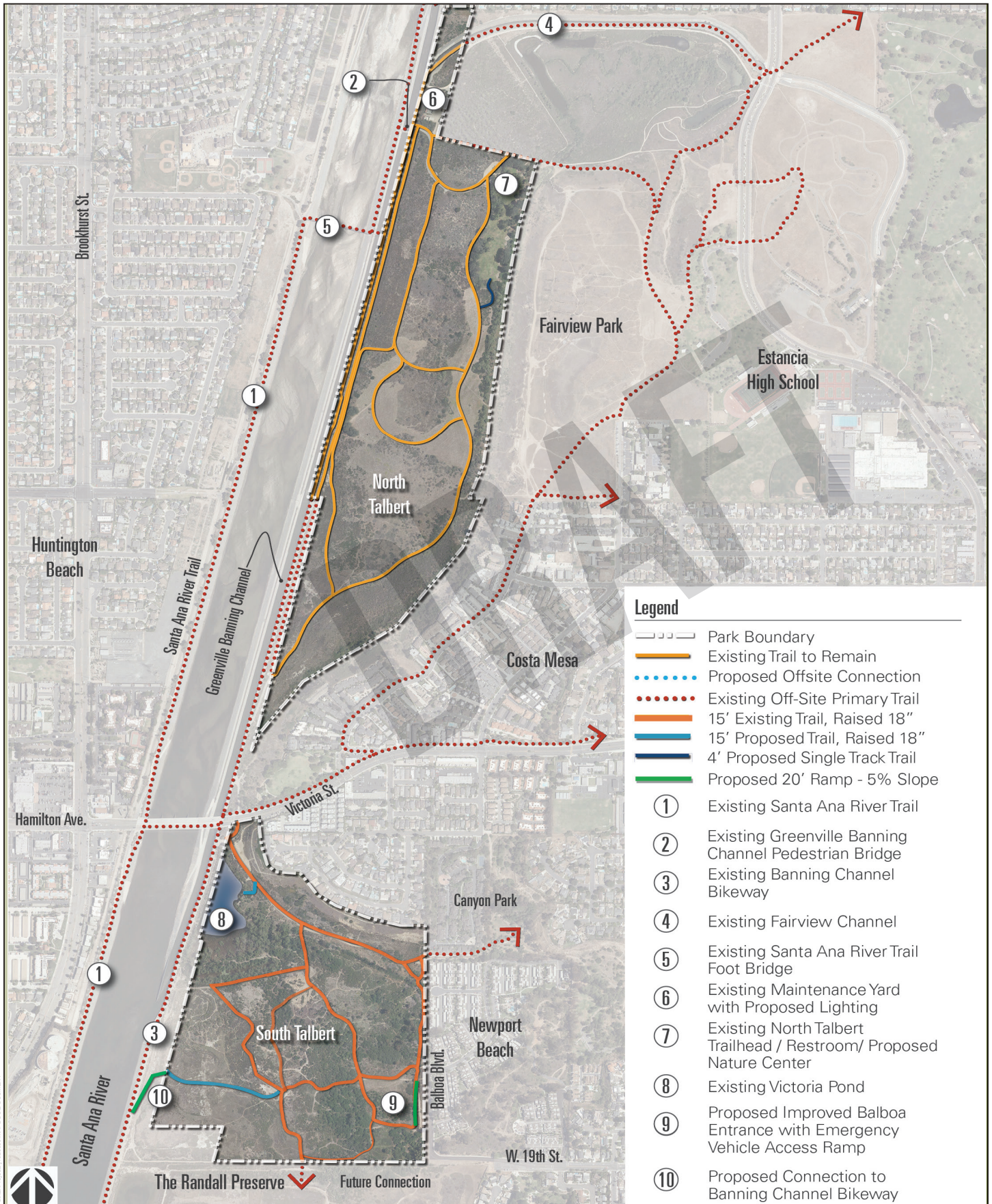


SOURCE: County of Orange; Open Street Maps 2019; DigitalGlobe Accessed 2022

FIGURE 1
Project Location
 Talbert Regional Park Master Plan Project

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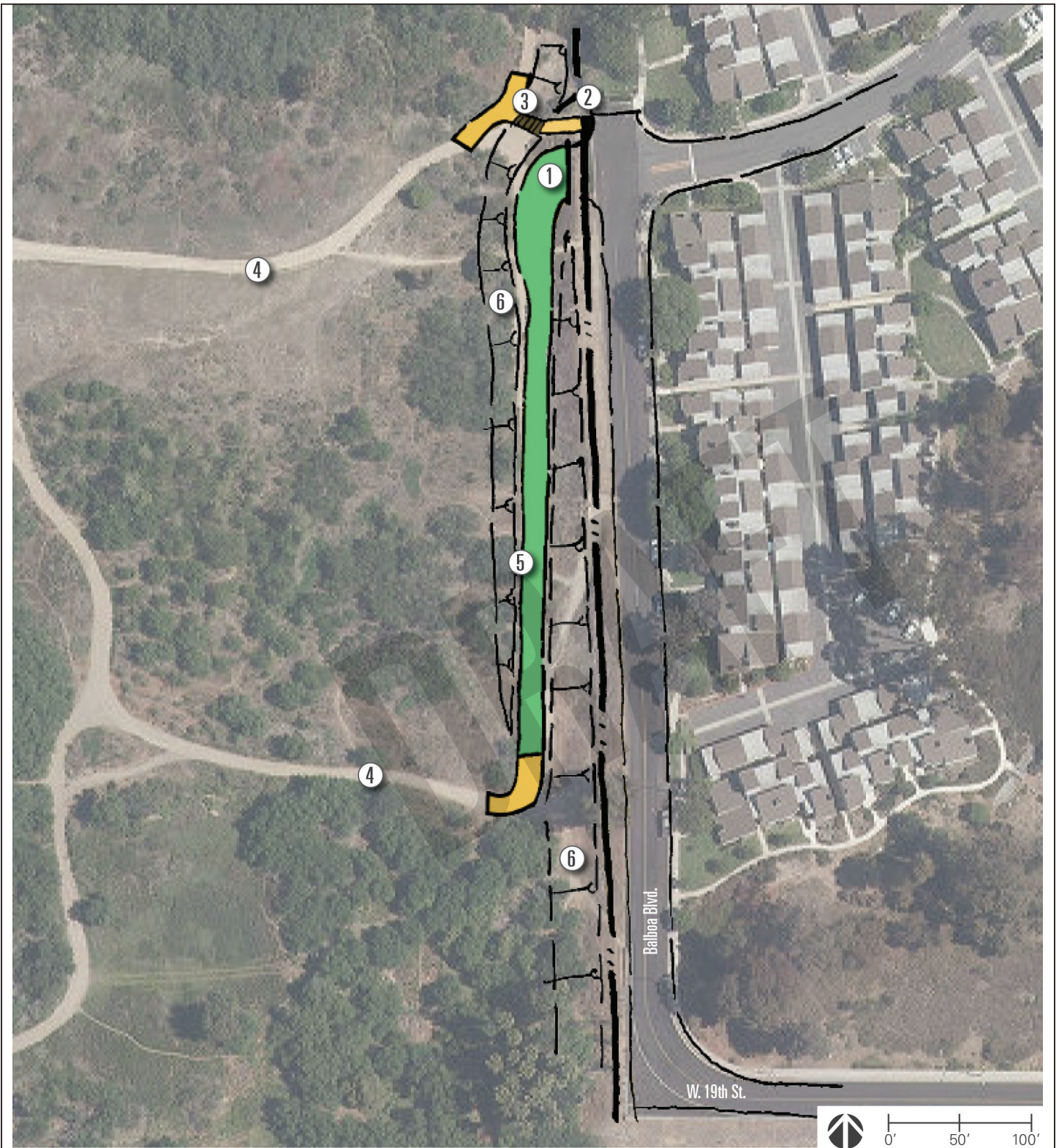


SOURCE: OC Parks 2025

FIGURE 3

Proposed Improvements
Talbert Regional Park Master Plan

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Legend

- | | |
|--------------------------------|---------------------------------------|
| ① Gate and Rolled Curb Opening | ④ Existing 15' Trail To Be Raised 18" |
| ② Pedestrian Arrival Sign | ⑤ Proposed 20' Ramp, 5% Maximum Slope |
| ③ Proposed Stairway | ⑥ Proposed 2:1 Slope |

SOURCE: OC Parks 2025

FIGURE 4

Balboa Boulevard Entrance Plan

Talbert Regional Park Master Plan

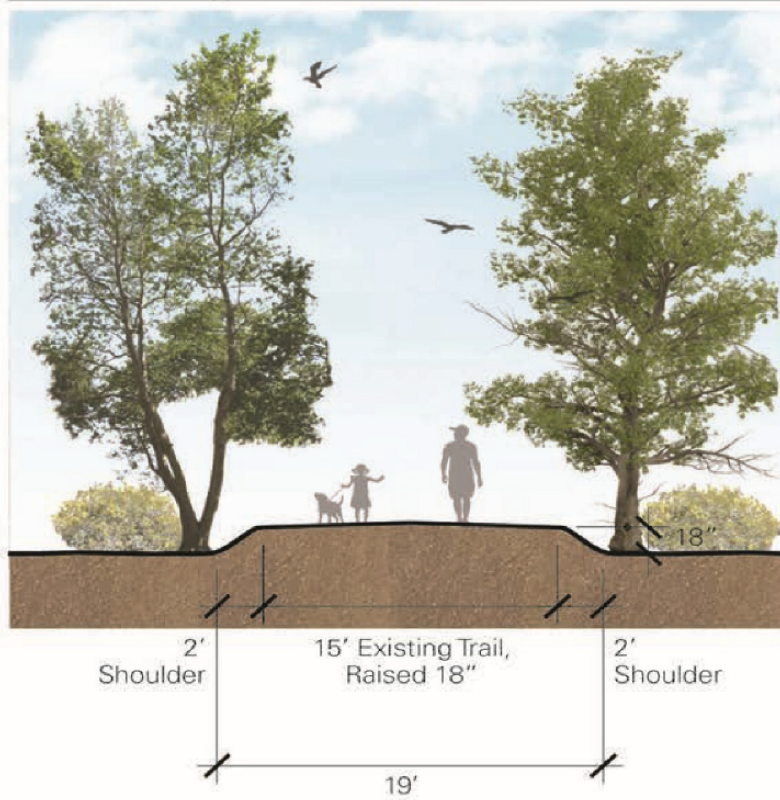
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North Talbert New Connector



4' Single Track Trail

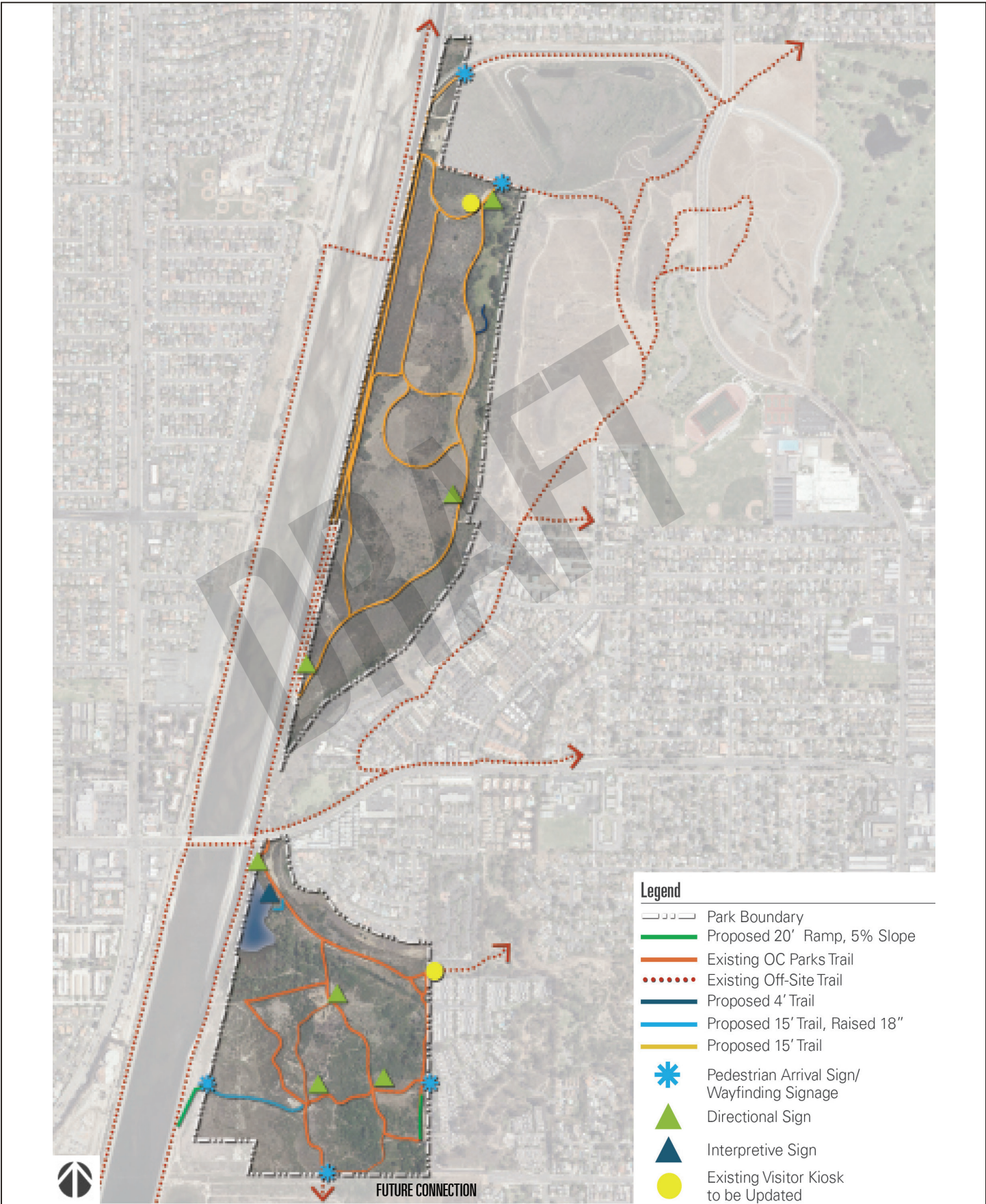
South Talbert Trail Improvement



SOURCE: OC Parks 2025

FIGURE 5

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SOURCE: OC Parks 2025

FIGURE 6

Conceptual Wayfinding Plan
Talbert Regional Park Master Plan

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SOURCE: Open Street Maps 2019, Digital Globe Accessed 2022

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