APPENDIX C

NATURAL ENVIRONMENT STUDY (MINIMAL IMPACTS)

OC LOOP SEGMENTS O, P, & Q COYOTE CREEK BIKEWAY PROJECT
NATURAL ENVIRONMENT STUDY REPORT
(MINIMAL IMPACTS)

CITIES OF CERRITOS, LA MIRADA AND BUENA PARK
ORANGE AND LOS ANGELES COUNTY, CALIFORNIA
District 12-ORA

ATPL-5955(112)

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STATE OF CALIFORNIA
Department of Transportation
Orange County, Department of Public Works

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Term
Agreement	Lake or Streambed Agreement
BEP	Bat Exclusion Plan
BGEPA	Bald and Golden Eagle Protection Act
BIOS	Biogeographic Information and Observation System
BMP	Best Management Practice(s)
BNSF	Burlington Northern Santa Fe Railway
BSA	Biological Study Area
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
CRAM	California Rapid Assessment Method
CRPR	California Rare Plant Rank
CWA	Clean Water Act
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Sensitive Area
FESA	Federal Endangered Species Act
FGC	(California) Fish and Game Code
GIS	Geographic Information System
HU	Hydrologic Unit
IPaC	Information for Planning and Consultation
I-5	Interstate 5
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MCV2	Manual of California Vegetation Online (Second Edition)
NEPA	National Environmental Policy Act
NES (MI)	Natural Environment Study (Minimal Impacts)
NOAA	National Oceanic and Atmospheric Administration

Acronym/Abbreviation	Term
NRCS	National Resources Conservation Service
NWI	National Wetland Inventory
NWP	Nationwide Permit Program
OC	Orange County
OCPW	Orange County Public Works
OCTA	Orange County Transit Authority
OHWM	ordinary high-water mark
PCN	Preconstruction Notification
RCB	reinforced concrete box
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
RWQCBs	Regional Water Quality Control Boards
SEA	Significant Ecological Area
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
U.S.	United States
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WEAP	Worker Environmental Awareness Program
WQC	Water Quality Certification
WQMP	Water Quality Management Plan
§	section
§§	sections

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EXECUTIVE SUMMARY

The proposed project site traverses the City of La Mirada, City of Buena Park and City of Cerritos, (see **Figure 1,** *Regional Overview*, and **Figure 2** *Project Vicinity,* and **Figure 3***, Project Location,* located in **Appendix A***, Figures*). The OC Loop Segments O, P, Q Coyote Creek Bikeway Project (proposed project) involves the construction and operation of a 2.7-mile Class I Bikeway component of a larger and longer 66-mile regional bikeway corridor called the OC Loop. Comprised of OC Loop Segments O, P, and Q, the new proposed facilities, scheduled to become part of the Coyote Creek Bikeway, will be located along the northwest Orange County/southeast Los Angeles County border from its point of origin along the Coyote Creek flood control channel in the City of Cerritos on the southwest to the City of Buena Park to the northeast.

Project components include installation of a pre-fabricated truss bridge across Coyote Creek at Station 10+00 (confluence of the north and east forks of the Coyote Creek flood control channel) and another pre-fabricated truss bridge (similar to the first one but much shorter) across Coyote Creek upstream of Stage Road. The project also involves undercrossings at Valley View Avenue, Artesia Boulevard, Union Pacific Railroad (UPRR) Industrial Lead, South Firestone Boulevard, Interstate 5 (I-5), North Firestone Blvd, Burlington Northern Santa Fe Railway (BNSF)/Metrolink Railway Line; alternatively, since UPRR has preliminarily indicated they may not be able to support an underpass of their tracks by policy, a pedestrian/cyclist truss bridge may be required as an alternative option. At-grade crossings include Knott Avenue, BNSF Railway lead, and Stage Road. The at-grade crossing at Stage Road would use a signalized intersection at McComber Road approximately 500 feet west of Coyote Creek and would involve installation of a fully functional "T intersection" traffic signal and crosswalk.

The new and existing bikeway would be connected by directing cyclists east onto La Mirada Boulevard and constructing a new 10-foot wide asphalt Class I trail on both sides of La Mirada Boulevard for a distance of 280 feet (on each side) where bicyclists could cross via an existing signalized intersection at the entrance of the Los Coyotes Shopping Center. Several ornamental trees would be removed and replaced if the landowner/City desire and minor grading would be conducted to install the new Class I trail. The existing sidewalks for this 280-foot reach of La Mirada Boulevard would be included in the Class I trail.

A reconnaissance-level biological resource field review was conducted on February 21 and March 6, 2020. Additional surveys included a tree inventory conducted on March 6, focused acoustic bat surveys conducted on July 14 and 15, 2020, and a desktop jurisdictional delineation conducted on April 9, 2020, which utilized photos and data collected during each aforementioned biological resources and tree inventory surveys. A desktop delineation was performed: 1) due to the stay-at-home order issued by Governor Gavin Newsom on March 19, 2020; 2) due to the static nature of the concrete-lined channel; and 3) the availability of storm drain plans to digitize jurisdictional boundaries using the approximate location of the ordinary high water mark and top of bank, as observed during the field surveys.

Three land cover types (habitats/natural communities) were observed within the project's 126.2-acre Biological Study Area (BSA): 1) Developed/Ornamental; 2) Concrete-lined channel; and 3) Disturbed habitats.

No listed endangered, threatened, candidate or state rare plant species or sensitive plant species were observed within the BSA during the field surveys conducted on February 21 or March 6, 2020 by UltraSystems Environmental. The literature review and field surveys concluded that habitat

conditions within the BSA create a moderate potential for one sensitive plant species to occur: lucky morning glory (*Calystegia felix*) (California Rare Plant Rank (CRPR): 1B.1).

One special-status wildlife species, Coastal Whiptail (*Aspidoscelis tigris stejnegeri*; California Department of Fish and Wildlife [CDFW] Species of Special Concern [CDFW, 2019; CDFW, 2020a; CDFW, 2020b; Association of Environmental Professionals, 2019), S-Rank = S3) was observed during the surveys. In addition, the literature review and field surveys concluded that habitat conditions within the BSA create a moderate potential for one sensitive wildlife species to occur: the Western Mastiff bat (*Eumops perotis californicus*; CDFW Species of Special Concern [SSC]). The focused acoustic bat surveys (which were performed July 14 and 15, 2020) are the only accepted industry-standard approach to determine presence/absence of this species.

Sixteen additional "common" wildlife species were detected (visually or aurally) during the survey. These include the mallard (*Anas platyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), least sandpiper (*Calidris minutilla*), killdeer (*Charadrius vociferus*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), northern mockingbird (*Mimus polyglottos*), black phoebe(*Sayornis nigricans*) and two bat species, big brown bat (*Eptesicus fuscus*) and Mexican free-tailed bat (*Tadarida brasiliensis*). Stage Road bridge contained a bat colony, as noted by sign (excrement) and aural cues (vocalizations and movement sounds). The focused acoustic bat survey conducted on July 14 and 15, 2020 confirmed a roosting colony on Stage Road Bridge and all other bridges were deemed as low risk for presence of a bat colony due to lack of suitable crevices or cavities and a lack of bat guano. The focused acoustic bat survey also confirmed suitable roosting habitat for the Western Mastiff Bat. Focused pre-construction surveys will be conducted to determine presence of roosting bats and to determine the particular bat species using the bridges.

Coyote Creek, a channelized intermittent stream that flows west/southwest through the BSA, discharges into the San Gabriel River (a known water of the U.S.); therefore, Coyote Creek is considered a water of the U.S. and a water of the State of California (water of the State).

The OC Loop segments O, P and Q Coyote Creek Bikeway Project may require a § 404 Clean Water Act (CWA) Nationwide Permit (NWP) and a §408 Authorization to Alter a "Civil Works" project, both from the United States Army Corps of Engineers (USACE), a § 401 CWA Water Quality Certification through the California State Water Resources Control Board (SWRCB), and a § 1602 California Fish and Game Code (FGC) Lake or Streambed Alteration Agreement from the South Coast Region of the California Department of Fish and Wildlife.

1.0 Introduction

1.1 Project Location

OC Loop Segments O, P, and Q Coyote Creek Bikeway Project ("proposed project" or "project") site goes through the City of La Mirada, City of Buena Park, and the City of Cerritos (see **Figure 1***, Regional Overview,* **Figure 2**, *Project Vicinity,* and **Figure 3**, *Project Location,* located in **Appendix A***, Figures*) United States Geological Survey (USGS) 7.5-Minute topographic map in Township 3 South, Range 11 West, Section 26,27,33 and 34 (see **Figure 4**, *Topography*, located in **Appendix A***, Figures*).

The proposed project would involve the development of a 2.7-mile Class I Bikeway component of a larger 66-mile regional bikeway corridor called the OC Loop, Segments O, P and Q (hereby referred to as the "proposed project" or "project") that will become part of the Coyote Creek Bikeway. The proposed project, scheduled to become part of the Coyote Creek Bikeway, will be located along the northwest Orange County/southeast Los Angeles County border from its point of origin along the Coyote Creek flood control channel in the City of Cerritos to the project terminus in the City of Buena Park.

Specifically, Segment O would be 1.1 miles long and extend from Coyote Creek North Fork to Artesia Boulevard. OC Loop Segment P would be 0.6-mile-long and extend from Artesia Boulevard to Knott Avenue. OC Loop Segment Q would be one mile long and extend from Knott Avenue to Malvern Avenue. (see **Figure 3**, *Project Location*, in **Appendix A**, *Figures*)

1.2 Project Purpose and Need

Areas along the OC Loop corridor that are open for bicycle traffic are in poor condition and the bikeway surface is not marked clearly. Bicycle traffic at the junction of the Coyote Creek Bikeway and the San Gabriel River Bikeway does not continue along Coyote Creek Bikeway (Stantec Consulting Services Inc., 2015, p. 40). In some areas, the bikeway is improved on one bank, while in other areas it is improved on both sides. Bicyclists can find themselves at the end of a bikeway facing a heavily used arterial highway with a high-speed limit. In addition, there may be no traffic signals to facilitate crossing, a raised median may prohibit crossing and no suitable way to use the roadway bridge to ride across the creek to reach the bikeway on the opposite bank (Stantec Consulting Services Inc., 2015, pp. 40-41).

Once constructed, the proposed project would close an existing bikeway gap along the OC Loop with a Class I bikeway physically separated from vehicular traffic. As an alternative mode of transportation, the proposed project would also increase the use of active transportation travel modes, enhance safety and mobility for non-motorized users, advance efforts to achieve greenhouse gas reduction goals, improve access and maintenance to the flood control channel, and enhance public health. In addition, the proposed project is a safety and mobility enhancement for the County of Orange, and is included in the 2008 Coyote Creek Bikeway Master Plan (Rivers and Mountains Conservancy and Trails4All), 2009 Orange County Transit Authority (OCTA) Commuter Bikeway Strategic Plan, 2012 OCTA/County of Orange Fourth District Bikeways Strategy Report, 2014 County of Orange General Plan Transportation Element (as part of the Orange County Seven-Year Plan), and the 2015 OC Loop Gap Feasibility Study (OC Parks).

The proposed project has the following objectives.

- To further establish the OC Loop as a significant regional recreational and alternative transportation facility resource.
- To facilitate increases in the public's use of active transportation travel modes.
- To enhance the safety and mobility for non-motorized users.
- To advance efforts to achieve greenhouse gas reduction goals.
- To improve the maintenance of, and access to, the flood control channel.
- To enhance public health via the facilitation of increased public use of active transportation travel modes.
- To serve as a viable contributor to County policies and physical improvements designed to promote safety and mobility enhancement.
- To accurately serve its stated purpose in various adopted County/OCTA policy and planning documents including the 2008 Coyote Creek Bikeway Master Plan (Rivers and Mountains Conservancy and Trails4All), 2009 OCTA Commuter Bikeway Strategic Plan, 2012 OCTA/County of Orange Fourth District Bikeways Strategy Report, 2014 County of Orange General Plan, and the 2015 OC Loop Gap Feasibility Study.

1.3 Project Description

As indicated previously, the proposed project is broken down into three Segments (O, P and Q) of the overall OC Loop. **Figure 3,** *Project Location*, (located in **Appendix A**, *Figures*) depicts the arrangement of the three Segments. From south to north, OC Loop Segment O extends northeasterly from the point of origin near the north fork of the Coyote Creek flood control channel to Artesia Boulevard. OC Loop Segment P extends northeasterly from Artesia Boulevard to Knott Avenue, while OC Loop Segment Q extends northeasterly from Knott Avenue to the terminus of the proposed project at La Mirada Boulevard. Conceptual drawings showing all of the improvements associated with the proposed project are provided herein as **Appendix B1**, *Project Design Plans*, and **Appendix B2**, *2020 Updated Crossing Plans*, for Improvement of Coyote Creek Class I Bikeway Segments O, P and Q (Orange County Flood Control District Facility No. A01). The plans originate at Station 10+00.0 (Coyote Creek/North Fork) and terminate at Station 147+22.83 (La Mirada Boulevard/Malvern Avenue).

Following are summary descriptions of the main improvements planned as part of the proposed project presented on a Segment-by-Segment basis. A number of utility crossings would be necessary to accommodate the proposed project. Existing flood control maintenance road ramps from the flood control channel to existing roadways would be improved for bicycle access as well. Chain link or wire fencing would be provided where safety dictates on one or both sides of the bikeway.

Summary of Segment O Improvements

Location

Segment O is the southernmost portion of the project area and is located within the cities of Cerritos and Buena Park. Segment O begins at the existing Coyote Creek Bikeway at the confluence of the channel's east and north forks. The segment runs east-northeast for approximately 4,800 feet, or 0.91 mile, along the east fork of the Coyote Creek Channel to Artesia Boulevard. A plan view of the proposed improvements within OC Loop Segment O is depicted in **Figure 5,** *OC Loop Segment O Improvement Plan*.

Pedestrian/Cyclist Bridge

At Station 10+00, at the confluence of the north and east forks of the flood control channel, a 200-foot-long and 12-foot-wide pre-fabricated truss bridge would be installed across Coyote Creek at the north fork. Approximately four 18-wheeled flatbed trucks would deliver the bridge in several sections and workers would bolt the bridge together onsite. The pre-fabricated bridge would be bolted together on the floor of the concrete flood control channel. It is estimated to take about two days to assemble the bridge on site. Reinforced concrete end bents would be constructed (cast in place) prior to delivery of the bridge. The bridge would be lifted and placed on the end bents by two large cranes. Only pedestrians and cyclists would use the bridge, as it would not be rated for the weight of motor vehicles. The bridge would be steel and designed to have a rust patina ("weathered steel" look), to eliminate the need for future painting. The deck of the pedestrian bridge would be wood.

Approximately 1,570 linear feet of a 12 to 16 foot-wide asphalt would be placed upstream of the pre-fabricated bridge to Valley View Avenue. About 1,750 cubic feet of asphaltic concrete used for the existing maintenance road would be removed and recycled before any new asphalt paving would be placed. The new asphalt would be approximately four inches thick over six inches of crushed aggregate base. Fencing, such as a five-foot high chain link fence or four-feet tall cable fence with six strands of cable may be installed on one or both sides. The fencing may be installed along the entire 2.7 miles of new bikeway if necessary. The location of the fencing (either on one or both sides of the bikeway) would be determined later in the design process.

Valley View Avenue Crossing

The next feature of Segment O would be a concrete undercrossing of Valley View Avenue that would be constructed into the side of the existing sloped bank of the concrete flood control channel. An under-bridge bundle of AT&T conduit will need to be relocated. The existing concrete slope under the Valley View Bridge would be removed and steepened to near vertical to accommodate the new 12-foot-wide trail undercrossing. A tieback wall would be installed under the bridge and the construction would be located above the existing outfalls. Upstream of the Valley View undercrossing to Artesia Boulevard, approximately 3,010 feet of 14 to 16 foot-wide asphalt paving would be placed adjacent to the flood control channel.

Artesia Boulevard Ramp

The bikeway ramp up to the south side of Artesia Blvd would generally follow the existing maintenance access road.

Summary of Segment P Improvements

Location

Segment P is located generally within the City of La Mirada in Los Angeles County and runs parallel to the north side of the Coyote Creek channel from the Artesia Boulevard undercrossing to Knott Avenue. It is approximately 3,000 feet long (equivalent to 0.57 mile) and crosses under the Interstate 5 (I-5) freeway, its frontage roads (North and South Firestone Boulevard), and the Union Pacific Railroad[1] (UPRR) industrial lead. It includes 1,085 linear feet of new 14 to 16 foot-wide asphalt trail. A plan view of the proposed improvements within OC Loop Segment P is provided in **Figure 6**, *OC Loop Segment P Improvement Plan.*

Undercrossing at Artesia Boulevard

Segment P begins at the Artesia Boulevard undercrossing, where there is currently a six-foot-wide strip of exposed dirt under the bridge between the bridge abutment and the vertical wall of the flood control channel. Several concrete columns would be installed into the six-foot-wide strip of exposed soil between the bridge abutment wall and the concrete channel wall. The concrete columns would support a 13-foot-wide concrete deck, six to seven feet of which would cantilever over the flood control channel. Approximately two to three feet of the top of the concrete flood control wall would be removed to ensure that there would be sufficient vertical clearance between the new bikeway and the bridge soffit. The existing concrete bridge abutment wall would act as the new flood control wall. Upstream from the Artesia Boulevard undercrossing would be about 1,200 feet of new 12- to 16-foot-wide asphalt paving.

Union Pacific Railroad Box Jack (Concrete Box) Underground Tunnel or Overcrossing

The next feature in Segment P would be a 120-foot-long box jack construction of a reinforced concrete box culvert underground tunnel under the UPRR railroad line. The box jacking operation would take two months and involve jacking a linear 134-feet-long, 12-foot-wide and 10-foot-tall[2] precast reinforced concrete box. There would be 7.5 feet of earthen cover between the top of the box and the railroad tracks.

Upstream from the UPRR undercrossing to the South Firestone Boulevard undercrossing, the bikeway elevation remains below the top of the channel. Between the UPRR crossing and South Firestone Boulevard would be an open concrete U-channel to contain the new trail. The vertical U-channel walls would vary from 0 feet to about 13 feet high. This channel would slope down into the tunnel, with the wall height increasing as the depth increases, and then would slope upwards as it leaves the tunnel, with its walls decreasing in height. One method to construct this depressed cross-section is to make use of the existing channel wall and then excavate away from it toward the ROW line. A wall would then be needed on the opposite side to support the below-grade bikeway. It is anticipated that this wall's height most likely could not be supported without ground anchors (or tiebacks) that would extend beyond the ROW; therefore, a top-down wall without tiebacks could be constructed (such as a secant or tangent pile wall). Another method is to use shoring to excavate the "u-shape" then construct a "U-wall" similar to what is done in creek channels.

1 Formerly Southern Pacific.
2 Inside dimensions.

On the downstream side of this crossing are two abandoned fuel lines, a U.S. Navy jet fuel line and a Kinder Morgan oil pipeline. The project would cut, cap and remove the Kinder Morgan fuel pipeline and the Navy jet fuel line.

Alternatively, since UPRR has preliminarily indicated they may not be able to support an underpass of their tracks by policy, a pedestrian/cyclist truss bridge may be required as an alternate (see **Appendix B2**, *2020 Updated Crossing Plans*). This would require a 1200-foot-long, 35-foot-high truss bridge. It is undesirable because the slope on the northeast end would reach a minimum of 9.6% to allow for the south Firestone underpass entrance. This exceeds ADA standards and is extremely difficult for cyclists. The bridge would be located within a heavily industrial area.

The alternate option, the UPRR overcrossing, has approximately the same overall footprint of the underground box jack (concrete box) option, therefore, the analysis within this report applies to either option.

South Firestone Boulevard Undercrossing

The project proposes an open cut of South Firestone Boulevard west of Coyote Creek and the installation of a 12-foot-wide by 9.25 foot-tall precast concrete box. The box under South Firestone Boulevard would be completed by closing all lanes of the road for approximately three weeks. A detour can be provided for each direction since South Firestone Boulevard has access on both ends. There are no residences within 2,400 feet of this site (the nearest residence is approximately 2,400 feet east of the site at the westerly end of the Kensington Drive cul-de-sac). After the concrete box has been installed, it would be covered with road base and paved to its original elevation. The existing Southern California Edison pole at South Firestone Boulevard may need to be relocated as part of the proposed project. If it is relocated, it would be moved within the ROW to the north side of the box culvert.

I-5, South and North Firestone Boulevard Undercrossing

The 1-5, South and North Firestone Boulevard undercrossing would be located in the City of La Mirada. South Firestone requires an open cut, concrete box culvert beneath the existing roadway. The I-5 Widening Project, which is separate from the proposed project, provides sufficient width for the tunnel between two bridge abutments at both the I-5 and North Firestone Boulevard. The section under the 1-5 and North Firestone Boulevard would need to be excavated to accommodate the proposed 12-feet-wide bikeway. Upstream of the l-5 and North Firestone Boulevard, the trail would continue adjacent to the top of the flood control channel. Approximately 1,550 linear feet of 14- to 16-feet-wide asphalt trail would be placed between North Firestone Boulevard and Knott Avenue.

Summary of Segment Q Improvements

Location

Segment Q begins in the City of Buena Park, extend northwest into the City of La Mirada and ends in the City of Buena Park. More specifically, Segment Q extends from Knott Avenue, crosses Stage Road at McComber Road and ends at La Mirada Boulevard in Buena Park and is approximately one mile long. It crosses beneath the Burlington Northern Santa Fe Railway Company (BNSF) industrial lead, the heavily used BNSF Los Angeles-San Diego-San Luis Obispo (LOSSAN) Rail Corridor, and Stage Road at grade at McComber Road before ending at La Mirada Boulevard. A plan view of the

proposed improvements within OC Loop Segment P is provided in **Figure 7**, *OC Loop Segment Q Improvement Plan*.

Knott Avenue At-Grade Crossing

The first component of Segment Q would be a signalized at-grade crossing at Knott Avenue. Traffic signals with push-button activation and crosswalk striping would be installed. Approximately 420 linear feet of 12 to 14 feet-wide asphalt trail would be installed upstream of Knott Avenue.

At-Grade Crossing of BNSF Railway Lead

Additionally, upstream of Knott Avenue (downstream of the confluence of Coyote Creek and Brea Creek) would be an at-grade crossing of a railroad industrial lead that serves only a few customers. BNSF is evaluating if this lead can be closed to the north of this crossing. If not closed, then because of the low volume, the California Public Utilities Commission and BNSF will not require warning signals; rather, zigzag fencing would be constructed on both sides so bicyclists are made to look in both directions before crossing. Upstream of this railroad crossing would be approximately 2,900 feet of new 14 to 16 feet-wide new asphalt pavement along the Coyote Creek flood control channel.

Undercrossing of the BNSF/Metrolink Railway Line

The next feature in Segment Q would be a 144-feet-long bore and jack construction of a reinforced concrete box culvert tunnel under an existing BNSF and Metrolink railway corridor, which carries three tracks as well as a railroad turnout (i.e., railroad switch).[3] It is anticipated that the corridor will be widened for a fourth railroad track in a couple of years. The box jacking operation would take two months and involve jacking a linear 144 feet long, 12-foot-wide and 10-feet-tall[4] precast reinforced concrete box. There would be 7.5 feet of earthen cover between the top of the box and the railroad tracks.

Various utility lines are located in this area. On the downstream side of the existing railroad corridor there is an abandoned Chevron fuel line. On the upstream side of the railroad tracks are telecommunication lines in a concrete box girder conduit, but the fuel line and the telecommunication lines would not be in conflict with the proposed tunnel because they are above ground rather than underground. The project would cut, cap and remove the abandoned Chevron Oil fuel pipeline. A utility conflict can be avoided by jacking the reinforced concrete box under the existing AT&T conduit (which is supported just above ground).

A vacant triangular 0.5-acre parcel owned by the Los Angeles County Flood Control District is located on the downstream side of the Metrolink line and could be used for construction staging.

Upstream of the BNSF/Metrolink Undercrossing

Upstream of the box section, between the BNSF/Metrolink undercrossing and Stage Road, would be an open U-channel to contain the new trail. The vertical U channel walls would vary from 0 feet to

3 A railroad turnout is a mechanical installation enabling railway trains to be guided from one track to another, such as at a railway junction or where a spur or siding branches off.

4 Inside dimensions.

about 13 feet high. This portion of the trail would provide safe passage for pedestrian and bicyclists from the BNSF Metrolink undercrossing to the at-grade crossing of Stage Road described below.

At-Grade Crossing of Stage Road

The next feature in Segment Q would be an at-grade crossing of Stage Road in Buena Park. The fully signalized intersection would be located at McComber Road approximately 500 feet west of the channel. A typical fully functional "T intersection" traffic signal and crosswalk would be installed. This option would involve restriping the existing roadway to allow for a 12-foot-wide, barrier-separated bikeway on both sides of Stage Road between McComber Road and Coyote Creek. This Class IV bikeway would be located between McComber Road and the Stage Road crossing. Class II striping transition would be located along Stage Road to the east of Coyote Creek and along Stage Road to the west of the intersection of McComber Road and Stage Road, as follows: restriping Class II bikeways would occur along Stage Road between Beach Boulevard to the east and approximately 300 feet west of the intersection of McComber Road and Stage Road. Additionally, new curb ramps would be installed at McComber Road and at Coyote Creek.

Pedestrian/Cyclist Bridge North of Stage Road Crossing Coyote Creek

Upstream from Stage Road would be about 560 feet of new 12 to 16 feet-wide asphalt paving along the east bank of Coyote Creek. To meet up with the already constructed OC Loop Segment R on the other side of the channel, a pre-fabricated truss bridge, similar to the one being installed at the beginning of the project, but much shorter, would be installed across Coyote Creek. The bridge would be approximately 50 feet long, no more than about five to eight feet high and 12 feet wide. Installation of the bridge would be completed in one day by using a large crane. Prior to the arrival of the bridge, the reinforced concrete bridge abutments would be formed and poured. Upstream from the pedestrian bridge would be 640 feet of new 12 to 16 foot-wide asphalt paving along the west bank of Coyote Creek.

La Mirada Boulevard Detour

The new and existing bikeway would be connected by directing cyclists onto La Mirada Boulevard and constructing a new 10-foot wide asphalt Class I trail on both sides of La Mirada Boulevard for a distance of 280 feet (on each side) where bicyclists could cross via an existing signalized intersection at the entrance of the Los Coyotes Shopping Center. Several ornamental trees (up to 22 trees) would be removed (and replaced if desired by landowners/or required by the City). Minor grading would be required to install the new Class I trail. The existing sidewalks for this 280-feet reach of La Mirada Boulevard would be included in the Class I trail.

Improvements at La Mirada Boulevard/Malvern Avenue

Along the north side and south side of La Mirada Boulevard between the Coyote Creek Channel and the shopping center driveway at Village Circle Way, the contractor will "clear & grub" from the back of curb to the privacy wall on the north side and from the back/curb to the retaining wall along the south side. Any surface-evident utilities will remain in place and a 10-foot-wide combined pedestrian/Class I bikeway would be constructed on both sides. Approximately 12 feet (or less) of new permanent easement is required on each side.

Landscaping

Other than an existing 280-feet-long by about 10-feet-wide strip of landscaping on both sides of La Mirada Boulevard behind the existing sidewalk, no other existing landscaping would be impacted. New or replacement landscaping will be provided as part of this project if the landowners and the City desire, at La Mirada Boulevard. Signage and maps would be installed along the bikeway to direct users.

Stormwater

A Water Quality Management Plan (WQMP) that may include constructed stormwater quality enhancements would be prepared as a part of this project. The project would add impervious area. During project design, pervious pavement or impervious pavement with bioswale will be used for the bikeway to meet Regional Water Quality Control Board requirements. If bioswales are incorporated, periodic drainage pipes will be installed to the channel. Storm drain pipes would be placed at the lowest elevation of undercrossings to allow storm water to drain into the adjacent channel. Bioswales for water quality treatment would be employed at the downstream sides of both railroad undercrossings.

Lighting

The only lighting associated with the proposed project for approximately 200 feet of bikeway under North and South Firestone Boulevard and the I-5, and the two railroad underpasses. The project does not propose any trail lighting. Light would be produced from signals (such as traffic signals) along the project alignment, as well as from existing street lighting in the vicinity of the bikeway.

Signage

Only standard and minimal bike signage and location maps conforming to OC Parks signage codes and criteria are required.

Bikeway

Where the bikeway is at grade, the path would be asphalt and be 14 to 16 feet wide, inclusive of the two-feet wide shoulders on each side of the trail, wherever a chain link fence or cable railing is added for safety. Where the bikeway would travel beneath grade, the bikeway surface would be concrete and 10 to 14 feet wide with no shoulders.

1.4 Projection Construction

Construction is anticipated to take between 18 months and two years and occur sometime between January 2023 and December 2024. Construction would occur in one stage, unless federal funding is provided in incremental amounts. Construction workers would be able to park within the Coyote Creek right-of-way via the street crossings (Valley View, Artesia, Firestone, Stage Road). All lanes of South Firestone Boulevard would be closed for approximately three weeks to install the precast box culvert beneath the roadway for the bikeway.

Depending upon funding, project construction would occur in one, two or three phases; for example, the three segments (O, P, and Q) could be done one at a time. The project includes three contiguous gap closure segments; O, P, and Q. Because of the significant cost of the project overall and the need

for state/federal grant funds to move forward, it is possible that grant funds will come in separate years for separate segments. The State has indicated that the County should simultaneously submit grant requests for the entire project and for each of the three segments separately for their next grant cycle. Therefore, the project may be done in two or three phases in different fiscal years, depending upon annual grant funding cycles. In general, construction phases could include:

- Demolition.
- Grading and excavation.
- At grade crossing construction.
- Installing 2 prefabricated bridges, 2 roadway underpasses, walls and box jacking under both railroads.
- Placing asphalt and fencing.
- Final items (striping, signage, etc.).

It is anticipated that an average of about 20 construction employees would be onsite over 24 months.

Several utilities would be protected in place and the abandoned fuel lines mentioned previously on the downstream sides of the two railroad undercrossings would be cut, capped and removed. AT&T conduit must be relocated beneath Valley View Boulevard. A power pole in the northwest quadrant at South Firestone Boulevard would require relocating. This pole supports a Southern California Edison power line and communications lines that would require relocating.

Construction Equipment

Proposed equipment anticipated to be used during project construction includes, but is not limited to, the following:

- Grading equipment for preparing the bikeway for paving.
- Excavation equipment (concrete saws, bulldozers, excavators, dump trucks) for going under Valley View Avenue, Artesia Boulevard, North and South Firestone Boulevard, and the I-5.
- Drilling rigs for end bents for the pedestrian bridge over the north fork of Coyote Creek, the tieback wall at Valley View Avenue, the piles for the bikeway foundation slab under Artesia Boulevard and the temporary shoring walls at both railroad undercrossings.
- Box-jacking equipment in pits for jacking the reinforced concrete box under the two railroad corridors.
- Flatbed trucks and cranes for installing the steel prefabricated pedestrian bridges.
- Asphalt paving equipment for installing the bikeway surface where the bikeway is at grade.
- Concrete trucks for pouring the end bents for the pedestrian bridge over the north fork of Coyote Creek, and concrete walls on either side of the railroad undercrossings.

- Two cranes to install the two prefabricated bridges, with a period of use of approximately two weeks for each bridge.

1.5 Construction Staging

Construction staging would involve detouring traffic for the closure of South Firestone Boulevard for installation of the reinforced concrete box. Additionally, a vacant triangular 0.5-acre parcel owned by the Los Angeles County Flood Control District is located on the downstream side of the Metrolink line and could be used for construction staging.

1.6 Easements

The project would include the following permanent easements:

- Along the north side and south side of La Mirada Boulevard between the Coyote Creek Channel and the shopping center driveway at Village Circle Way, the contractor will "clear & grub" from the back of curb to the privacy wall on the north side and from the back/curb to the retaining wall along the south side. Any surface-evident utilities will remain in place and a 10-foot-wide combined pedestrian/Class I bikeway would be constructed on both sides. Approximately 12 feet (or less) of new permanent easement is required on both sides.

- A permanent driveway easement for access to the Flood Control Channel at Trojan Way may be required. The Los Angeles County Flood Control District maintenance access driveway that Caltrans constructed needs to be reconnected after the bikeway is constructed. However, because of the difference in grade between the access driveway and the proposed bikeway, this reconstructed driveway may be as steep as 15 percent. Therefore, if the grade cannot be achieved, then a permanent access easement would need to be obtained from the property owner so that the Los Angeles Flood Control District could use the property owner's driveway to access the flood control channel when needed.

1.7 Discretionary Actions

Discretionary actions required for the implementation of the proposed project are provided in **Table 1.7-1**, *Discretionary Actions*.

Table 1.7-1
DISCRETIONARY ACTIONS

Federal	
Agency	**Required Permit and/or Agreements**
U.S. Army Corps of Engineers (USACE)	• 404 Dredge and Fill permit • 408 Authorization to Alter a "Civil Works" project
State	
Agency	**Required Permit and/or Agreements**
Caltrans	• Construction and Encroachment permit
California Department of Fish and Wildlife (CDFW)	• 1602 Streambed Alteration Agreement
California Public Utilities Commission (CPUC)	• Approval of GO-88b permits at all three railroad crossings
Metrolink/Southern California Regional Rail Authority (SCRRA)	• Plan specification and estimate (PS&E) review and approval
State Water Resources Control Board (SWRCB)	• 401 Water Quality Certification
Regional	
Agency	**Required Permit and/or Agreements**
Los Angeles County Flood Control District (LACFCD)	• Construction and Encroachment permit
Orange County Flood Control District (OCFD)	• Construction and Encroachment permit
Los Angeles Regional Water Quality Control Board (LARWQCB)	• 401 Water Quality Certification
Santa Ana Regional Water Quality Control Board (SARWQCB)	• 401 Water Quality Certification
Local	
Agency	**Required Permit and/or Agreements**
Orange County Public Works	• Construction permit
City of Cerritos	• Construction and Encroachment permit
City of Buena Park	• Construction and Encroachment permit
City of La Mirada	• Construction and Encroachment permit
Railroads and Utilities	
Agency	**Required Permit and/or Agreements**
Union Pacific (UP) Railroad and California Public Utilities Commission	• CPUC new grade crossing permits and Construction & Maintenance (C&M) Agreements
Burlington Northern and Santa Fe (BNSF) Railway and California Public Utilities Commission	• CPUC new grade crossing permits and Construction & Maintenance (C&M) Agreements • Plan specification and estimate (PS&E) review and approval
Chevron, AT&T & SCE	• Agreement for removal/possible relocation of SCE utility pole
Kinder-Morgan & U.S. Navy	• Agreements for removal

2.0 Study Methods

The preliminary study methods for this analysis included the identification and characterization of biological resources, including vegetation community types and alliances, and special-status plant and animal species that are known to occur or have potential to occur in the project area and the larger BSA. The project area (footprint of disturbance) is defined as the area directly affected by the proposed construction and is represented by three different colored polygons; the red polygon represents Segment O, the turquoise polygon represents Segment P, and the purple polygon represents Segment Q (please see **Figure 8**, *Project Boundary and Biological Study Area (BSA)*, located in **Appendix A**). The BSA was defined as a zone approximately 150 feet around the boundary of the project area; the BSA encompass a sufficient area to allow biologists to compile information regarding biological resources that could potentially be affected by site preparation activities and construction. The assessed areas of the BSA include the overall project site, as presented in **Figure 8** (located in **Appendix A**), with the exception of areas that were topographically inaccessible or to which biologists did not have right-of-access. Should the project alignment change prior to construction, it is expected, given the nature of the proposed project, that the revised project footprint would still be within the limits of the BSA.

"Special-status," as used in this report, refers to species that are:

- Listed, proposed for listing, or candidates for listing as threatened or endangered under the Federal Endangered Species Act (FESA) (50 Code of Federal Regulations [CFR] Part 17.12 [listed plants], 50 CFR Part 17.11 [listed animals], 67 Federal Register [FR] 40657 [candidate species], Birds of Conservation Concern (BCC), and various notices in the FR [proposed species]) (USFWS, 2020a);

- Listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (CNDDB, 2020);

- Identified by the CDFW as fully protected species, including fish and wildlife that do not have State or federal threatened or endangered status but may still be threatened with extinction (CDFW, 2020c);

- California Species of Special Concern: vertebrate species that have been designated as "species of special concern" or "Special Animals" by the CDFW because declining population levels, limited range, and/or continuing threats have made them vulnerable to extinction (CDFW, 2019; CDFW, 2020d);

- Included in the California Native Plant Society (CNPS) Rare Plant Inventory (CNPS, 2020a); or

- Otherwise defined as rare, threatened, or endangered under the California Environmental Quality Act (CEQA).

Prior to conducting fieldwork, biologists reviewed records of known occurrences to identify special-status species that may occur within the BSA, including the defined project area. Those records were then compared with lists of federal- or state-listed threatened, endangered, or other special-status species.

2.1 Regulatory Requirements

2.1.1 Federal Statutes, Regulations, and Executive Orders

2.1.1.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] § 4321) requires federal agencies carrying out, funding, or permitting projects, or implementing any other major federal action that significantly adversely affects the quality of the human environment to prepare a detailed environmental impact analysis for the major federal action. The analysis, known as the Environmental Impact Statement or an Environmental Assessment, must address the adverse environmental impacts of the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, alternatives to the proposed action, the relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

2.1.1.2 Federal Endangered Species Act

The FESA of 1973 (Title 16, U.S.C. §§ 1531-1543), as amended, designates and provides for protection of listed threatened and endangered plant and animal species, and their Critical Habitat. The USFWS, in the Department of the Interior, and National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service, in the Department of Commerce, share responsibility for administration of the ESA. These responsibilities include listing and delisting species, designating Critical Habitat, and formulating recovery plans. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of National Marine Fisheries Service are mainly marine wildlife.

Critical Habitat

The ESA of 1973, as amended (16 U.S.C. 1531 et seq.) states that the purposes of the Act are to provide a means to conserve the ecosystems upon which listed species depend. In passing the Act, Congress viewed habitat loss as a significant factor contributing to species endangerment. The present or threatened destruction, modification, or curtailment of a species' habitat or range is included in the Act as one of the factors on which to base a determination of threatened or endangered species (USFWS, 2016).

The designation of Critical Habitat provides a significant regulatory protection in that federal agencies are required to ensure, in consultation with the Services under § 7(a)(2) of the Act, that their actions are not likely to destroy or adversely modify Critical Habitat. This benefit is especially valuable when, for example, a species presence or habitats are ephemeral in nature, species presence is difficult to establish through surveys, or when protection of unoccupied habitat is essential for the conservation of the species (USFWS, 2016).

2.1.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (Title 16, U.S.C. §§ 703 - 712), as amended, includes provisions for protection of migratory birds, including basic prohibitions against any take not authorized by federal regulation. The administering agency for the above authority is the USFWS. The law contains no requirement to prove intent to violate any of its provisions. Wording in the MBTA

makes it clear that most actions that result in "take" or possession (permanent or temporary) of a protected species can be a violation of the act. The word "take" is defined as "pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (including nests, eggs, and feathers)." The provisions of the MBTA are nearly absolute; "except as permitted by regulations" is the only exception.

2.1.1.4 Bald and Golden Eagle Protection Act

Bald eagles (*Haliaeetus leucocephalus*) were removed from the federal list of threatened and endangered species in 2007, and are no longer protected under the ESA. However, bald eagles remain protected under the Bald and Golden Eagle Protection Act (BGEPA) (Title 16, U.S.C. §§ 668-668c). The BGEPA was enacted in 1940 to protect bald eagles, and revised in 1962 to include golden eagles (*Aquila chrysaetos*) due to their declining populations. The agency administering this Act is the USFWS. The BGEPA prohibits anyone, without a permit issued by USFWS, from "taking" bald eagles or golden eagles, including their parts, nests, or eggs. The BGEPA defines take as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." Exceptions may be granted by USFWS for scientific or exhibition use, or for traditional and cultural use by Native Americans. However, no permits may be issued for import, export, or commercial activities involving eagles.

2.1.1.5 Federal Clean Water Act of 1977

The federal CWA (33 U.S.C. §§ 1251-1376) is an amendment to the Federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of dredged or fill into waters of the United States (waters of the U.S.) Several sections of this act pertain to regulating the discharge of dredge and fill, as well as pollutants, into wetlands.

§ 401 CWA specifies additional requirements for obtaining a water quality certification. § 401 CWA is administered by the U.S. Environmental Protection Agency (USEPA). The USEPA has occasionally ceded authority to individual states whose water quality regulations meet or exceed the federal regulations; thus, the USEPA has ceded authority to the State of California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) for issuing Water Quality Certifications.

a. Through the § 401 Program, the SWRCB and its nine RWQCBs certify that an activity's discharge complies with federal (and state) water quality standards and ensures that there is no net loss of wetlands through impact avoidance, minimization, and mitigation. A Water Quality Certification (WQC) requires project owners or proponents to obtain a Water Quality Certification which requires their project to prevent the discharge or dredge and fill material in quantities that would violate federal water quality standards.

b. The SWRCB and its RWQCBs may, at their discretion, use the § 401 Water Quality Certification Program to also implement the California Porter-Cologne Water Quality Control Act (Porter-Cologne; see Section 2.1.2.7 of this document) since both § 401 and Porter-Cologne require that a proposed discharge will comply with water quality standards, which include numeric and narrative water quality objectives applicable to identified surface and ground waters in the State of California. These water quality objectives are designated in the Water Quality Control Plans (Basin Plans) that are prepared, updated, and implemented by each Regional Water Quality Control Boards (RWQCB).

The proposed project occurs in the jurisdictions of both the Santa Ana RWQCB (Region 8) and Los Angeles RWQCB (Region 4); therefore, the SWRCB would provide review and water quality certification services for this project

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the U.S. The United States Army Corps of Engineers (USACE) implementing regulations define "dredged material" as material that is excavated or dredged from waters of the U.S. The CWA implementing regulations define "fill material" as material placed in waters of the U.S. where the material has the impact of either replacing any portion of waters of the U.S. with dry land or changing the bottom elevation of any portion of a waters of the U.S. Examples include discharges of rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure for development projects in waters of the U.S.

a. No discharge of dredged or fill material may be permitted if there is a practicable alternative that would be less damaging to aquatic resources, so long as that alternative does not have other significant adverse environmental consequences [40 CFR § 230.10(a)]. Under 40 CFR § 230.10(a), a potential project alternative is "practicable" if it "is available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purpose." These regulations are jointly administered and enforced by the USACE and the EPA.

b. Under the law, any project that discharges dredged or fill material (temporarily or permanently) into waters of the U.S., including wetlands, may require a § 404 permit. The § 404 permit may be a nationwide permit or an individual permit from the USACE pursuant to § 404 of the CWA. The USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S. provided that a proposed activity can demonstrate compliance with standard terms and conditions. No activity is authorized under any nationwide permit that is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the ESA, or that will destroy or adversely modify the Critical Habitat of such species. If the conditions cannot be met, a regional or individual permit will be required.

The discharge of dredge or fill material into wetlands and other waters of the U.S. is subject to permitting under § 404 CWA, which is administered by the USACE. The USACE, Los Angeles District Office, would provide review and permitting services for this project.

2.1.1.6 Impaired Waters and Total Maximum Daily Loads

Section 303(d) of the Clean Water Act authorizes the USEPA to assist states, territories and authorized tribes in listing impaired waters and developing Total Maximum Daily Loads (TMDLs) for these waterbodies. A Total Maximum Daily Load (TMDL) is a number that represents the assimilative capacity of a receiving water to absorb a pollutant. The TMDL is the sum of the individual wasteload allocations for point sources, load allocations for nonpoint sources plus an allotment for natural background loading, and a margin of safety. (RWQCB, 2018).

Under CWA § 303(d), states are required to submit to the USEPA a list identifying waters within its boundaries not meeting water quality standards (impaired waters) and the water quality parameter (i.e., pollutant requirements) not being met [referred to as the 303(d) List]. States are also required to include a priority ranking of such waters, taking into account the severity of the pollution and the

impacted beneficial uses, for the development of TMDLs. The Water Quality Control Policy for Developing California's Clean Water Act § 303(d) List (Listing Policy) provides the requirements for developing the 303(d) List in California.

In addition to the 303(d) List, the CWA § 305(b) requires states to report to USEPA on the overall water quality conditions of their surface waters, not just those that are impaired (this is referred to as the 305(b) Report). Both Clean Water Act § 303(d) and § 305(b) requirements are being satisfied by the 2014 and 2016 California Integrated Report (RWQCB, 2018).

Consistent with Section 2 of the Listing Policy, the California 303(d) List is made up of Integrated Report Categories 4a, 4b, and 5. These categories contain water bodies that [4a] have a water segment where all of its 303(d) listings are being addressed; [4b] have a water segment where all of its 303(d) listings are being addressed by action(s) other than TMDL.

2.1.1.7 Rivers and Harbors Act

Section 14 of the Rivers and Harbors Act of 1899, as amended and codified at 33 USC 408 (Section 408), authorizes the Secretary of the Army, on the recommendation of the Chief of Engineers of the USACE, to grant permission for the alteration or occupation or use of a USACE civil works project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. Public works projects include dams, basins, levees, channels, navigational channels, and any other local flood protection works constructed by the Corps. The Los Angeles District of the USACE will provide review and permitting services for this project.

2.1.1.8 Executive Order 11990 – Protection of Wetlands (May 24, 1977)

Executive Order (EO) 11990 provides for the protection of wetlands, as described under applicably current rule. The administering agency for the above authority is the USACE. If impacts to wetlands cannot be avoided, then all practicable measures to minimize harm to those wetlands must be included and documented in the final environmental document for the proposed project or activity (NARA, 1977).

2.1.1.9 Executive Order 13112 – Invasive Species (February 3, 1999)

This EO called upon executive departments and agencies to take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are established. EO 13112 also created a coordinating body - the Invasive Species Council, also referred to as the National Invasive Species Council - to oversee implementation of the order, encourage proactive planning and action, develop recommendations for international cooperation, and take other steps to improve the Federal response to invasive species (USFWS, 2020b).

Non-native flora and fauna can cause substantial changes to native ecosystems, upset native ecological balances, and have the potential to also cause economic harm. Roads and highways provide opportunities for the movement and spread of non-native, invasive species through an area, from the local to the national level.

2.1.2 State Statutes and Regulations

2.1.2.1 California Environmental Quality Act

The CEQA of 1970 (Public Resources Code §§ 21000-21178) and its implementing CEQA Guidelines (California Code of Regulations §§ 15000-15387), applies to discretionary projects proposed to be carried out by public agencies or private projects subject to public agency approval. CEQA defines projects broadly to include an activity which may cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, and is an activity directly undertaken by a public agency, an activity undertaken by a person that is supported by a public agency, or an activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement.

2.1.2.2 California Endangered Species Act of 1984 (California Fish and Game Code §§ 2050 2098)

The CESA of 1984 is outlined in California Fish and Game Codes (FGC) §§ 2050 – 2098, and includes provisions for the protection and management of wildlife species listed by the State of California as endangered or threatened, or designated as candidates for such listings. This act declares "it is the policy of the state that state agencies should not approve projects as proposed which would jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy" (§ 2053).

Plants of California declared to be endangered, threatened, or rare are listed under 14 California Code of Regulations (CCR) § 670.2. Wildlife of California declared to be endangered, threatened, or rare (also referred to as "sensitive" wildlife species) are listed under 14 CCR § 670.5. The administering agency for the above Act is the CDFW.

2.1.2.3 Native Plant Protection Act of 1977 (California Fish and Game Code § 1900 et. seq.)

The Native Plant Protection Act prohibits importation of rare and endangered plants into California, take of rare or endangered plants, and sale of rare and endangered plants. The CESA defers to the California Native Plant Protection Act (CNPPA), which ensures that plant species listed by the State as endangered, threatened, or rare ("sensitive" plant species) are protected when state agencies are involved in projects or activities subject to CEQA. In this instance, plants listed as rare under the CNPPA are not protected under CESA, but rather under CEQA.

2.1.2.4 California Fish and Game Code § 3503 and § 3503.5

These codes provide for the protection of birds by declaring, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto" (§ 3503), and that, "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto" (§ 3503.5).

2.1.2.5 California Fish and Game Code §§ 1930 – 1940

These code sections provide for the Significant Natural Areas program and database. The administering agency for the above authority is the CDFW.

2.1.2.6 California Fish and Game Code § 4150

Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). Several bat species are considered California Species of Special Concern (SSC) and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

2.1.2.7 California Fish and Game Code §§ 1600 – 1616 Lake or Streambed Alteration

Section § 1600 - § 1616 FGC protect the natural flow, bed, channel, and bank of any river, stream, or lake designated by the CDFW in which there is at any time an existing fish or wildlife resource, or from which ecosystem these resources derive benefit. General project plans must be submitted to CDFW in sufficient detail to indicate the nature of a project for construction, if the project would: divert, obstruct, or change a streambed; use material from the streambed; result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a stream.

Any person or entity whose project or activity may result in any of the above must first notify CDFW in writing. CDFW will review the project or activity and decide if may continue or if they must issue an Agreement, which would stipulate mitigation measures for the protection of the aquatic resource in question.

2.1.2.8 Porter-Cologne Water Quality Control Act (as amended)

The Porter-Cologne Water Quality Control Act (Porter-Cologne) defines "water quality objectives" as the allowable "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area". Thus, water quality objectives are intended to protect the public health and welfare, and to maintain or enhance water quality in relation to the existing and/or potential beneficial uses of the water. Water quality objectives apply to both Waters of the United States and Waters of the State (see Section 2.1.1.6, *Clean Water Act of 1977*; Section 401). In the State of California, the Porter-Cologne Water Quality Control Act is administered in concurrence with the § 401 CWA Water Quality Certification. As with § 401 CWA, the SWRCB would provide review and water quality certification for this Act.

2.1.2.9 Basin Plans

The SWRCB requires its nine RWQCBs to develop Basin Plans (water quality control plans) designed to preserve and enhance water quality and protect the beneficial uses of all Regional waters. Specifically, Basin Plans designate beneficial uses for surface waters and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and describe implementation programs to protect all waters in the Regions. In addition, Basin Plans incorporate by reference all applicable State

and Regional Board plans and policies, and other pertinent water quality policies and regulations. This project is regulated by the Basin Plans of the Santa Ana RWQCB and the Los Angeles RWQCB.

2.1.2.10 California State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State

As discussed in Section 2.1.1.5, in California the discharge of dredged or fill material to waters of the state may be regulated by the Federal Water Pollution Control Act Amendments of 1972, as amended (Clean Water Act) (33 U.S.C. § 1251 et seq.), and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (Wat. Code, Div. 7, § 13000 et seq.). Under the Porter-Cologne Act, discharges of dredged or fill material to waters of the state are subject to waste discharge requirements or waivers thereof. Under the Clean Water Act, applicants for a federal license or permit for an activity that may result in a discharge of dredged or fill material to waters of the United States must obtain a certification from the state that the discharge will comply with certain provisions of the Clean Water Act and set forth any other appropriate requirement of state law.

As set forth in Resolution No. 2008-0026, although the state has historically relied primarily on requirements in the Clean Water Act to protect wetlands, U.S. Supreme Court rulings reducing the jurisdiction of the Clean Water Act over wetland areas by limiting the definition of "waters of the United States" have necessitated the use of California's independent authorities under the Porter-Cologne Act to protect these vital resources.

2.1.2.11 California State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

On April 2, 2019, the SWRCB Resolution No. 2019-0015, Amendment to the Water Quality Control Plan for Ocean Waters of California and the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California to Establish a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures; subsequently approved by the Office of Administrative Law on August 28, 2019). These Procedures went into effect on May 28, 2020.

When a discharge is proposed to waters outside of federal jurisdiction, the SWRCB or the RWQCBs regulate the discharge under Porter-Cologne through the issuance of WDRs. The Procedures provide guidance for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

2.1.2.12 Construction General Permit Order 2009-009-DWQ (as amended)

The SWRCB and its nine RWQCBs implement water quality regulations under the federal CWA and California Porter-Cologne Water Quality Control Act. Existing water quality regulations require compliance with the National Pollutant Discharge Elimination System for discharges of storm water runoff associated with a construction activity.

Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the Project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants to be implemented if there is a failure of BMPs, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The complete Notice of Intent package (including SWPPP) must be submitted to the SWRCB via the Storm Water Multiple Application and Report Tracking System (SMARTS) Database.

2.1.3 Regional and Local Ordinances, Plans, and Policies

2.1.3.1 Orange County General Plan

The Orange County General Plan primarily focuses on the unincorporated area and also addresses regional services and facilities provided by the County such as regional parks, roads, flood control facilities, etc. The Orange County General Plan consists of nine elements which include, Land Use, Transportation, Public Services and Facilities, Resources, Recreation, Noise, Safety, Housing, and Growth Management. The Resources element in particular contains official County policies and the conservation and management of resources and is comprised of six components, one of which is the Natural Resources Component and is primarily concerned with agricultural resources, mineral resource, vegetation and wildlife habitat, and landforms.

2.1.3.2 Los Angeles County General Plan

The Los Angeles County 2035 General Plan was adopted by the Los Angeles County Board of Supervisors on October 6, 2015. The new General Plan went into effect on November 5, 2015. The Conservation and Natural Resources Element (Chapter 9) of the plan guides the long-term conservation of natural resources and preservation of available open space. This section describes the County's role in the protection, conservation and preservation of natural resources and open space within the unincorporated areas of Los Angeles County.

2.1.3.3 Los Angeles County – Significant Ecological Areas

Significant Ecological Areas (SEAs) are officially designated areas within Los Angeles County identified for their irreplaceable biological resources and value. These areas warrant special management because they contain biotic resources that are considered to be rare or unique; are critical to the maintenance of wildlife; represent relatively undisturbed areas of County habitat types; or serve as linkages. Individual SEAs include undisturbed or lightly disturbed habitat supporting valuable and threatened species, linkages and corridors to promote species movement, and are sized to support sustainable populations of its component species. The SEAs are not wilderness preserves, and much of the land within the SEAs is privately-held, used for public recreation, or abuts developed areas.

The SEA Program was updated as a component of the Los Angeles County General Plan 2035. The update included SEA boundary revisions and grouping smaller SEAs into larger connected SEAs. The new General Plan went into effect on November 5, 2015 with the updated SEA Boundaries. The new

General Plan includes 21 SEAs and nine Coastal Resource Areas, and greatly expanded technical descriptions for each of the SEAs. Cumulatively, the 21 SEAs and nine Coastal Resource Areas represent the wide-ranging biodiversity of Los Angeles County, and contain its most important biological resources.

2.1.3.4 Municipal Tree-Related Ordinances (Buena Park)

Sections as described in City of Buena Park (2020) Municipal Code:

12.20.010: Prohibition against installing, damaging and removing vegetation, etc.
12.20.020: Installing, damaging, removing and maintain vegetation, ornaments, etc.
12.20.030: Obligations of Residential Property Owners
12.20.040: Removal Permits

12.20.010 Prohibition against installing, damaging and removing vegetation, ornaments and improvements in and from public property other than parkways. No person other than a city employee shall in any public street, alley, parkway, thoroughfare or place within the city other than a parkway abutting property owned or occupied by such person:

A. Plant or cut down, injure, girdle or remove any tree, shrub, bush or other vegetation;

B. Install, damage or destroy any ornament or improvement. (Ord. 1505 § 1, 2007)

12.20.020 Installing, damaging, removing and maintaining vegetation, ornaments and landscaping in and from parkways. No person shall in any parkway abutting property owed or occupied by such person:

A. Place, plant or cause to be placed or planted any tree, shrub or vegetation other than grass without obtaining a permit from the director of public works;

B. Cut down, injure, girdle, destroy or remove any vegetation, or install, damage or remove any ornament or improvement; provided, however, that this section shall not apply to the removal of vegetation or any ornament or improvement by a city employee;

C. Pave and/or resurface any portion of the parkway;

D. Permit the growth of any vegetation to exceed twenty-four inches in height above the curb or to obstruct any portion of the adjoining sidewalk or street. (Ord. 1505 § 1, 2007)

12.20.030 Obligations of residential property owners.

Owners and occupants of residentially zoned property shall:

A. Except for parkways lawfully paved or landscaped prior to the effective date of subsections C and D of Section 12.20.020, install grass and properly maintain all landscaping within the parkway adjacent to the property. The requirement to maintain landscaping within the adjacent parkway as set forth in this subsection shall exclude the obligation to maintain a city tree in said parkway other than providing water to the tree;

B. Notify the department of public works of any suspected tree hazards or maintenance needs of any tree in the parkway adjacent to the property;

C. Maintain the parkway adjacent to the property lawfully paved prior to the effective date of subsection D of Section 12.20.020 in a manner that does not create a hazard to any other person. Any person who fails to maintain a paved parkway as required by this subsection shall, upon receipt of written notification from the director of public works or his or her representative, remove the paving and install landscaping in compliance with subsection A of this section. (Ord. 1505 § 1, 2007)

12.20.040 Removal permits.

A. Persons desiring to remove any standing or growing trees or shrubbery or any ornament or improvement from a parkway adjacent to property owned or lawfully occupied by such persons shall apply to the director of public works for a permit. The application for such permit shall be in writing and set forth the reasons such removal is desired.

B. If the director finds upon investigation that the tree, shrub, ornament or improvement desired to be removed constitutes a private nuisance, is not of the type or species designated for such street or for other good cause shown, he or she shall issue a permit allowing such tree, shrub, ornament or improvement to be removed.

C. The permit for the removal of any tree, shrub, ornament or improvement shall prescribe the method or manner in which such tree, shrub, ornament or improvement shall be removed by the applicant, shall be conditioned upon the fact that all expenses and costs shall be borne by the applicant and shall contain a provision signed by the applicant that the applicant agrees to save, indemnify and keep harmless the city against all liabilities, judgments, costs and expenses which may in any wise accrue against the city in consequence of the granting of the permit or in consequence of the use or occupancy of any sidewalk, street or other public place or in any other wise by virtue thereof and will in all things strictly comply with the conditions of the permit and of this code, all ordinances, rules and regulations of the city.

D. The permit for the removal of any tree may require the replanting of another tree after the removal, and, if a replacement is required, the applicant shall deposit a sum fixed by the city council for each tree to be replaced before the permit shall be issued. If all the conditions of the permit are not complied with, the deposit required by this section will be forfeited to the city. If the conditions are complied with, the deposit shall be refunded to the applicant.

E. Any person aggrieved by the refusal of the director to issue a permit for the removal of any tree, shrub, ornament or improvement or by the requirements of such permit may appeal to the city council. The city council shall have the right and authority upon investigation and findings to issue the permit. (Ord. 1505 § 1, 2007)

2.2 Studies Required

2.2.1 Literature and Database Search

Preliminary investigation included review of information obtained from literature searches, examinations of habitat as discernible from aerial photographs, and database searches including:

- the USFWS Information for Planning and Consultation (IPaC) system (2020a; located in **Appendix C**, *IPaC Species List*);
- CNPS Inventory of Rare and Endangered Plants of California (online edition; 2020a);
- The Manual of California Vegetation Online Edition (MCV2; Sawyer et al., 2009, CNPS, 2020b);
- CDFW's California Natural Diversity Database (CNDDB) was used to identify special-status plant and wildlife species that may occur within the project site and within a ten-mile radius of the site (**Appendix D,** *Plant Special-Status Species Inventory and Potential Occurrence Determination* and **Appendix E,** *Wildlife Special-Status Species Inventory and Potential Occurrence Determination*).
- To identify the existing and potential biological resources present in the vicinity of the proposed Project, a geographic information system (GIS) search was performed. This consisted of mapping baseline biological resource data (CNDDB 2020, and National Hydrography Database (2020) waterways, and USFWS, 2020c);
- GIS datasets for USFWS Critical Habitat in the project region (USFWS, 2020c);
- Soils data was retrieved from the Natural Resources Conservation Service Web Soil Survey to determine type, consistency, and pH of the soils in the BSA (Soil Survey Staff, 2020);
- Other sources as cited in the text.

2.2.2 Field Reviews

A reconnaissance-level biological resource field review was conducted on February 21 and March 6, 2020 to ground-truth the results of the literature and database search and to document baseline conditions of the project site and BSA. The field review included a habitat assessment and vegetation community mapping, general plant survey, and a general wildlife survey. All vegetation and wildlife species observed during the survey were recorded on field maps and in field notes. Field surveys were conducted as shown on **Table 2.2-1**, *Field Survey Information*.

Table 2.2-1
FIELD SURVEY INFORMATION

Survey Date	Survey Time	Temperature	Weather	Surveyors	Survey Conducted
February 21, 2020	11:45 a.m. – 5:45 p.m.	61 - 68°F	60 to 95% Cloud Cover	MT & HF	Habitat Assessment
March 6, 2020	10:30 a.m. – 5: 15 p.m.	64 - 65°F	50% Cloud Cover	MT & HF	Habitat Assessment & Tree Inventory
July 13, 2020	8:00 a.m. – 9:15 a.m.	69 – 73°F	Clear	CM & HF	Site walkthrough for the Focused Acoustic Bat Survey
July 14, 2020	7:33 p.m.[5]	68 - 78°F	Clear	CM & CN	Focused Acoustic Bat Survey
July 15, 2020	7:33 p.m.[6]	69 - 73°F	Clear	CM & CN	Focused Acoustic Bat Survey

CM: Courtney McCammon
CN: Christian Nordal
HF: Hugo Flores
MT: Michelle Tollett

2.2.2.1 Survey Methods

The reconnaissance-level surveys, tree surveys, and a field investigation of waters of the US and State of California were conducted on foot during daylight hours; all accessible areas of the BSA were surveyed, especially those areas within and adjacent to the proposed project (see **Figure 8**, *Project Boundary and Biological Study Area*, located in **Appendix A**, *Figures*).

Reconnaissance-level survey

The reconnaissance-level survey included vegetation community mapping of the BSA. General botanical and wildlife observations were noted within and adjacent to the Project area. Vegetation communities were classified according urban land cover types typically used to describe "Developed" and "Disturbed" habitats, and utilizing the Natural and Semi-Natural Communities as described within MCV2 Alliances/Associations when applicable. The botanical observations of the sites were floristic in nature, meaning that dominant and subdominant plant species incidentally observed were identified to the taxonomic level needed to determine whether they were special-status plant species. Wildlife species were detected either by observation, by vocalization, or by sign (e.g., tracks, burrows, scat).

Tree Surveys

UltraSystems performed a tree inventory within the project's direct impact area to identify, collect location data (via GPS), measure, and perform a health assessment of trees that may impacted.

Jurisdictional Delineation

On February 21 and March 6, 2020, UltraSystems' biologists Michelle Tollett and Hugo Flores conducted a field investigation of potentially jurisdictional features (including hydrophytic

5 This is the start time of the survey. Surveys concluded one hour after bats had finished emerging from the roost.
6 This is the start time of the survey. Surveys concluded one hour after bats had finished emerging from the roost.

vegetation and soil surfaces within the OWHM [USACE/RWQCB] and bed, bank and channel[CDFW]) within the impact area of the proposed project to the lateral extent of jurisdictional waters, and continued their survey 150 feet upstream and downstream of the project footprint (at Segment O and Segment Q). Wetlands and other waters of the U.S. and State that are located outside of this segment of the BSA and not within known or anticipated areas of project-related ground disturbance would not be affected by the project and were therefore not delineated.

Prior to conducting the general field evaluations, a review of readily available data relevant to the project was performed and the results were compiled from aerial imagery, USGS topographic maps, National Wetland Inventory (NWI) (USFWS, 2020b) maps, data from the U.S. Environmental Protection Agency's Watershed Assessment, Tracking, & Environmental Results System (WATERS; USEPA, 2020), and Natural Resources Conservation Service (NRCS) soil surveys (Soil Survey Staff, 2020) to determine areas of potential USACE, SWRCB, and CDFW jurisdiction, e.g. the location of any potential waters of the U.S. and State, including wetlands. Additionally, the Orange County and Los Angeles County Flood Control Districts' Storm Drain System online mapping programs were reviewed for the "as-built" limits of the concrete-lined channels.

Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. It was expected that the channel was devoid of hydrophytic vegetation and hydrophytic soils within the proposed impact area, due to the concrete channel bottom and the ongoing maintenance of the channel by the Orange County Flood Control District (OCFCD). Therefore, use of the Manual (USACE, 1987) for identification and analysis of hydrophytic vegetation and hydrophytic soils was unnecessary; however, it was used to determine hydrology, as several hydrologic indicators were present. In addition to the hydrologic indicators in the Manual, the OHWM Field Guide (Lichvar and McColley, 2008) and the OHWM Supplement (Curtis and Lichvar, 2010) were used to determine the OHWM. The OHWM is a defining element used to identify the lateral limits of non-wetland waters under Section 404 of the Clean Water Act (33 U.S.C. 1344).

Due to the Novel Coronavirus (COVID-19) pandemic and ongoing State of California Stay at Home Order (Executive Order N-33-20), UltraSystems opted to use the previously recorded field data to conduct the jurisdictional delineation via desktop review. Therefore, on the recommendation of the USACE Los Angeles District Office (Veronica Li, personal communication). UltraSystems' biologists Michelle Tollett and Allison Carver conducted digital delineations of Coyote Creek using historic and recent aerial imagery (Google Earth, 2020), as described in detail within the Jurisdictional Delineation Report for the OC Loop Segments O, P, and Q Coyote Creek Bikeway Project (UltraSystems, 2020).

Because Coyote Creek and Coyote Creek North Fork are concrete-lined channels throughout the project area, which is developed and urbanized, areas of potential jurisdiction to the USACE and SWRCB were evaluated and digitally delineated in accordance with the guidelines set forth in the following manuals:

- USACE 1987 *Wetland Delineation Manual* (Manual),
- The *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (Arid West Supplement*; USACE, 2008),
- *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (OHWM Guide*; Lichvar and McColley, 2008)

- *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OHWM Supplement*; Curtis and Lichvar, 2010).

Notes and photographs from an earlier biological field investigation (UltraSystems, 2020) were also used to assist with the digital jurisdictional delineation. Due to private property and ROW restrictions, only those potentially jurisdictional features within the project footprint and within a 150-foot buffer, which together comprised the Biological Study Area (BSA; e.g., in and along the channel, channel walls, and berms), were investigated.

The project area is comprised of concrete-lined flood control channels which serve to convey flows from the historic Coyote Creek and Coyote Creek North Fork, both tributaries to the San Gabriel River. The concrete-lined channels were originally built by the USACE to protect property and control flows originating from northern Orange County and eastern Los Angeles County flowing towards the San Gabriel River and, ultimately, to the Pacific Ocean.

Focused Acoustic Bat Surveys

A site walkthrough for the focused bat survey was conducted on July 13, 2020, by bat biologist Courtney McCammon and UltraSystems staff biologist Hugo Flores. The focused acoustic bat surveys were conducted on July 14 and 15, 2020, by Courtney McCammon, and bat biologist Christian Nordal. (See **Appendix F**, Bat Report).

2.3 Personnel Survey Dates

The reconnaissance-level biological resource field review was conducted on February 21 and March 6 of 2020, by UltraSystems Senior Biologist Michelle Tollett and Staff Biologist Hugo Flores. Additional surveys included a tree inventory conducted by Ms. Tollett and Mr. Flores on March 6, 2020, a desktop jurisdictional delineation conducted on April 9, 2020, by Michelle Tollett and Allison Carver (Senior Biologist/Regulatory Specialist), which utilized photos and data collected during each aforementioned biological resources and tree inventory surveys. A desktop delineation was performed: 1) due to the stay-at-home order issued by Governor Gavin Newsom on March 19, 2020; 2) due to the static nature of the concrete-lined channel; and 3) relying on the availability of storm drain plans to digitize jurisdictional boundaries using the approximate location of the ordinary high water mark and top of bank, as observed during the field surveys.

A site walkthrough for the focused bat survey was conducted by bat biologist Courtney McCammon and UltraSystems staff biologist Hugo Flores. The focused acoustic bat surveys were conducted on July 14 and 15, 2020, by Courtney McCammon, and bat biologist Christian Nordal.

Ms. Tollett has 19 years of experience as a field and consulting biologist working with private companies and public agencies throughout California and the Rocky Mountains. Ms. Tollett is familiar with the regulatory framework to prepare defensible biological resources technical reports and environmental documents including biological constraints surveys, reconnaissance-level field surveys, wetland delineations, California Rapid Assessment Method (CRAM) assessments, focused special-status species surveys, and habitat mitigation and monitoring plans.

Ms. Carver has 19 years of experience as a field and consulting biologist working with private companies and public agencies in California. She specializes in jurisdictional determination of waters of the U.S. and State, including regulatory framework and permitting, and project impact analyses for projects ranging in size from small school upgrade projects to major infrastructure projects.

Ms. Carver has conducted jurisdictional delineations and authored jurisdictional delineation reports, prepared Preconstruction Notifications required by Section 404 Clean Water Act, Water Quality Certification applications required by Section 401 Clean Water Act, and Lake or Streambed Alteration Notifications as required by Section 1602 of the California Fish & Game Code.

Ms. McCammon is a bat biologist. She has at least ten years of biological monitoring experience performing assessments of both plant and animal species in varied habitats throughout California. She has managed and conducted several biological and ecological projects in the course of her graduate studies and various professional positions. These projects have utilized her skills in field data collection and analysis, time and schedule management, literature review, correspondence and coordination, and working in a team to successfully complete project goals. Ms. McCammon has participated in bat workshops and multiple bat presence surveys in southern California.

Mr. Nordal's bat experience began at Bowling Green State University with a two-year research project that focused on acoustic monitoring for local bat species and statistical analysis on the data to compare trends over space and time. Knowledge acquired from workshops and research has since been applied to Mr. Nordal's work as a consultant. Mr. Nordal performed acoustic monitoring during his work at Caltrans for bats living in bridges, and he has continued acoustic monitoring at multiple consulting firms including Jericho Systems.

Mr. Flores has 10 years of experience as a field and consulting biologist and is familiar with biological and construction monitoring, permit compliance, wetland delineations, CRAM assessments, and technical writing for biological reports. He has conducted numerous botanical and wildlife surveys. Mr. Flores is very knowledgeable about environmental policy and planning practices (CEQA, NEPA) and is also experienced in the implementation of habitat mitigation and restoration.

2.4 Agency Coordination and Professional Contacts

At this time, formal consultation and/or agency coordination has not been conducted with the USFWS, CDFW, USACE, or the SWRCB.

2.5 Limitations That May Influence Results

Parts of the BSA were inaccessible private properties (residential, commercial, or gated) to which the biologists lacked right-of-access. If possible, areas such as these were surveyed using binoculars, and vegetation and wildlife observed were recorded and mapped. However, cryptic vegetation and wildlife may not have been visible through binoculars and therefore may not have been observed during the survey.

The general biological field survey, and protected tree surveys[7] were conducted during daylight hours to maximize the detection of most wildlife and plant species. Some nocturnal wildlife species may not have been observable during the survey; however, if occurrence of their sign (e.g. tracks, scat) was observed, presence of the species within the BSA would have been assumed.

7 The jurisdictional delineation was completed through desktop review and daylight field photos.

3.0 Results: Environmental Setting

According to *Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin* (USDA, 2006):

> "The project site is within the Southern California Coastal Plain of the California Subtropical Fruit, Truck, and Specialty Crop Region, which was once characterized by annual and perennial grasses, scattered coast live oak; stands of brush consisting of buckwheat, ceanothus, California sagebrush, chamise, and scrub oak; and rangeland supporting wild oats, soft chess, red brome, filaree, burclover, needlegrass, tarweed, mustard, and annual lupine interspersed with coast live oak occurring as scattered individual trees to dense stands. Major wildlife species included deer, feral hog, mountain lion, coyote, bobcat, raccoon, skunk, jackrabbit, gray squirrel, ground squirrel, rattlesnake, turkey vulture, roadrunner, crow, quail, pigeon, blackbird, dove, heron, and coot. However, at least two-thirds of this area now consists of urban or suburban areas, and other land in the area is rapidly being converted to suburban, commercial, and industrial uses."

Elevation within the BSA ranges between 32 feet above mean sea level to 119 feet above mean sea level; (refer to **Figure 4,** *USGS Topographic Map*, located in **Appendix A**). The proposed project is located in the cities of Cerritos, Buena Park, and La Mirada (see **Figure 8,** *Project Boundary and Biological Study Area [BSA]* located in **Appendix A**).

3.1 Description of the Existing Biological and Physical Conditions

Land use in the BSA and vicinity primarily consists of residential and commercial development. Most of the properties within the BSA are privately owned other than public roads, and the Coyote Creek and Coyote Creek North Fork channels and maintenance roads.

3.2 Physical Conditions in the Study Area

3.2.1 Water Resources

As shown in **Figure 9**, *Surface Waters and Watersheds*, the project site is manly located in the Brea Creek-Coyote Creek Hydrologic Unit (HU; HU Code 180701060603); however, the pedestrian bridge located at station 10+00 in Coyote Creek North Fork, is in the La Mirada HU (HU Code 18071060602).

The entirety of Coyote Creek (north fork and east fork) within the project area is channelized. The channel structure varies regularly between trapezoidal (slant-walled), wide channel bottom (slant-walled), and rectangular (vertical-walled) throughout the project area.

The channels convey nuisance runoff and storm flow, and now comprise the current (and historic) _Coyote Creek and Coyote Creek North Fork. The southernmost portion of the project area is the confluence of Coyote Creek and Coyote Creek North Fork, both of which are tributaries to the San Gabriel River, ultimately discharging into the Pacific Ocean, in Seal Beach, California. All flows within the channel are considered jurisdictional waters of the U.S. and waters of the State, protected under §§ 401 and 404 CWA, §§ 1600-1616 FGC, and SWRCB Resolution No. 2019-0015, as described in **Section 2.1**, *Regulatory Requirements*.

With regard to Section 303(d) Clean Water Act, those sections of Coyote Creek and Coyote Creek North Fork that are located within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB, Region 4) are on the current 303(d) List. These streams and the related water pollutants for which they are listed are presented in **Table 3.2-1**, *Total Maximum Daily Loads for Coyote Creek and Coyote Creek North Fork*.

The majority of the proposed project (along Coyote Creek) falls under the jurisdiction of the Santa Ana RWQCB (SARWQCB, Region 8); however, Coyote Creek is not listed as an impaired waterbody by the SARWQCB (SWRCB, 2017).

Table 3.2-1
TOTAL MAXIMUM DAILY LOADS FOR COYOTE CREEK AND COYOTE CREEK NORTH FORK

Stream Name	Regional Board	Pollutant	Pollutant Category	Potential Sources
Coyote Creek North Fork	Los Angeles (Region 4)	Indicator Bacteria	Fecal Indicator Bacteria	Source Unknown
		Selenium	Metals/Metalloids	Source Unknown
Coyote Creek	Los Angeles (Region 4) a	Copper, Dissolved	Metals/Metalloids	Source Unknown
		pH	Miscellaneous	Source Unknown
		Toxicity	Toxicity	Source Unknown
		Indicator Bacteria	Fecal Indicator Bacteria	Source Unknown
		Malathion	Pesticides	Source Unknown
		Iron	Metals/Metalloids	Source Unknown

Source: SWRCB 2017

USFWS National Wetland Inventory. the National Wetland Inventory (NWI) has mapped Coyote Creek mainly as riverine, with an intermittent flow, with a streambed that is seasonally flooded and was excavated by humans at some point (R4SBCX), the only exception is a section that starts approximately 0.8 mile upstream of Knott Avenue and ends approximately 0.2 miles downstream of Knott Avenue and is mapped as palustrine with emergent and persistent vegetation (remains standing at least until the beginning of the next growing season), is seasonally flooded and was excavated by humans at some point (PEM1Cx) (**Figure 10a** through **10c**, *National Wetlands Inventory*; also see Photo 2 in **Appendix G**, *Site Photographs*); however, no hydrophobic vegetation or hydric soils were observed during the field surveys.

At the time of the field investigation, surface water was observed in Coyote Creek North Fork and Coyote Creek. No wetlands, or signs of wetlands, were observed within the BSA.

3.2.2 Climate

The Western Regional Climate Center has a co-op weather station located near Tuffree Middle School, located in Anaheim approximately 7.5 miles northeast of the end of Segment Q (Anaheim, California Station #040192; WRCC, 2020). This weather station has recorded climate records from 1989 through 2012 and provides the best available insight into the climate in the project area. As with much of southern California, the recorded data show that the region receives the most precipitation during the wet season, e.g. winter and spring (November – April).

Climate summaries recorded at the Anaheim weather station (#040192) for the period of record 1989 through 2012 are presented in **Table 3.2-2,** *Temperature Statistics for Anaheim Station #040192 (1989- 2012)* and **Table 3.2-3**, *Precipitation Statistics for Anaheim Station #040192 (1989- 2012)*.

Table 3.2-2
TEMPERATURE STATISTICS FOR ANAHEIM STATION #040192 (1989 – 2012)

	Monthly Averages (°F)			Monthly Extremes (°F)	
	Max	Min	Mean	Highest Mean	Lowest Mean
Annual	77.4	55.4	66.4	67.7	64.2
Winter	69.9	47.6	58.7	61.2	56.7
Spring	74.7	55.5	58.7	68.6	59.4
Summer	84.1	63.0	73.6	78.6	70.7
Fall	81.0	57.4	69.2	73.3	66.2

Table 3.2-3
PRECIPITATION STATISTICS FOR ANAHEIM STATION #040192(1989 – 2012)

	Precipitation Monthly Averages (inches)			Total Snowfall (inches)	
	High	Low	Mean	Mean	High
Annual	41.23	4.86	14,09	0.0	0.0
Winter	26.34	1.86	8.83	0.0	0.0
Spring	8.37	0.00	3.22	0.0	0.0
Summer	1.24	0.00	0.23	0.0	0.0
Fall	8.13	0.00	1.81	0.0	0.0

3.2.3 Soils

The USDA National Resources Conservation Service (NRCS) Web Soil Survey (Soil Survey Staff, 2020) of has mapped six soil types within the boundary of the BSA for the original proposed alignment. These soils types and some of their properties are presented in in **Figure 11**, *USDA Soils* (see **Appendix A**) and **Table 3.2-4**, *USDA NRCS Soils Mapped Within the BSA*, shown below.

Table 3.2-4
USDA NRCS SOILS MAPPED WITHIN THE BSA

Soil Map Unit Name	Map Unit Symbol	Parent Material	Natural Drainage Class	Hydric? (Y/N)	Hydric Criteria
Chino silty clay loam, drained	140oc, 140	Alluvium derived from sedimentary rock	Somewhat poorly drained	No	N/A
Urban land, frequently flooded, 0 to 5 percent slopes	1261, 1261LA	Not Specified	Not Rated	No	N/A
Urban land-Ballona-Typic Xerorthents, fine substratum complex, 0 to 5 percent slopes	1137, 1137LA	Discontinuous human-transported material over young alluvium derived from sedimentary rock	Well drained	No	N/A
Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes	1005	Discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock	Somewhat poorly drained	No	N/A
Urban land-Hueneme, drained-San Emigdio complex, 0 to 2 percent slopes	1000	Discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock	Somewhat poorly drained	No	N/A
Urban land-Metz-Pico complex, 0 to 2 percent slopes	1000LA	Discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock	Somewhat excessively drained	No	N/A

3.2.4 Biological Conditions in the Study Area

The BSA is mainly developed and consists of residential and commercial buildings with ornamental trees, paved roads and disturbed areas. Three different land cover types occur within the BSA, they are developed/ornamental, concrete-lined channel and disturbed. Land cover types for the proposed project can be seen in **Figure 12**, *Land Cover Types*.

Wildlife observed in the BSA (directly or by sign) included one special-status Coastal whiptail (*Aspidoscelis tigris stejnegeri*; CDFW Species of Special Concern, S-Rank = S3) as well as sixteen additional common wildlife species were detected (visually or aurally) during the survey. These include the mallard (*Anas platyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), least sandpiper (*Calidris minutilla*), killdeer (*Charadrius vociferus*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), and two bat species, big brown bat (*Eptesicus fuscus*) and Mexican free-tailed bat (*Tadarida brasiliensis*). A complete list of plant and wildlife species observed in the BSA is located in **Appendix H**, *List of*

Species Observed During Surveys. Representative site photos are located in **Appendix G**, *Site Photographs*.

3.2.5 Habitat Connectivity

The BSA is not within a regional CDFW designated Essential Connectivity Area or Natural Landscape Block (see **Figure 13**, *CDFW Regional Wildlife Corridors*). Coyote Creek and Coyote Creek North Fork are concrete-lined flood control channels that lack vegetation; the BSA also lacks vegetation and does not support sensitive biological habitats or plant species.

3.2.6 Regional Species, Habitat, and Natural Communities of Concern

3.2.6.1 Regional Natural Communities of Concern

Based on the literature review and CNDDB search, five sensitive natural communities have the potential to occur within the BSA. The CNDDB sensitive natural communities are were initially based on Robert F. Holland's Preliminary Descriptions of the Terrestrial Communities of California (Holland, 1986) and appear in the CNDDB query results[8]. The five sensitive natural communities and their Holland classification codes are listed below. CDFW considers natural communities with ranks of S1-S3 to be sensitive natural communities that meet the CEQA definition of rare, threatened, or endangered (CEQA Guidelines, §§ 15380, 15063, 15065) to be addressed in CEQA (CEQA Guidelines, § 15125[c]). These sensitive plant communities, Holland classification code, and its presence is listed below in **Table 3.2-4**, *CNDDB Sensitive Communities Within Ten Miles of the Project Site*. Please note that this classification system is no longer current with the commonly used MCV2 *(*Sawyer et al., 2009), which replaced Holland (1986) to characterize natural and semi-natural vegetation communities. If natural or semi-natural communities exist onsite, the Holland (1986) description would then be "cross-walked" compare and parallel to the current natural community, as defined by the MCV2 (Sawyer et al., 2009), to determine the status of the vegetation community. The crosswalk was not necessary for this project, due to the overwhelming presence of developed and ornamental land cover types and lack of natural communities.

Table 3.2-5
CNDDB SENSITIVE COMMUNITIES WITHIN TEN MILES OF THE PROJECT SITE

Sensitive Plant Habitats	Holland Element Code	Present (P)/Absent (A) in the BSA
California walnut woodland	71210	**A**
Southern California arroyo chub/Santa Ana sucker stream	N/A	**A**
Southern Coastal salt marsh	52120	**A**
Southern coast live oak riparian forest	61310	**A**
Southern willow scrub	63320	**A**

Note: The Holland Element Code number is taken from Robert F. Holland's *Preliminary Descriptions of the Terrestrial Communities of California* (Holland, 1986).

8 Please note that this classification system is no longer current with the commonly used MCV2 (Sawyer et al., 2009), which replaced Holland (1986) to characterize natural and semi-natural vegetation communities.

3.2.6.2 Regional Plant Species of Concern

For this report, plant species, subspecies, or varieties are considered "special-status" if they meet any of the following criteria:

- Taxa with official status under the federal Endangered Species Act (ESA). These include plants federally listed as endangered or threatened (50 Code of Federal Regulations [CFR] § 17.12); plants proposed for listing as endangered or threatened (50 CFR § 17.12); plants proposed for delisting (or down listing from endangered to threatened) (50 CFR § 17.12); and plants that are candidates for federal listing.

- Taxa with official status under the CESA. These include plants listed by the California Fish and Game Commission as endangered or threatened (California Fish and Game Code § 2062 and § 2067); plants that the Fish and Game Commission has formally published in the California Regulatory Notice Register as being under review by the CDFW for addition to the list of endangered or threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (California Fish and Game Code § 2068); and plants that the Fish and Game Commission has formally published in the California Regulatory Notice Register as being under review by CDFW for removal from either the list of endangered species or the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to remove the species from either list.

- Taxa with official status under the CNPPA. This includes plants listed by the California Fish and Game Commission as rare (California Fish and Game Code § 1900 et seq.).

- Taxa listed in the CNPS's Inventory of Rare and Endangered Plants of California.

- Taxa that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) § 15380(b) and (d). Species that may meet the definition of rare or endangered include the following (CDFG, 2009):

    - Taxa considered by CNPS and CDFW to be "rare, threatened or endangered in California" (California Rare Plant Rank [CRPR] 1A, 1B and 2) in their Inventory of Rare and Endangered Plants of California. In general, CRPR 3 plants (plants about which more information is needed) and CRPR 4 plants (plants of limited distribution) may not warrant consideration under CEQA § 15380. These plants may be included on special-status plant lists such as those developed by counties where they would be addressed under CEQA § 15380. However, CRPR 3 and CRPR 4 plants are also included in the CNDDB's Special Vascular Plants, Bryophytes, and Lichens List (CDFW, 2015a).

    - Taxa that may warrant consideration on the basis of local significance or recent biological information.

    - A taxon that is considered a locally important species, that is, a species that is not rare from a statewide perspective, but is rare or uncommon in a local context such as within a county or region (CEQA § 15125 [c]) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G) (CDFG, 2009). Examples

include a species at the outer limits of its known range or a species occurring on an uncommon soil type (CDFG, 2009).

The literature review provided a list of 25 special-status plant species (plant inventory) within the study area. **Figure 14**, *CNDDB Plant Species and Habitats* (located in **Appendix A**) gives a broad overview of plants of regional concern, within a two-mile radius of the BSA. The potential to occur analysis table can be found in **Appendix D**, *Plant Special-Status Species Inventory and Potential Occurrence Determination*. The table provides both the taxonomic name (scientific name) and common name of each plant species. Plant taxonomic order is based on The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al., 2012). In addition, **Appendix D**, *Plant Special-Status Species Inventory and Potential Occurrence Determination*, describes each species' status and describes each species' requirements and preferred habitat.

Each special-status plant species was assessed for its potential to occur within the BSA by comparing its elevational range and distribution, retrieved from CNPS and other databases and literature, with the BSA's location and elevation range. A species was determined as being "absent" within the BSA if the BSA is well outside the species' known distribution and/or the species' known elevation range.

3.2.6.3 Regional Wildlife Species of Concern

For this report, wildlife species or subspecies are considered "special-status" if they meet any of the following criteria:

- Taxa with official status under the FESA. These include wildlife federally listed as endangered or threatened (50 Code of Federal Regulations [CFR] § 17.11); wildlife proposed for listing as endangered or threatened (50 CFR § 17.11); wildlife proposed for delisting (or down listing from endangered to threatened) (50 CFR § 17.11); and wildlife that are federal candidates for listing.

- Taxa with official status under the CESA. These include wildlife listed by the California Fish and Game Commission as endangered or threatened (California Fish and Game Code § 2062 and § 2067); wildlife that the Fish and Game Commission has formally published in the California Regulatory Notice Register as being under review by the CDFW for addition to the list of endangered or threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (California Fish and Game Code § 2068); and wildlife that the Fish and Game Commission has formally published in the California Regulatory Notice Register as being under review by CDFW for removal from either the list of endangered species or the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to remove the species from either list.

- Taxa designated by CDFW as species of special concern on the Special Animals List (CDFW, 2019).

- Taxa designated as state fully protected species by CDFW (California Fish and Game Code § 5515, § 5050, § 3511, and § 4700).

- Taxa identified as sensitive, unique or rare by the USFWS or by CDFW.

- Taxa protected under the BGEPA and other laws and regulations.

- Considered a locally important species, that is, a species that is not rare from a statewide perspective, but is rare or uncommon in a local context such as within a county or region (CEQA § 15125 [c]) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range.

This database search provided a list of 43 special-status wildlife species (wildlife inventory). Each special-status wildlife species was assessed for its potential to occur within the BSA and project site by comparing its elevational range (if known) and distribution, retrieved from databases and literature, with the BSA's location and elevation range. A species was determined as being "Absent" within the BSA or project site if the BSA is well outside the species' known distribution and/or the species' known elevation range, or if the only recorded observations of the species are historic (i.e., the observation was recorded over 20 years ago; for the purpose of this report, if the observation was recorded prior to 1997).

Appendix E, *Wildlife Special-Status Species Inventory and Potential Occurrence Determination*, summarizes conclusions from the literature review and field surveys regarding the potential occurrence of special-status wildlife species within the BSA. **Figure 15**, *CNDDB Wildlife Species* (located in **Appendix A**) gives a broad overview of sensitive wildlife within a two-mile radius of the BSA.

4.0 Results: Biological Resources, Discussion of Impacts and Mitigation

The following impacts were analyzed using the details provided in **Section 1.3,** *Project Description*.

4.1 Land Cover Types and Natural Communities within the BSA

The project site is essentially a concrete bottomed and walled flood control channel with adjacent bare dirt right of way that is currently used as a maintenance access road (See **Appendix G**, *Site Photographs*). This existing maintenance access road is proposed to be paved to provide a smooth all-weather surface for cyclists. At two roadways and two railroads, underpasses will be provided as a part of the project.

The literature review and field surveys determined that the BSA does not contain any sensitive plant communities but does contain three non-sensitive land cover types.

- Developed/Ornamental
- Concrete-lined Channel
- Disturbed

4.1.1 Developed/Ornamental

Developed lands are non-vegetated features within the BSA that describe areas occupied by man-made structures, paving and other impermeable surfaces that cannot support vegetation. Inside the BSA, developed lands consist of paved streets, paved access roads, parking lots, driveways, sidewalks, shipping containers, and other permanent structures. These developed areas provide virtually no habitat for wildlife species. Landscaping (ornamental trees, shrubs, turf, etc.) associated with the developed lands are also included within this category. These developed areas provide virtually no habitat for wildlife species; however, birds could use the ornamental trees for foraging and nesting. Developed lands and ornamental vegetation do not have a global or state rank and are not considered a sensitive plant community.

Within the BSA, this land cover type covers approximately 70.5 acres and makes up most of the 126.2-acre BSA.

4.1.2 Concrete-lined Channel

This land cover type mainly consists of the unvegetated, concrete-lined Coyote creek channel. At the time of the surveys, the channel contained water.

Within the BSA, this land cover type covers approximately 32.2 acres and comprises the second most commonly occurring land cover type of the 126.2-acre BSA.

4.1.3 Disturbed

The disturbed land cover type contains areas that lack vegetation or have non-native vegetation as dominant; some of the non-native vegetation observed include Russian thistle (*Salsola tragus*), Mexican fan palm tree (*Washingtonia robusta*), and Eucalyptus tree (*Eucalyptus* sp.). They provide little to no habitat value for wildlife. Disturbed habitats observed within the BSA do not fit any

classification described in *A Manual of California Vegetation Second Edition* (Sawyer et al., 2009) or *Preliminary Descriptions of the Terrestrial Communities of California* (Holland, 1986). Disturbed habitats are not considered a sensitive plant community. Within the BSA, disturbed habitat mainly consists of dirt maintenance roads running alongside Coyote Creek.

Within the BSA, this land cover type covers approximately 23.4 acres of the 126.2-acre BSA.

Table 4.1-1, *Land Cover Types Recorded in the BSA*, lists the land cover types with approximate acreages mapped.

Table 4.1-1
LAND COVER TYPES RECORDED IN THE BSA

Land Cover Type	Holland Community Name and Element Code	Sawyer et al. Community Name	CaCode	Global and State Rank
Concrete-lined channel	N/A	N/A	N/A	N/A
Disturbed	N/A	N/A	N/A	N/A
Developed/Ornamental	N/A	N/A	N/A	N/A

The Land Cover Areas (acreage and square feet) in the BSA are provided in **Table 4.1-2**, *Land Cover Area in the BSA*, and shown in **Figure 12**, *Land Cover Types.*

Table 4.1-2
LAND COVER AREA IN THE BSA

Land Cover Type	Area
	Acres
Developed/Ornamental	70.49
Concrete-lined Channel	32.23
Disturbed	23.45
TOTAL IN BSA	**126.16** **126.2 (rounded)**

4.1.4 Potential Impacts to Land Cover Types and Natural Communities of Concern

4.1.4.1 Direct Impacts

No natural communities or sensitive habitats were observed within the BSA during the field surveys; therefore, no direct impacts to natural communities or sensitive habitats are anticipated as a result of construction of the project.

Impacts to land covers are shown on **Figure 16a-m**, *Impacts to Land Cover Mapbook* (figure is located in **Appendix A**). Impacted land cover acreages are summarized in **Table 4.1-3**, *Area of Anticipated Direct Impacts to Land Cover in the BSA.* Calculations were based on the currently proposed

development designs in conjunction with vegetation mapping from the field survey and aerial imagery.

Table 4.1-3
AREA OF ANTICIPATED DIRECT IMPACTS TO LAND COVER IN THE BSA

Land Cover Type	Total Mapped Acreage within the BSA	Total Mapped Acreage within the Project Boundary	Total Impact Acreage within the Project Boundary[1]		
			Permanent	Temporary	Total
Developed/Ornamental	70.49	7.18	4.38	2.80	7.18
Concrete-lined Channel	32.23	1.60	1.09	0.52	1.60
Disturbed	23.45	10.48	7.44	3.05	10.48
Total Acreage:	**126.17 126.2 (rounded)**	**19.26**	**12.91**	**6.37**	**19.26**

*The total mapped acreage discussed in this report is rounded to 126.2 acres.
[1] If the UPRR overcrossing option is taken, these acreages would not change significantly.

Direct, temporary impacts would occur within the project work limits during construction, but would be restored to the preconstruction contours and elevations when construction is complete.

4.1.4.2 Indirect Impacts

No indirect impacts are anticipated.

4.1.4.3 Mitigation Measures

Indirect impacts are not anticipated; therefore, mitigation measures are not required.

4.1.4.4 Cumulative Impacts

Direct and indirect impacts to natural communities or sensitive habitats are not anticipated as a result of construction of the project; therefore, it is anticipated that the project, in combination with other past, present and reasonably foreseeable activities would have no cumulative effects on natural communities or sensitive habitats in the region.

4.2 Potential Impacts to Protected Trees

UltraSystems performed a tree inventory within the project's impact area to identify, record location via GPS unit, measure and perform a health assessment of any trees impacted in the City of Buena Park. See **Table 4.2-1**, *Protected Tree Inventory*, below. (see **Figure 17**, *Tree Inventory Map*).

Table 4.2-1
PROTECTED TREE INVENTORY

Tree #	Common Name	Scientific Name	Tree Dimensions			Health Assessment	
			Height (approx.)	# of Trunks	Diameter at Breast Height	Tree Health	Comment
1	Carrotwood	*Cupaniopsis anacardioides*	20 ft.	1	24.0 ft.	4	Trimmed on top
2	Ficus tree	*Ficus* sp.	20 ft.	1	21.0 ft.	3	Significantly pruned
3	Ficus tree	*Ficus* sp.	20 ft.	1	14.5 ft.	3	Significantly pruned
4	Ficus tree	*Ficus* sp.	20 ft.	1	15.4 ft.	3	Significantly pruned
5	Ficus tree	*Ficus* sp.	20 ft.	1	14.9 ft.	3	Significantly pruned
6	Ficus tree	*Ficus* sp.	20 ft.	1	18.4 ft.	3	Significantly pruned
7	Ficus tree	*Ficus* sp.	20 ft.	1	19.0 ft.	3	Significantly pruned
8	Ficus tree	*Ficus* sp.	20 ft.	1	27.8 ft.	4	Significantly pruned
9	Crape myrtle	*Lagerstroemia indica*	25 ft.	1	9.8 ft.	4	Pruned
10	Crape myrtle	*Lagerstroemia indica*	25 ft.	1	8.4 ft.	4	Pruned
11	Crape myrtle	*Lagerstroemia indica*	25 ft.	1	8.0 ft.	4	Pruned
12	Crape myrtle	*Lagerstroemia indica*	25 ft.	1	7.0 ft.	4	Pruned
13	Crape myrtle	*Lagerstroemia indica*	25 ft.	1	8.2 ft.	4	Pruned
14	Crape myrtle	*Lagerstroemia indica*	25 ft.	1	7.9 ft.	4	Pruned
15	London Plane	*Platanus acerifolia*	28 ft.	1	7.6 ft.	4	Pruned
16	Brisbane Box	*Lophostemon confertus*	30 ft.	1	6.4 ft.	5	No visible signs of stress, disease of pest infestation
17	Myoporum	*Myoporum laetum*	15 ft.	4	1.0+1.0+2.0+ 2.0 = 6.0 ft	5	No visible signs of stress, disease of pest infestation
18	Brisbane Box	*Lophostemon confertus*	30 ft.	1	7.8 ft.	5	No visible signs of stress, disease of pest infestation

Tree #	Common Name	Scientific Name	Tree Dimensions			Health Assessment	
			Height (approx.)	# of Trunks	Diameter at Breast Height	Tree Health	Comment
19	London Plane	*Platanus acerifolia*	20 ft.	1	7.3 ft.	5	No visible signs of stress, disease of pest infestation
20	London Plane	*Platanus acerifolia*	20 ft.	1	7.5 ft.	5	No visible signs of stress, disease of pest infestation
21	Brisbane Box	*Lophostemon confertus*	30 ft.	1	7.5 ft.	5	No visible signs of stress, disease of pest infestation
22	Brisbane Box	*Lophostemon confertus*	30 ft.	1	7.3 ft.	5	No visible signs of stress, disease of pest infestation

Tree Acronyms

Brisbane Box (LOCO) Ficus tree (FISP)
Carrotwood (CUAN) London Plane (PLAC)
Crape myrtle (LAIN) Myoporum (MYLA)

Tree Health Criteria Rating

3 - Tree in moderate health.
4 - Tree in very good health.
5 - Tree in excellent health.

4.2.1 Direct Impacts

Direct impacts by removal of some or all trees listed in **Table 4.2-1**, *Protected Tree Inventory*, are anticipated to occur within the project area along La Mirada Boulevard in the City of Buena Park, no trees would be removed within the Cities of La Mirada or Cerritos. The final tree count to be removed will be decided by the contractor in the field, therefore, it is presumed that all 22 ornamental street trees will be impacted through removal or trimming.

4.2.2 Indirect Impacts

No indirect impacts are anticipated to occur to adjacent urban forest protected trees, which will be avoided and "protected-in-place" with implementation of the mitigation measures stated below. Therefore, no indirect effects to protected trees will occur as a result of this project.

4.2.3 Mitigation Measures

Direct impacts to trees in the City of Buena Park are anticipated to occur as a result of this project, implementation of the mitigation measures below will help to avoid, eliminate or reduce direct or indirect effects on impacted trees. These include: **BIO-1: Qualified Biological Monitor**, **BIO-2: Worker Environmental Awareness Program (WEAP)**, **BIO-3: Project Limits and Designated Areas**, **BIO-4: General Vegetation Avoidance and Protection Measures** and **BIO-5: Tree Removal Permit.**

- **BIO-1: Qualified Biologist/Biological Monitor**

  Although the project is being constructed on an existing dirt/asphalt maintenance path with no vegetation (with minor exception of 280 feet of La Mirada Blvd), if required by

forthcoming regulatory agency authorizations, a focused biological monitor will be on site to monitor activities at locations that result in the clearing or grading of areas (initial vegetation removal and grading activities) known to contain or potentially contain native wildlife (i.e., coyotes, American crows, common ravens, etc.), special-status species (such as the Coastal Whiptail), as well as grading, excavation, and/or other ground-disturbing activities in jurisdictional areas to ensure that effects do not exceed the limits of grading and to minimize the likelihood of inadvertent impacts to special-status species and protected trees. Where appropriate, the biological monitor will mark/flag the limits of sensitive areas (such as active bird nests/sensitive bird habitat) to restrict project activities near the areas. These restricted areas will be monitored to protect the species during construction. The biological monitor will ensure that all biological mitigation measures, BMPs, avoidance and protection measures described in the relevant project permits, approvals, licenses, and environmental reports are in place and are adhered to. Monitoring will cease when the sensitive habitats and jurisdictional areas have been cleared or affected. All observations of special-status species will be documented and mapped in monitoring logs. Monitoring logs will be completed for each day of monitoring. All special-status species recordings will be submitted to the CNDDB.

The biological monitor will have the authority to temporarily halt all construction activities and all non-emergency actions if sensitive areas and special-status species are identified and will be directly affected by project activities. The monitor will notify the County, the County will then notify the appropriate resource agency and consult if needed. If needed, and if possible, the biological monitor will relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if Orange County Public Works (OCPW) and the consulted resource agency determine that the activity will not result in impacts to the species.

The biological monitor will notify the project proponent, who will notify the appropriate agencies if a dead or injured protected special-status species is located within the project site. Written notification must be made within 15 days of the date and time of the finding or incident (if known) and must include; location of the carcass, a photograph, cause of death (if known), and other pertinent information.

- **BIO-2: Worker Environmental Awareness Program**

  If required by forthcoming regulatory agency authorizations, prior to project construction activities, a qualified biologist will prepare and conduct a Worker Environmental Awareness Program (WEAP) training that will describe the biological constraints of the project. All personnel who will work within the project site will attend the WEAP prior to performing any work. The WEAP should cover the results of any pre-construction surveys, jurisdictional area locations, and sensitive biological resources (such as Coastal Whiptail) potentially present on the site. In addition, the training should cover restrictions, avoidance and protection measures, mitigation measures, and individual responsibilities associated with the project, including measures provided within the forthcoming regulatory permits. The program will include the steps to take if workers encounter a sensitive wildlife species (i.e. notifying the biological monitor or the construction foreman, who will then notify the biological monitor). Training materials will be language-appropriate for all construction personnel. Upon completion of the WEAP, workers will sign a form stating that they attended the program, understand all protection measures, and will abide by all the rules of the WEAP. A record of all trained personnel will be kept with the construction foreman onsite. If new construction personnel are added to the project later, the construction foreman will ensure

that new personnel receive training before they start working. The biologist will prepare and provide written hard copies of the WEAP and photos of the sensitive biological resources to the construction foreman.

- **BIO-3: Project Limits and Designated Areas**

  To avoid impacts to environmentally sensitive areas (ESAs), if any are later identified, surrounding habitats and wildlife, OCPW and/or its assigned contractor, will implement the following measures prior to project construction and commencement of any ground-disturbing activities or vegetation removal.

  - Project footprint will be set at the minimum size to accomplish necessary work, resulting in minimal impacts to sensitive biological resources.
  - Specifications for the project boundary, limits of grading, project related parking, storage areas, laydown sites, and equipment storage areas will be mapped and clearly marked in the field with temporary fencing, signs, stakes, flags, rope, cord, or other appropriate markers. All markers will be maintained until the completion of activities in that area.
  - To minimize the amount of disturbance, the construction/laydown areas, parking areas, staging areas, storage areas, spoil areas, and equipment access areas will be restricted to designated areas. Designated areas will comprise of existing disturbed areas (parking lots, access roads, graded areas, etc.) to the extent possible.
  - Project-related work limits will be defined and work crews will be restricted to designated work areas. Disturbance beyond the actual construction zone will be prohibited without site-specific surveys. If sensitive biological resources are detected in an area to be affected, then appropriate measures would be implemented to avoid effects (i.e., flag and avoid, erect orange construction fencing, biological monitor present during work, etc.). However, if avoidance is not possible and the sensitive biological resources will be directly affected by project activities, the biologist will mark and/or stake the site(s) and map the individuals on an aerial map and with a GPS unit. The biologist will then contact the appropriate resource agencies to develop additional avoidance, minimization and/or mitigation measures prior to commencing project activities.
  - ESAs will be identified, mapped, clearly marked in the field, and avoided to the maximum extent practicable in order to avoid and minimize effects to sensitive biological resources.
  - Existing roads will be utilized wherever possible to avoid unnecessary impacts. Project-related vehicle traffic will be restricted to established roads, staging areas, and parking areas. Travel outside construction zones will be prohibited.

  Monitoring would occur periodically during the length of construction activities to ensure project limits, designated areas (parking, storage, etc.), and ESAs are still clearly marked.

- **BIO-4: General Vegetation Avoidance and Protection Measures**

  OCPW, or its assigned contractor, would implement the following general avoidance and protection measures to protect vegetation, to the extent practical.

  - Although no vegetation was noted along the bikeway route efforts would be made to minimize vegetation removal. Cleared or trimmed vegetation and woody debris would be disposed of in a legal manner at an approved disposal site.
  - If any invasive species are subsequently discovered within the temporary disturbance areas they would be controlled to the maximum extent feasible using hand pulling or hand tool removal methods only. Limiting control methods to hand pulling or hand tools would further protect the surrounding habitat.
  - To minimize the transfer of exotic weed seed, vehicles and all equipment would be washed before first use at the project site. This includes wheels, undercarriages, bumpers and all parts of the vehicle. In addition, all tools such as chain saws, hand clippers, pruners, etc. would also be washed. All washing would take place where rinse water is collected and disposed of in either a sanitary sewer or a landfill.

  Contractors, subcontractors, employees, and site visitors would be prohibited from collecting plants.

- **BIO-5: Tree Removal Permit**

  City of Buena Park Ordinance 12.20.040 states the following:

  "A. Persons desiring to remove any standing or growing trees or shrubbery or any ornament or improvement from a parkway adjacent to property owned or lawfully occupied by such persons shall apply to the director of public works for a permit. The application for such permit shall be in writing and set forth the reasons such removal is desired.

  B. If the director finds upon investigation that the tree, shrub, ornament or improvement desired to be removed constitutes a private nuisance, is not of the type or species designated for such street or for other good cause shown, he or she shall issue a permit allowing such tree, shrub, ornament or improvement to be removed.

  C. The permit for the removal of any tree, shrub, ornament or improvement shall prescribe the method or manner in which such tree, shrub, ornament or improvement shall be removed by the applicant, shall be conditioned upon the fact that all expenses and costs shall be borne by the applicant and shall contain a provision signed by the applicant that the applicant agrees to save, indemnify and keep harmless the city against all liabilities, judgments, costs and expenses which may in any wise accrue against the city in consequence of the granting of the permit or in consequence of the use or occupancy of any sidewalk, street or other public place or in any other wise by virtue thereof and will in all things strictly comply with the conditions of the permit and of this code, all ordinances, rules and regulations of the city.

  D. The permit for the removal of any tree may require the replanting of another tree after the removal, and, if a replacement is required, the applicant shall deposit a sum

fixed by the city council for each tree to be replaced before the permit shall be issued. If all the conditions of the permit are not complied with, the deposit required by this section will be forfeited to the city. If the conditions are complied with, the deposit shall be refunded to the applicant.

E. Any person aggrieved by the refusal of the director to issue a permit for the removal of any tree, shrub, ornament or improvement or by the requirements of such permit may appeal to the city council. The city council shall have the right and authority upon investigation and findings to issue the permit. (Ord. 1505 § 1, 2007)"

4.2.4 Cumulative Impacts

Implementing the recommended mitigation measures described in Section 4.2.3 will help to avoid, reduce or eliminate potential direct and indirect impacts to protected trees; therefore, it is anticipated that the project in combination with other past, present and reasonably foreseeable activities in the environment around the project site would have little to no cumulative effects on protected trees in the region.

4.3 Potential Impacts to Special-Status Plant Species

No listed endangered, threatened, candidate or state rare plant species or sensitive plant species were observed within the BSA during any of the field surveys. The literature review and field surveys concluded that habitat conditions within the BSA create a moderate potential for one sensitive plant species to occur: lucky morning-glory (*Calystegia felix*) (CRPR: 1B.1).

4.3.1 Discussion of Lucky Morning Glory

Lucky Morning Glory is not known to be extant in the wild. All extant occurrences are associated with well-watered landscaping on recently completed industrial, commercial, and residential developments (Provance and Sanders, 2013).

4.3.1.1 Survey Results

Even though Lucky Morning Glory was not observed during the survey, this species has a low potential to occur within the project footprint. The project site is located within this plant's known distribution and elevation range, but contains limited potential suitable habitat; most of the project site is developed or disturbed.

4.3.1.2 Direct Impacts

No direct impacts to Lucky Morning Glory or any other special-status plants are anticipated as a result of construction of the project, as no special-status plants were observed during field surveys. Only small pockets of unpaved, suitable habitat exist within the project footprint.

4.3.1.3 Indirect Impacts

Construction of the project is not expected to result in indirect reasonably foreseeable impacts to special-status plant species located adjacent to the project work site.

4.3.1.4 Mitigation Measures

No special-status plant species were observed during any survey, therefore, impacts to special-status plants are not anticipated as a result of the project. Mitigation is not required for special-status plants.

Cumulative Impacts

Direct impacts to special-status plant species are not anticipated as a result of construction of the project, however, implementing the general recommended mitigation measures **BIO-1**, **BIO-2**, **BIO-3**, and, **BIO-4** help to avoid, reduce or eliminate potential indirect impacts to vegetation; therefore, it is anticipated that the project in combination with other past, present and reasonably foreseeable activities in the environment around the project site would have little to no cumulative effects on special-status plants in the region.

4.4 Potential Impacts to Special-Status Wildlife

One special-status wildlife species, Coastal Whiptail (CDFW Species of Special Concern, S-Rank = S3) was observed during the field surveys; and one sensitive wildlife species, the Western Mastiff Bat (*Eumops perotis californicus*)(CDFW Species of Special Concern), has moderate potential to occur based on the literature review and habitat conditions observed during the field surveys.

Sixteen additional common wildlife species were detected (visually or aurally) during the survey. These include the mallard, red-tailed hawk, least sandpiper, killdeer, rock pigeon, American crow, common raven, American kestrel, mourning dove, house finch, house sparrow, northern mockingbird, black phoebe and two bat species, big brown bat and Mexican free-tailed bat. Stage Road bridge contained a bat colony, as noted by sign (excrement) and aural cues (vocalizations and movement sounds). The focused acoustic bat survey conducted on July 14 and 15, 2020 confirmed a roosting colony on Stage Road Bridge and all other bridges were deemed as low risk for presence of a bat colony due to lack of suitable crevices or cavities and a lack of bat guano. The focused acoustic bat survey also confirmed suitable roosting habitat for the Western Mastiff Bat. Focused pre-construction surveys will be conducted to determine presence of roosting bats and to determine the particular bat species using the bridges.

4.4.1 Discussion of MBTA-Protected Bird Species

The BSA is situated within the boundary of the Pacific Flyway, which is a major north-south flyway for large populations of migrating birds. The Pacific Flyway extends from Alaska to South America and encompasses eight western states: Washington, Oregon, California, Idaho, western Montana, Nevada, Utah, and Arizona (EAFB, 2008). Migrating birds travel the flyway in the spring and fall following food sources and to breed or overwinter.

4.4.1.1 Survey Results

The BSA supports trees, vegetation, and other physical features that could potentially provide foraging, nesting, and cover habitats to support a diverse assortment of bird species (year-round residents, seasonal residents, and migrants). A majority of the birds observed during the field surveys and those birds that could potentially breed within the BSA are protected by the MBTA and California Fish and Game Code § 3503, § 3503.5, and § 3513. The statutes make it unlawful to take native breeding birds, and their nests, eggs, and young. Therefore, the project has the potential to directly and indirectly take individual breeding birds, their nests, young, or eggs. Project development is not

expected to cause a substantial impact to bird species that only forage at the site or occur as transient visitors.

4.4.1.2 Direct Impacts

Activities which are most likely to result in take of migratory birds during the breeding bird season when eggs or young are likely to be present include, but are not limited to, clearing or grubbing of bird nesting habitat (such as birds that nest in bridges or ground nesting birds) during the nesting season (generally between February and September); structure demolition; operation and maintenance activities; or vegetation trimming or clearing.

Due to lack of habitat, project construction is not expected to impact bird species that only fly over the site, forage at the site, or occur as transient visitors. Therefore, project construction is not anticipated to directly affect breeding habitat for these species.

4.4.1.3 Indirect Impacts

If construction occurs during the nesting season, indirect impacts on breeding birds could occur from increased noise, vibration, lighting and dust during construction, which could adversely affect the breeding behavior of some birds and lead to the loss (take) of eggs and chicks, or nest abandonment.

4.4.1.4 Mitigation Measures

Implementing the recommended mitigation measures described in Section 4.2.3 combined with the mitigation measures below will help to minimize or avoid direct and indirect effects on MBTA-protected bird species, common and special-status species. These include: **BIO-1**, **BIO-2**, **BIO-3**, **BIO-4**, **BIO-6: Nesting Bird Surveys**, and **BIO-7: General Wildlife Avoidance and Protection Measures**.

MM BIO-6 Nesting Bird Surveys

To aid compliance with the MBTA and the California Fish and Game Code, and to minimize or avoid direct and indirect impacts to migratory non-game breeding birds, and their nests, young, and eggs, the following measures should be implemented.

- Project activities that will remove or disturb potential nest sites should be scheduled outside the nesting bird season, if feasible. The nesting bird nesting season is typically from February 15 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Raptors are known to begin nesting early in the year. The raptor nesting bird season begins January 31.
- If project activities that will remove or disturb potential nest sites cannot be avoided during January 31 through September 15, a qualified biologist will conduct a pre-construction survey for breeding bird activity or active nests within the limits of project disturbance up to seven days prior to mobilization, staging and other disturbances. A lapse of no more than seven days should occur between nesting bird surveys.
- If no breeding bird activity or active nests are observed during the pre-construction survey(s), or if they are observed and will not be affected, then

project activities may begin and no further nesting bird monitoring will be required.

- If an active bird nest is located during the pre-construction survey and potentially will be affected, a no-activity buffer zone will be delineated on maps and marked by fencing, stakes, flagging, or other means up to 500 feet for special-status avian species and raptors, or up to 100 feet for non-special status avian species. Materials used to demarcate the nests will be removed as soon as work is complete or the fledglings have left the nest. The biologist will determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species because some bird species are more tolerant than others to noise and other disturbances. Buffer zones will not be disturbed until a qualified biologist determines that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be affected by project activities. Periodic monitoring by a biologist will be performed to determine when nesting is complete. After the nesting cycle, project activities may begin within the buffer zone.
- If special-status bird species, such as the Least Bell's Vireo, are observed within the project site during the pre-construction surveys, then a qualified biologist will delineate individual species' nesting territories, and notify the appropriate resource agency to: (1) determine if additional or focused protocol surveys are necessary, and (2) select suitable mitigation measures. Project activities may not begin within the area until concurrence is received from the appropriate resource agencies.

BIO-7 General Wildlife Avoidance and Protection Measures

The project site contains habitats which can support some wildlife species. Although few wildlife species were observed utilizing this urban area[9] (please see **section 3.2.4** for full list) during the two field surveys, including bats at Stage Road and the Coastal Whiptail, OCPW, or its contractor, would implement the following general avoidance and protection measures to protect wildlife, to the extent practical.

- To minimize construction-related mortalities of nocturnally active species such as mammals and snakes, it is recommended that all work be conducted during daylight hours. If nighttime work is required, the Qualified Biologist will assess the construction area to determine if there are any biological concerns for nighttime work. Nighttime work (and use of artificial lighting) would not be permitted unless specifically authorized by the wildlife agencies. If required, night lighting would be directed away from the preserved open space areas. All unnecessary lights would be turned off at night to avoid attracting wildlife such as insects, migratory birds, and bats.
- If any wildlife is encountered during project activities, it will be allowed to freely leave the area unharmed.

9 Wildlife survey limitations include: (1) A two-day survey cannot be used to conclusively determine presence or absence of a wildlife species, (2) biological surveys were conducted during daylight hours to maximize the ability to observe most wildlife, and (3) Many species are nocturnal, move about a territory, may have become dormant for the season, or are less active during weather extremes.

- Wildlife would not be disturbed, captured, harassed, or handled. Fishing would be prohibited at the project site. Animal nests, burrows and dens would not be disturbed without prior survey and authorization from a qualified biologist.
- Active nests cannot be removed or disturbed. Nests can be removed or disturbed if determined inactive by a qualified biologist.
- To avoid impacts to wildlife, OCPW, or its contractor, would comply with all litter and pollution laws and would institute a litter control program throughout project construction. All contractors, subcontractors, and employees would adhere to this program. Trash and food items would be disposed of promptly in predator-proof containers with resealing lids, or will be removed off the site each day. These covered trash receptacles would be placed at each designated work site and the contents would be properly disposed at least once a week. Trash removal would reduce the attractiveness of the area to opportunistic predators such as common ravens (*Corvus corax*), northern raccoons (*Procyon lotor*), Virginia opossums (*Didelphis virginiana*), and coyotes (*Canis latrans*).
- Contractors, subcontractors, employees, and site visitors would be prohibited from feeding wildlife and collecting wildlife.
- To avoid the potential for mortality and harassment of wildlife, all non-security related firearms, weapons, and domestic dogs would be prohibited from the project site.
- All pitfalls (trenches, holes, bores, detention basins, and other excavations) greater than two feet deep would be completely covered at the end of each work day, or escape ramps provided.

4.4.1.5 Cumulative Impacts

Implementing the mitigation measures **BIO-1** though **BIO-4**, **BIO-6** and **BIO-7** will help to avoid, reduce, or eliminate direct or indirect impacts on migratory non-game breeding birds, and their nests, young, and eggs; therefore it is anticipated that the project, in combination with past, present, and reasonably foreseeable probable future projects in the environment around the project site, would have little to no cumulative impacts on migratory non-game breeding birds, and their nests, young, and eggs in the region.

4.4.2 Discussion of Coastal Whiptail

The Coastal Whiptail is found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage such as deserts, chaparral and semiarid. Also found in woodland and riparian areas. The Coastal Whiptail probably occurs in oak woodlands because they have been detected in riparian areas (Schoenherr, 1976). The Coastal Whiptail can be found in open, often rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations (Benes, 1969). The Coastal Whiptail is known to use compacted, firm, sandy, and/or rocky soil substrates.

4.4.2.1 Survey Results

A Coastal Whiptail was observed within the BSA (but outside of project limits) during the February 21, 2020 survey. It was observed in the disturbed area immediately east of 15250 Desman Road, La Mirada, CA.

4.4.2.2 Direct Impacts

Potential direct impacts to common (see Section 3.2.4 for a list of common wildlife observed during the field surveys) and sensitive wildlife, such as Coastal Whiptail, could occur from construction related mortality, injury, or harassment of individuals as a result of construction and from the removal and direct loss of breeding, foraging, and/or sheltering habitats. Project development could also reduce the amount of habitat available for common and special-status wildlife species utilizing onsite habitats. Direct permanent impacts include all areas within the limits of grading in the project footprint.

Ground disturbing and habitat altering activities could involve substantial disturbance to common and special-status ground-dwelling animals or nesting birds. Examples include grading, clearing, disking, grubbing, excavation, trenching, paving, and heavy equipment compacting. Direct impacts to less mobile fossorial animals that are underground during most of the day or year (e.g., small mammals or lizards) or have a life stage in the soil or on plants (e.g., amphibians, nesting birds, insects) could occur from encounters with vehicles or heavy equipment as many of these animals do not run away from construction vehicles/equipment and would most likely be killed. These species could be expected to experience direct mortality, injury, harassment, and displacement from increased human activity and vehicle/equipment travel if they are present onsite within the project footprint at the time of construction. Individual losses are more likely, especially during clearing and grubbing activities. Individuals could also be injured, disturbed, or killed from encounters with workers' or visitors' pets. However, project impacts to common native species are expected to be minor for this urban project.

4.4.2.3 Indirect Impacts

Indirect impacts could occur within areas located adjacent to the limits of construction in the project footprint. Indirect impacts are more subtle than direct ones. Impacts may either be short-term related to construction or long-term and may affect populations and habitat quality over an extended period of time, long after construction activities have been completed. It is hard to predict indirect impacts from project construction. Examples of indirect impacts that could potentially occur from the project include the following.

- The permanent loss of habitats and physical features that could occur from clearing and grading could indirectly impact wildlife species through the loss of foraging, roosting, denning, and/or breeding habitat available. Habitat loss could displace species from existing territories and reduce the home range of those species and impact nearby populations of similar species. Displaced species would then have to compete for and/or find new territories and compete for food with resident species. This could result in delayed nest building, fewer nest attempts, reduced clutch size, and an overall reduction in reproductive output.

- Project construction could result in temporary increased ambient noise levels, dust, vibration, lighting and/or human intrusion in and near habitats. This could disrupt natural foraging, roosting, denning, and/or breeding behavior of wildlife species. Wildlife species stressed by these factors may disperse from habitat in the project site and project vicinity. In addition, increased noise levels could interfere with territorial and mating vocalizations, thereby interfering with wildlife reproduction.

- Project construction could increase fugitive dust, pollution, runoff, siltation, sedimentation, and erosion. This could result in degradation and alteration of habitats, soils, and water

quality of onsite washes. Consequently, the ability of onsite and adjacent plant communities to support wildlife populations may decrease.

- Nighttime construction work and use of artificial lighting could disrupt natural foraging and breeding behaviors and/or alter wildlife movement patterns and migratory routes of nocturnally active species such as mammals and snakes. Most animals would attempt to avoid moving in or near the lighting; however, some animals such as insects, migratory birds, and bats might be attracted to the lighting, increasing construction-related mortalities. Artificial lighting could also indirectly affect wildlife by increasing detection by predators.

- An increase and continuation of human activities within and adjacent to the project site could lead to mortality, injury, or harassment of common and special-status wildlife species by providing food in the form of trash and litter or water which attracts predators such as the common raven (*Corvus corax*), Virginia opossum (*Didelphis virginiana*), and coyote (*Canis latrans*).

Habitat quality could be altered and reduced with the potential of illegal hiking trails in native habitat, introduction of invasive plant species, and compaction of soils. Future conditions could harm special-status wildlife species if noxious weeds become established and displace native vegetation that serve as forage and breeding habitat for the animals. The introduction of noxious weeds could also lead to increased wildfire.

4.4.2.4 Mitigation Measures

Implementing the recommended mitigation measures described in Section 4.2.3 and Section 4.4.1.4 combined with the mitigation measures below will help to avoid, eliminate or reduce direct or indirect effects on the Coastal Whiptail, common and special-status species. These include: **BIO-1**, **BIO-2**, **BIO-3**, **BIO-4**, **BIO-7,** and **BIO-8: Pre-Construction Survey for Coastal Whiptail.**

- **BIO-8: Pre-Construction Survey for Coastal Whiptail**
    - Preconstruction surveys for these species shall be conducted by the project's assigned biological monitor or a qualified biologist immediately prior to initiation of excavation and/or daily work involving earth-moving activities. Survey will be done within 300 feet of where it was observed (disturbed area immediately east of 15250 Desman Road, La Mirada, CA)
    - If the Coastal Whiptail does not leave the project site on its own, it should be coaxed to move out of harm's way, outside of the project area, using an object to "steer" it away from the project site, such as a snake stick or piece of plywood. Relocation out of harm's way of the Coastal Whiptail shall only be conducted by the project's assigned biological monitor or a qualified biologist prior to any site preparation.

4.4.2.5 Cumulative Impacts

Implementing mitigation measures **BIO-1**, **BIO-2**, **BIO-3**, **BIO-4**, **BIO-7,** and **BIO-8: Pre-Construction Survey for Coastal Whiptail** will help to avoid, reduce, or eliminate direct or indirect impacts on Coastal Whiptail; therefore, it is anticipated that the project in combination with past, present, and reasonably foreseeable probable future projects in the environment around the project site would have little to no cumulative impacts on Coastal Whiptails in the region.

4.4.3 Discussion of Western Mastiff Bat

Western Mastiff Bats are found in a variety of habitats, such as semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, (Alhorn, 2000; Cockrum, 1960; Allen, 1987) and urban, but the species' distribution may be geomorphically determined, occurring primarily where there are significant rock features offering suitable roosting habitat. A cliff dwelling species, where maternity colonies of 30 to several hundred roost generally under exfoliating rock slabs and rock crevices along cliffs. Western Mastiff Bats can also be found in similar crevices in large boulders and buildings (Pierson and Rainey, 1996; Pierson, 1998). When roosting in rock crevices they require a sizable drop from their roost in order to achieve flight.

4.4.3.1 Survey Results

Even though the Western Mastiff Bat was not observed during the survey, this species has a moderate potential to occur within the BSA. The BSA is located within this mammal's known distribution and contains suitable habitat (CDFW, 2020e; CDFW, 2020f; Gogol-Prokurat, 2016).

On February 21st, 2020, UltraSystems Biologists heard bats on the underside of Stage Road bridge and the Interstate 5 bridge, while surveying from Coyote Creek Channel. For proper identification of the specific bat species present, a focused survey was conducted using Titley Scientific Anabat Walkabout bat detector, operated by a qualified bat biologists Courtney McCammon and Christian Nordal.

All other bridges within the BSA were also inspected for bat activity and/or potential for maternal colonies. The other bridges were determined to have no or low potential based on the absence of guano, noise and/or crevices (see **Figure 18**, *Potential Bat Maternity Colonies*).

Focused bat surveys

The only bridge containing roosting bats is Stage Road. Bat guano was abundant in areas in the wash where active flow was not occurring. Over 100 bats were observed emerging from this roost at sunset. Two species were recorded over the course of surveys; big brown bat, and Mexican free-tailed bat. Bats from this roost were observed foraging in areas around other bridges, but no bats were observed emerging from other bridges. No bats were recorded at other bridges during the time period where bats had previously been recorded emerging from the occupied roost.

Bats were observed foraging around the following bridges; North Firestone Boulevard, proposed Pedestrian/Cyclist Bridge North of Stage Road, and La Mirada Boulevard.

4.4.3.2 Direct Impacts

Direct impacts to bats are not anticipated as a result of this project because none of the existing bat roosts or surfaces of the underpasses that typically contain substrates that can be utilized as bat habitat will be altered during construction.

4.4.3.3 Indirect Impacts

The same indirect impacts described for Coastal Whiptail may similarly impact the Western Mastiff Bat. These impacts are described in Section 4.4.2.3.

4.4.3.4 Mitigation Measures

Implementing the recommended mitigation measures described in Section 4.2.3 and Section 4.4.1.4 combined with the mitigation measure below will help to avoid, eliminate or reduce direct or indirect effects on roosting bats, the Western Mastiff Bat, common and other special-status wildlife species. These include: **BIO-1**, **BIO-2**, **BIO-3**, **BIO-4**, **BIO-7,** and **BIO-9: Bat Mitigation.**

- **BIO-9 Bat Mitigation**

  BIO-9a: Safety Measure, Standard Operating Procedures

  Safety Measure, Standard Operating Procedures: A safety measure concerning the presence of bats within the Coyote Creek channel should be included in the Standard Operating Procedures by the contractor for the onsite construction crews. The safety measure should include precautions for working within 150 feet of any bridge with bat colonies, for the safety of the crews. The safety measure should disclose potential risk of disease from bat bites/scratches and inhalation of guano; requirements for use of Personal Protective Equipment; and responsibilities and actions of crews if a negative interaction with a bat is reported. Although negative interactions with bats are extremely rare, guidance for the contractor and construction crews is recommended.

  - Every effort should be made to avoid displacement of the special-status bats during the construction phase.

  - If work cannot occur simultaneously with the presence of special-status bats, due to safety hazard for the crew or the bats, the animals may require exclusionary method prior to construction, within 150 feet of bat occupied structures.

  - If an exclusionary method is required, OCPW, or its contractor, will prepare a Bat Exclusion and Monitoring Plan (BEMP), for review and approval by CDFW. The BEP, will detail alternate habitat to be provided if bats are to be excluded from maternity roosts. A roost with comparable spatial and thermal characteristics will be constructed as directed by a project biologist. (see BIO-9c, below)

  BIO-9b: Pre-construction Bat Survey (Stage Road Bridge Only)

  Pre-Construction Bat Survey: Within 30 days before construction, and if work is to be done near Stage Road during bat pupping season, generally from May 1 to August 31 (4 months), a project biologist who is qualified to survey for special-status bats will conduct pre-construction surveys[10] for presence of roosting bat colonies (including the western mastiff bat). If roosting bat colonies or special-status bat species are present, the following should be implemented:

  - Saw cutting, jackhammering, piledriving, or similar activities within 150 feet of structures occupied by maternal bat roosts (colonies) should not occur without prior consultation with CDFW. Maternal roosts are typically present between May 1 and August 31.

10 OCPW may alternatively confer with CDFW for other options.

- Avoid Jackhammering, piledriving, or similar activities within 150 feet of the maternal roost until all young bats have left the roost, or as determined by a project biologist, or through consultation with CDFW.
- If special-status bats are present, but there is not an active maternity roost, a consultation with the CDFW will be entered into to determine the approved best management practices, without directly impacting the bat colony.

Preconstruction Survey Methods. Bat species with potential to occur in the project area employ varied roost strategies, from solitary roosting in foliage of trees to colonial roosting in trees and artificial structures, such as buildings and bridges. Daily and seasonal variations in habitat use are common. To obtain the highest likelihood of detection, preconstruction bat surveys will include these components.

- Identification of potential roosting habitat within project area.
- Daytime search for bats and bat sign in and around identified habitat.
- Evening emergence surveys at potential day-roost sites, using night-vision goggles and/or active full-spectrum acoustic monitoring where species identification is sought.
- Passive full-spectrum acoustic monitoring and analysis to detect bat use of the area from dusk to dawn over multiple nights.
- Additional onsite night surveys as needed following passive acoustic detection of special status bats to determine nature of bat use of the structure in question (e.g., use of structure as night roost between foraging bouts).
- Qualified biologists will have knowledge of the natural history of the species that could occur in the project area and experience using full-spectrum acoustic equipment. During surveys, biologists will avoid unnecessary disturbance of occupied roosts.
- Note that preconstruction surveys are triggered only if the project requires construction activities producing unusually loud activities or activities causing shaking or vibration of the bridge, generally resulting from jackhammering, piledriving, or similar activities (within 150 feet of the bat colony).

BIO-9c: Bat Exclusion and Monitoring Plan (Stage Road Bridge Only)

Bat Exclusion and Monitoring Plan: If roosting bats, including the western mastiff bat, are identified using the bridge structures, the bat biologist will determine if the project is likely to cause the failure of special-status maternal (breeding) colonies. To avoid impacts to maternal bat colonies a BEMP would be prepared for implementation during the construction phase of the project.

- The BEMP would provide project-specific measures for noise attenuation devices, acoustic and visual monitoring during high-vibration and sound activities (such as saw cutting, jackhammering, and pile driving), visual disturbance buffers, and the installation of bat exclusion devices to safely and humanely evict bats outside of the maternity season, in the event they are needed.

- If the BEMP is necessary, consultation with the California Department of Fish and Wildlife would occur to finalize preparation of the BEMP for inclusion in the Streambed Alteration Agreement under Section 1600-1616 of the Fish and Game Code. Each SAA usually contains a section titled Measures to Protect Fish and Wildlife Resources, for which this plan would be incorporated.

- Note that the BEMP is triggered only if the project requires high-vibration and sound activities causing shaking or vibration of the bridge, generally resulting from saw cutting, jackhammering, pile driving, or similar activities (within 150 feet of the bat colony).

4.4.3.5 Cumulative Impacts

Implementing the recommended mitigation measures **BIO-1**, **BIO-2**, **BIO-3**, **BIO-4**, **BIO-7,** and **BIO-9: Bat Mitigation** will help to avoid, reduce or eliminate potential direct and indirect impacts to special-status wildlife; therefore, it is anticipated that the project in combination with other past, present and reasonably foreseeable activities in the environment around the project site would have little to no cumulative effects on roosting bats and Western Mastiff bats in the region.

4.5 Potential Impacts to Waters of the U.S. and State

This Section discloses impacts for regulatory permitting required for work within the jurisdictional waterway, namely Coyote Creek.

4.5.1 Sections 401 and 404 of the Clean Water Act

Temporary impacts to waters of the U.S. are defined as "Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not in the measurement of loss of waters of the United States" (WTI, 2017, p. 337). Project-related impacts to waters of the U.S. (e.g. scaffolding) will be restored to their preconstruction contours and elevations before construction is complete; therefore, all impacts to waters of the U.S. will be temporary impacts.

4.5.2 Section 1602 of the California Fish and Game Code

The absence of riparian vegetation combined with the developed nature of the areas adjacent to channels were the overwhelming factors in making the determination that the top of the channel comprised the lateral extent of the waters of the State (CDFW; refer to **Figures 19a** to **19o,** *Jurisdictional Areas Mapbook*, in **Appendix A**, for locations of delineated waters of the State). Observed Jurisdictional Status

Using the results of the field investigation described in Section 3.1.1.1 of this document, the preliminary determination was made that Coyote Creek North Fork and Coyote Creek are waters of the U.S. and State. Both creeks are jurisdictional to the USACE under § 404 of the CWA; and to the SWRCB under § 401 of the CWA, as well as the California Porter-Cologne Water Quality Control Act, because the water flow from both channels discharge into the San Gabriel River and, ultimately, to the Pacific Ocean, a known water of the U.S.

It can be said with certainty that the project area lacks the 3-parameter USACE wetland per the Manual (1987) as the project area lacked hydrophytic vegetation and hydric soils. The Manual

defines it as "an area should be considered vegetated (and a potential wetland) if there is 5 percent or more areal cover of plants at the peak of the growing season. Unvegetated areas have less than 5 percent plant cover. Patchy vegetation is a mosaic of both vegetated and unvegetated areas. In some cases, the unvegetated portions of a site may be considered as other waters of the United States if they exhibit ordinary high water (OHWM) indicators (33 CFR 328.3)". UltraSystems biologists used the approved OHW indicators such as "water staining, wrack line, and debris" along the margins of the waterway (USACE, 1987). These OHWM indicators were located at an average of 15 feet above the channel bottom along the flood control channel and were used as an estimate to guide the digitization of the OHWM location via GIS mapping software for the desktop delineation.

Coyote Creek North Fork and Coyote Creek are determined to be waters of the State under the jurisdiction of the California Department of Fish and Wildlife under §§ 1602 through 1616 of the California Fish and Game Code in that

1. All streams in the State of California are under CDFW jurisdiction under § 1602 of the Fish and Game Code; and

2. Coyote Creek North Fork and Coyote Creek, within the limits of the BSA, meet the definition of a watercourse as "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic course regime, and where the width of its course can reasonably be identified by physical or biological indicators" as provided by Brady and Vyverberg (2013).

Final jurisdictional status will be provided by the USACE, SWRCB, and CDFW. **Figure 19**, *Jurisdictional Areas Mapbook*, depicts the jurisdictional boundaries of the waters of the U.S. and waters of the State that were delineated within the affected portion of the BSA. Photographs of the project area are located in the Jurisdictional Delineation Report (**Appendix I**).

Should the USACE decline jurisdiction over Coyote Creek and Coyote Creek North Fork, the SWRCB could regulate project-related discharges under Porter-Cologne through the issuance of a Waste Discharge Requirement (WDRs; SWRCB Resolution No. 2019-0015).

4.5.3 Potential Impacts

Potential impacts to areas under the jurisdiction of the USACE (under § 404 CWA), SWRCB (under § 401 CWA and the California Porter-Cologne Water Quality Control Act), and CDFW (under the jurisdiction of § 1602 FGC)were calculated by overlaying the project design, grading, and work areas on the mapped results of the digital delineation. Refer to **Figure 20,** *Impacts to Jurisdictional Areas Mapbook*, for location details of impact areas.

Within the project boundary, construction of Segment O (approximately 5,087 linear feet) would result in temporary impacts of 0.48 acre (see **Table 4.5-1,** *Jurisdictional Areas and Impacts Summary Table*). Within Segment P (approximately 3,540 linear feet), the project would result in approximately 0.05 acre of temporary impact; and within Segment Q (approximately 5,975 feet in length), construction would result in approximately 0.15 acre of temporary impact to waters of the U.S., as shown in **Table 4.5-1**.

Within the project boundary, construction of Segment O would result in approximately 1.21 acres of temporary impacts to waters of the State. Construction of Segment P would result in 0.05 acre of

temporary impacts, and construction of Segment Q would result in 0.22 acre of temporary impacts to waters of the State, as shown in **Table 4.5-1**.

Table 4.5-1
JURISDICTIONAL AREAS AND IMPACTS SUMMARY TABLE

Waters Jurisdictional Designation	Length of Segment (feet)	Temporary Impact (acres)	Permanent Impact (acres)	Total Impacts (acres)
Waters of the U.S.				
Segment O	5,087	0.48	0	0.48
Segment P	3,540	0.05	0	0.05
Segment Q	5,975	0.15	0	0.12
Total	**14,602**	**0.69**	**0**	**0.69**
Waters of the State				
Segment O	5,087	1.21	0	1.20
Segment P	3,540	0.05	0	0.05
Segment Q	5,975	0.22	0	0.17
Total	**14,602**	**1.48**	**0**	**1.48**

As stated in the 2017 Nationwide Permit (NWP) Program (NWP 14 Linear Transportation Projects), "The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands." The project complies with USACE Los Angeles District Regional Conditions for the 2017 Nationwide Permits Program, and to all General Conditions. Due to the lack of permanent impacts (i.e., losses of waters of the U.S.), the project is not required to submit a Preconstruction Notification (PCN) pursuant to General Condition 32; however, in the interest of transparency, it is recommended that the project submit a PCN to the USACE, Los Angeles District.

The project will be required to submit an application for Water Quality Certification (under § 401 CWA, and in compliance with the Porter-Cologne Water Quality Control Act) to the SWRCB. The project will also be required to submit a Lake or Streambed Alteration Notification (under § 1602 FGC) to the South Coast Regional Office of CDFW.

Please note that impacts to the maintenance roads and waterways associated with the Coyote Creek and Flood Control Channel jurisdiction will need to be disclosed during the permitting process for the authorizations required under the Section 14 of the Rivers and Harbors Act of 1899, as amended and codified at 33 USC 408 (Section 408) with USACE and for the encroachment permit with the appropriate flood control district.

4.5.4 Indirect Impacts to Wetlands and Waters

Indirect effects could occur within jurisdictional areas located adjacent to the limits of construction. Examples of reasonably foreseeable indirect, temporary effects include construction-related erosion, runoff, siltation, sedimentation, soil compaction, and alteration of drainage patterns could affect

habitat and natural communities by altering site conditions so that the location in which plants are growing becomes unfavorable. Another example of indirect effects includes the introduction and spread of new invasive, exotic plants by removing established vegetation and creating areas of exposed soil, grading and other construction activities which could result in permanent indirect impacts to downstream riparian vegetation communities.

4.5.5 Cumulative Impacts to Wetlands and Waters

Combined temporary impacts to waters of the U.S. and State will measure 2.17 acre (includes 0.69 acre of Waters of the U.S. and 1.48 acre of Waters of the State); however, areas of temporary impact will be restored to preconstruction contours and elevations when construction is complete. No permanent impacts to waters of the U.S. or waters of the State are anticipated due to construction. A search of the CEQAnet Web Portal (CEQAnet; OPR 2020) resulted in 169 recreational projects filed in Los Angeles County and 50 recreational projects filled in Orange County between May 1, 2015 and May 1, 2020.

Out of the 169 projects in Los Angeles county only five were within the Lower San Gabriel Watershed and contained some type of trail and a jurisdictional waterway nearby; in Orange County only three of the 50 projects that resulted from the inquiry were within the Lower San Gabriel Watershed and contained some type of trail and a jurisdictional waterway nearby. A review of the jurisdictional, hydrology and water quality impacts of these individual projects revealed that all their impacts are less than significant due to implementation of construction stormwater BMPs, post-construction structural BMPs are detailed in project WQMPs, and other mitigation measures,

Therefore, cumulative impacts of the proposed project to the waters of the Lower San Gabriel River Watershed would also be less that significant because the proposed project would minimize or avoid water impacts to receiving wasters through implementation of site-specific stormwater construction BMPs as directed in the required SWPPP, and would also implement any project-specific mitigation required by reviewing agencies (i.e., the SWRCB and the South Coast Region of CDFW).

Compliance with all permit-required conditions, and implementation of standard construction best management practices, will avoid or minimize adverse effects to waters of the U.S. and State. It is anticipated that the project, in combination with other past, present and reasonably foreseeable activities proximate to OC Loop Segments O, P, and Q and within the Brea Creek-Coyote Creek watershed would result in less than significant cumulative impacts to the waters and receiving waters of the Brea Creek-Coyote Creek Watershed.

4.5.6 Mitigation Measures

The project has no permanent impacts to wetlands or other waters of the US and State, or to water quality. With implementation of site-specific stormwater construction BMPs to minimize or avoid construction-related impacts, as detailed in the required SWPPP, potential impacts would be temporary in nature and less than significant. Mitigation is not required.

4.6 Potential Impacts to Wildlife Corridors

The literature review and field surveys determined that the BSAs do not function as wildlife movement corridors. Coyote Creek Channel is a concrete-lined channel devoid of vegetation within the project limits, hence, does not provide habitats to support a large amount of species. No direct or indirect impacts on wildlife corridors are anticipated as a result of construction of the project;

therefore, no avoidance and minimization measures are required and no compensatory mitigation is required. (Please see **Figure** 13, *CDFW Regional Wildlife Corridors*, located in **Appendix A**).

4.6.1 Direct Impacts

No direct impacts will occur on wildlife corridors, as none exist within the BSAs. Therefore, no effects will occur as a result of this project.

4.6.2 Indirect Impacts

No indirect impacts will occur on wildlife corridors, as none exist within the BSAs. Therefore, no effects will occur as a result of this project.

4.6.3 Mitigation Measures

Impacts to regional wildlife corridors are not anticipated, as this project does not occur within a regional wildlife corridor. Therefore, no mitigation is required and mitigation is not proposed.

4.6.4 Cumulative Impacts

No effects on Wildlife Corridors will occur; therefore, no cumulative impacts are anticipated as a result of this project.

4.7 Potential Impacts to USFWS Critical Habitats

The literature review determined that the BSA is not located within designated or proposed critical habitats and the nearest designated critical habitat (coastal California gnatcatcher) is approximately 1.14 miles northeast from intersection of Coyote Creek Channel and La Mirada Boulevard (near the northern end of the project site). (See **Figure 21**, *Critical Habitats*)

4.7.1 Direct Impacts

No direct impacts will occur on USFWS Critical Habitat, as none exist within the BSA. Therefore, no effects on USFWS Critical Habitat will occur.

4.7.2 Indirect Impacts

No indirect impacts will occur on USFWS Critical Habitat, as none exist within the BSA. Therefore, no effects on USFWS Critical Habitat will occur.

4.7.3 Mitigation Measures

No USFWS Critical Habitat exists within the BSA. Therefore, no mitigation is required and mitigation is not proposed.

4.7.4 Cumulative Impacts

No cumulative adverse impacts to USFWS Critical Habitat are anticipated as a result of this project. Therefore, no effect will occur.

4.8 Potential Impacts to Significant Ecological Areas

4.8.1 Direct Impacts

No direct impacts will occur on SEAs, as none exist within the BSA. Therefore, no effects will occur as a result of this project.

4.8.2 Indirect Impacts

No indirect impacts will occur on SEAs, as none exist within the BSA. Therefore, no effects on SEAs will occur as a result of this project.

4.8.3 Mitigation Measures

No SEAs exist within the BSA. Therefore, no mitigation is required and mitigation is not proposed.

4.8.4 Cumulative Impacts

No cumulative adverse impacts to SEAs are anticipated as a result of this project. Therefore, no effect will occur as a result of the project.

5.0 Conclusions and Regulatory Determination

Each project must comply with federal, state, and local environmental laws and regulations. The mix of regulatory permits and approvals required to construct the project depends on several factors, including the final project layout and the proximity of necessary construction to protected resources. Additional requirements may be identified upon further consultation with the resource agencies and as project design and layout become more refined. Consultation with resource agencies has not been initiated yet, except as described within Section 5.2, below. The following sections describe the process to obtain the potential and necessary permits and approvals.

5.1 Federal Endangered Species Act Consultation Summary

The project is located outside of the jurisdiction of the NOAA; therefore, a NOAA Fisheries species list is not required and no effects to NOAA Fisheries are anticipated.

Effects determinations for the federal threatened and endangered species and USFWS Critical Habitats obtained from the USFWS list of species that may occur in the BSA is provided below.

- Pacific pocket mouse Effect Determination: *No effect.*
- California least tern Effect Determination: *No effect.*
- Coastal California gnatcatcher Effect Determination: *No effect.*
- Least Bell's vireo Effect Determination: *No effect.*
- Light-footed clapper rail Effect Determination: *No effect.*
- Southwestern willow flycatcher Effect Determination: *No effect.*
- Western snowy plover: *No effect.*
- Santa Ana sucker Effect Determination: *No effect.*
- San Diego fairy shrimp Effect Determination: *No effect.*
- Nevin's Barberry Effect Determination: *No effect.*
- Salt Marsh Bird's-beak Effect Determination: *No effect*.
- San Diego Button-celery Effect Determination: *No effect.*
- Ventura Marsh Milk-vetch Effect Determination: *No effect.*
- USFWS Coastal California gnatcatcher Critical Habitat Effect Determination: *No effect.*

5.2 Wetlands and Other Waters Coordination Summary

One telephone conversation between Veronica Li (USACE) and Michelle Tollett (UltraSystems) occurred on April 3, 2020, to discuss the preparation of a desktop delineation for the OC Loop project. It was decided that the desktop delineation would be prepared using the ordinary high water mark locations, as observed during the previous field surveys (February 21 and March 6, 2020) and as shown in site photographs, and then digitized using Google Earth imagery, in an effort to avoid field work within the flood control channel, given the forecasted rainstorms, combined with the stay-at-home order, issued by Governor Gavin Newsom on March 19, 2020. During this conversation, Veronica Li also suggested that the project applicant submit the notification "application" for the Dredge and Fill Permit, under Section 404 of the Clean Water Act, and the Permission to Alter a USACE Civil Works Project, under Section 14 of the Rivers and Harbors Act of 1899 [as amended and codified at 33 USC 408 (Section 408)] (pers. comm., 2020)

Coordination has not yet been initiated with the SWRCB, or CDFW with regard to wetlands and other waters of the U.S. and State.

5.2.1 Clean Water Act § 404 Nationwide Permit

Waters of the U.S., including wetlands, are subject to the USACE jurisdiction under § 404 of the CWA. The project would qualify for a §404 Nationwide Permit 14 for Linear Transportation Projects from the USACE. §404 of The CWA requires linear transportation projects that will result in the permanent loss of 0.10 acre or more of waters of the U.S. to submit a PCN to the USACE.

As stated in the 2017 Nationwide Permit (NWP) Program (NWP 14 Linear Transportation Projects), "The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands." The project complies with USACE Los Angeles District Regional Conditions for the 2017 Nationwide Permits Program, and to all General Conditions. Due to the lack of permanent impacts (i.e., losses of waters of the U.S.), the project is not required to submit a PCN pursuant to General Condition 32; however, in the interest of transparency, it is recommended that the project submit a PCN to the USACE, Los Angeles District.

The USACE will review the PCN and determine if the project qualifies for the requested NWP. If the USACE issues an NWP, the permit would specify required BMPs, avoidance and protection measures, and/or compensatory mitigation measures for impacts to jurisdictional waters of the U.S. Compliance with the requirements of the USACE's regulatory program and implementation of mitigation measures required by the NWP would offset the loss of waters of the U.S. and minimize potential project-related adverse effects.

Approximately 0.69 acre of waters of the U.S. will be temporarily impacted by the project. Waters of the U.S. that are temporarily filled, flooded, excavated, or drained, but restored to preconstruction contours and elevations after construction, are not included in the calculation of loss of waters of the U.S. When construction of the bikeway is complete, the project would restore all temporarily impacted areas to their preconstruction contours and elevations.

5.2.2 Clean Water Act § 401 Water Quality Certification

The USEPA has given California's SWRCB and its nine RWQCBs the authority to issue, waive, or deny WQC that a proposed activity maintains compliance with federal water quality standards, pursuant to §401 CWA. For most construction projects, SWRCB and RWQCBs usually use the 401 Program to implement water quality standard and regulations pursuant to the California Porter-Cologne Water Quality Control Act (Porter-Cologne). Pursuant to Porter-Cologne, all waters in the state of California are waters of the State, and waters of the U.S. are a subset of these.

Section 401 of the CWA requires every applicant for a federal license, federal permit to conduct any activity which may result in any discharge of dredge or fill material into waters of the U.S., or whose activity has potential may result in any discharge of dredge or fill material, or other pollutants into waters of the State provide a certification that any project-related discharges will comply with the CWA, state water quality laws (e.g., Porter-Cologne), and other appropriate state regulations (e.g., California Water Code), including water quality standard requirements.

The project will be required to submit an application for Water Quality Certification (under § 401 CWA, and in compliance with the Porter-Cologne Water Quality Control Act) to the SWRCB. No permanent impacts to waters of the U.S. and State would result from construction of the project. Approximately 0.69 acre of Waters of the U.S. and 1.48 acres of Water of the State will be temporarily

impacted by the project (refer to **Figure 19a-m**, *Jurisdictional Areas Mapbook,* and **Figure 20a-m**, *Impacts to Jurisdictional Areas Mapbook*, in **Appendix A**).

5.2.3 § 1602 Lake or Streambed Alteration Agreement

The project will not permanently impact Waters of the State but will temporarily impact 1.48 acres (refer to **Figure 19a-m**, *Jurisdictional Areas Mapbook*, and **Figure 20a-m**, *Impacts to Jurisdictional Areas Mapbook* in **Appendix A**). The project would be required to submit a notification package to the Lake or Streambed Alteration Division at CDFW pursuant to §§ 1600-1616 FGC. CDFW regulates waters of the State through its Lake and Streambed Alteration Program. § 1602 requires an entity to notify CDFW prior to any activity that may "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" or that may that derives benefit from the river, stream, or lake.

Prior to the issuance of grading or building permits for the project, and prior to any impacts to the drainages, OCPW will obtain a Lake or Streambed Alteration Agreement (Agreement) from CDFW pursuant to §§ 1600-1616 FGC, authorizing specific impacts to waters of the State under their jurisdiction. The Agreement will mandate BMPs, avoidance and protection measures, and compensatory mitigation measures for impacts to waters of the State regulated by § 1602. Authorized impacts and mitigation related the project will be defined by the conditions of the Agreement between OCPW and the CDFW. All measures to protect fish and wildlife resources required by the Agreement will be incorporated into the project design as appropriate. Compliance with the requirements of the Agreement and implementation of mitigation measures required by the permit would offset the loss of waters of the State and minimize or avoid potential project-related impacts.

5.3 Invasive Species

Non-native, invasive plant species observed in the BSA during the field survey include Russian thistle, and Mexican fan palm.

Non-native wildlife species observed during the survey include house sparrow and rock pigeons.

As described in **MM BIO-4: General Vegetation Avoidance and Protection Measures**, invasive species within temporary disturbance areas would be controlled to the maximum extent feasible using hand pulling or hand tool removal methods only. Limiting control methods to hand pulling or hand tools would further protect the surrounding habitat. To minimize the transfer of exotic weed seed, vehicles and all equipment would be washed before first use at the project site. This includes wheels, undercarriages, bumpers and all parts of the vehicle. In addition, all tools such as chain saws, hand clippers, pruners, etc., would also be washed. All washing would take place where rinse water is collected and disposed of in either a sanitary sewer or a landfill.

There is no feasible method for the project to control non-native birds such as the house finch, and the project does not propose any measures to prevent the spread of this already wide-spread species.

5.4 Migratory Bird Treaty Act

Protected MBTA Species observed in the BSA include the mallard, red-tailed hawk, least sandpiper, killdeer, American crow, common raven, American kestrel, mourning dove, house finch, northern mockingbird, and the black phoebe.

As described in **MM BIO-6: Nesting Bird Surveys**, to be in compliance with the MBTA and the California Fish and Game Code, and to avoid and reduce direct and indirect impacts to migratory non-game nesting birds, and their nests, young, and eggs, the following measures should be implemented:

- Project activities that will remove or disturb potential nest sites should be scheduled outside the nesting bird season, if feasible. The nesting bird nesting season is typically from February 15 through September 15, but can vary slightly from year to year, or bird species, usually depending on weather conditions. Raptors are known to begin nesting early in the year. The raptor nesting bird season begins January 31.
- If project activities that will remove or disturb potential nest sites cannot be avoided during January 31 through September 15, a qualified biologist will conduct a pre-construction survey for nesting birds within the limits of project disturbance up to seven days prior to mobilization, staging and other disturbances. It will end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance.
- If no breeding bird activity or active nests are observed during the pre-construction survey(s), or if they are observed and will not be affected, then project activities may begin and no further nesting bird monitoring will be required.
- If an active bird nest is located during the pre-construction survey and potentially will be affected, a no-activity buffer zone will be delineated on maps and marked by fencing, stakes, flagging, or other means up to 500 feet for special-status avian species and raptors, or 100 feet for non-special status avian species. Materials used to demarcate the nests will be removed as soon as work is complete or the fledglings have left the nest. The biologist will determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species because some bird species are more tolerant than others to noise and other disturbances. Buffer zones will not be disturbed until a qualified biologist determines that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be affected by project activities. Periodic monitoring by a biologist will be performed to determine when nesting is complete. After the nesting cycle, project activities may begin within the buffer zone.

If special-status bird species, such as the least Bell's vireo, are observed within the project site during the pre-construction surveys, then a qualified biologist will delineate individual species' nesting territories, and notify the appropriate resource agency to: (1) determine if additional or focused protocol surveys are necessary, and (2) select suitable mitigation measures. Project activities may begin within the area after concurrence is received from the appropriate resource agency.

It is anticipated that implementation of this mitigation measure would avoid impacts to breeding and nesting birds and there would be no project-related impacts to migratory bird species.

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