DRAFT

Initial Study and Mitigated Negative Declaration
Wildomar Master Drainage Plan (MDP)

Lateral C Revision Project

March 2021

Lead Agency:



Riverside County Flood Control and Water Conservation District

1995 Market Street
Riverside, CA 92501

Prepared by:



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	DRAFT MITIGATED NEGATIVE DECLARATION
WILDOMAR MDP LATERAL C REVISION PROJECT	WILDOMAR MDP LATERAL C REVISION PROJECT

Lead Agency:	Riverside County Flood Control and Water Conservation District
Project Proponent:	Riverside County Flood Control and Water Conservation District
Project Location:	The project site is located within the City of Wildomar in southwest Riverside County. The proposed Bundy Canyon Basin is located on the southeast corner of Bundy Canyon Road and Monte Vista Drive. The proposed storm drains (Laterals C, C-2, and C-3) are located mostly within existing paved and unpaved street right-of-way. More specifically, Lateral C would begin just southwest of the I-15 freeway and continues south along the White Street right-of-way until it approaches Central Street. At Central Street, the storm drain continues southwest to Como Street where it continues along Como Street for approximately 1,200 feet. Lateral C-2 begins at the White Street and Baxter Road interchange and continues east within the Baxter Road right-of-way for approximately 1,180 feet. Lateral C-3 begins at the White Street and Grove Street intersection and continues east within the Grove Street right-of-way for approximately 720 feet.

Project Description:

The Riverside County Flood Control and Water Conservation District (District), in partnership with the City of Wildomar (City), is proposing to update the Wildomar MDP Lateral C facility. Lateral C, Stage 1, from Wildomar Channel to Palomar Street, was constructed in 1987, and Stage 2, from Palomar Street to Pasadena Street, was constructed in 1992. The remaining components of the proposed Lateral C system have not been constructed; however, the remaining portions of the alignment were originally proposed to be aligned with Bundy Canyon Wash. The purpose of the original alignment was to capture storm runoff at the downstream end of the existing Caltrans double 10-ft. by 6-ft. reinforced concrete box (RCB) culvert under the I-15, approximately half a mile south of Bundy Canyon Road, and convey it to Wildomar Channel, just northeasterly of McVicar Street.

Phase 1 of the Wildomar MDP Lateral C Revision Project (Project) would be constructed by the District and includes the development of Bundy Canyon Basin at the southeast corner of Bundy Canyon Road and Monte Vista Drive, including the extension of Lateral A at the southeast corner of the proposed Bundy Canyon Basin. Phase 2 includes updates to the original Lateral C alignment and would be constructed by the City of Wildomar. The updated alignment of Lateral C (mainline) would begin and end at the same locations. However, instead of a concrete lined trapezoidal channel aligned within Bundy Canyon Wash, the District is proposing a RCB to be constructed mostly within existing street right-of-way. In addition to the revision of Lateral C, as a part of Phase 2 the District is also proposing Lateral C-2, and Lateral C-3 as part of the Wildomar MDP Lateral C system revisions.

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Public Review Period: March 26, 2021 to April 26, 2021

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Air Quality

AQ-1: Construction Equipment Requirements. In order to minimize air quality impacts to the maximum extent practicable, all diesel-fueled construction equipment, including but not limited to rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors, shall be CARB Tier 3 Certified or better as set forth in Section 2423 of Title 13 of the CCR, and Part 89 of Title 40 of the Code of Federal Regulations.

Biological Resources

- BIO-1: Preconstruction Surveys/Biological Monitoring for Nesting Birds. If ground disturbing activities with the potential to disrupt nesting birds are scheduled to occur during the nesting bird season (approximately December 15 September 15), a pre-construction nesting bird survey shall be conducted by a qualified biologist no more than three days prior to commencement of construction activities. The nesting bird survey shall include the project site and a 500-foot buffer around the disturbance area. If nesting birds (including nesting raptors) are present, the qualified biologist shall determine an appropriate construction monitoring protocol and establish an appropriate avoidance buffer until nesting has been completed or the nest has been deemed inactive by a qualified biologist. If no nesting birds are observed during the survey, site preparation and construction activities may begin.
- **BIO-2: Preconstruction Burrowing Owl Survey.** For Phase 2 projects, a pre-construction survey for burrowing owls shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the Western Riverside MSHCP burrowing owl survey guidelines (County of Riverside 2006). If burrowing owls are observed during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP.

This mitigation measure does not apply to the Phase 1 project area.

Cultural Resources

- **CUL-1: Accidental Discovery of Cultural Resources.** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find. The archaeologist shall have the authority to modify the nowork radius as appropriate, using professional judgment.
 - o If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.

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- o If the professional archaeologist determines that the find represents a cultural resource from any time period or cultural affiliation, the handling of the cultural resource(s) shall follow the applicable recommendations as described in the Cultural Resources Management Plan (CRMP) prepared for the Project, as required by TCR-1.
- **CUL-2: Accidental Discovery of Human Remains.** If human remains or remains that are potentially human are found, the District or City shall retain a qualified professional archaeologist to ensure reasonable protection measures are taken to protect the discovery from disturbance. The archaeologist shall notify the Riverside County Coroner per § 7050.5 of the Health and Safety Code. Handling of the discovery shall follow the provisions set forth by § 7050.5 of the California Health and Safety Code and § 5097.98 of the California Public Resources Code.

Geology and Soils

GEO-1: Paleontological Resources Impact Mitigation Plan. Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Plan (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction requirements for all work consisting of excavations at depths greater than 8 feet below the original ground surface within areas that have a Potential Fossil Yield Classification (PFYC) ranking of moderate or greater.

Tribal Cultural Resources

TCR-1: Tribal/Cultural Resources Management Plan. The District shall prepare or cause for the preparation of a Tribal/Cultural Resources Management Plan (CRMP) prior to ground disturbing activities. The CRMP shall be based on the final construction grading plans prepared by the District and may include requirements for pre-construction cultural sensitivity training, notification, and monitoring protocol. The CRMP will consider the concerns of the consulting Tribes and the consulting Tribes will have an opportunity to review and comment on the draft CRMP.

In the event that the consulting Tribes are not able to reasonably accommodate the District's requests and/or needs regarding monitoring, the District may proceed with Mitigation Measure TCR-2 as needed:

TCR-2: Archeological Monitoring. The District may, at its discretion, conduct archeological monitoring and/or reconnaissance of the project site using a qualified archeologist that is not a Tribal monitor or representative of a Native American Tribe. This would occur only as needed during ground-disturbing construction activities.

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ACRONYMS AND ABBREVIATIONS

AB Assembly Bill

AQMP Air Quality Management Plan
BMPs Best Management Practices

CalEEMod California Emissions Estimator Model
Caltrans California Department of Transportation

CARB California Air Resources Board

CDC California Department of Conservation
CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act
CESA California Endangered Species Act

CH₄ Methane

CMP Congestion Management Plan

CNDDB California Natural Diversity Database

CNPS California Native Plant Society

CNPSEI California Native Plant Society Electronic Inventory

CO Carbon Monoxide CO₂ Carbon Dioxide

CO₂e Carbon Dioxide Equivalent

CO Plan Federal Attainment Plan for Carbon Monoxide

CRHR California Register of Historic Resources

CWA Clean Water Act

DBESP Determination of Biologically Equivalent or Superior Preservation

DPM Diesel Particulate Matter

DTSC Department of Toxic Substances Control

EIC Eastern Information Center
EIR Environmental Impact Report
EPA Environmental Protection Agency

EVMWD Elsinore Valley Municipal Water District FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

GHGs Greenhouse Gases

LEUSD Lake Elsinore Unified School District
LUST Leaking Underground Storage Tank

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MBTA Migratory Bird Treaty Act
MDP Master Drainage Plan
MLD Most Likely Descendent

MND Mitigated Negative Declaration

MSHCP Multiple Species Habitat Conservation Plan
NAHC Native American Heritage Commission

ND Negative Declaration

NEPSSA Narrow Endemic Plant Species Survey Area

NO_X Nitrogen Oxide

NPDES National Pollutant Discharge Elimination System

N₂O Nitrous Oxide

NRCS Natural Resources Conservation Service
NRHP National Register of Historic Places

OEHHA Office of Environmental Health Hazard Assessment

OPR Governor's Office of Planning and Research

PM Particulate Matter

PFYC Potential Fossil Yield Classification

RCB Reinforced Concrete Box

RCHCA Riverside County Habitat Conservation Agency

RCIP Riverside County Integrated Project

ROG Reactive Organic Gases
RTP Regional Transportation Plan

RWQCB Regional Water Quality Control Board
USACE United States Army Corps of Engineers
USFWS United Stated Fish and Wildlife Service

SCAG Southern California Association of Governments
SCAQMD South Coast Air Quality Management District

SCS Sustainable Communities Strategy

SIP State Implementation Plan

SO₂ Sulfur Dioxide

SoCAB Southern California Air Resources Board

SRA Source Receptor Area
SSC Species of Special Concern

SWPPP Stormwater Pollution Prevention Plan SWRCB State Water Resources Control Board

TAC Toxic Air Contaminant

WEAP Worker Environmental Awareness Program

SECTION 1.0 BACKGROUND

1.1 Summary

Project Title:	Wildomar Master Drainage Plan Lateral C Revision Project	
Lead Agency Name and Address:	Riverside Flood Control and Water Cons 1995 Market Street Riverside, CA 92501	ervation District
Contact Person and Phone Number:	Senior Flood Control Planner	Jerry Aguirre Associate Flood Control Planner (951) 955-1245
Project Location:	The project site is located within the Riverside County (Figure 1). The project a corner of Bundy Canyon Road and Mc Bundy Canyon Basin site, with Lateral C (of-way of White Street, Central Street, a facilities, Lateral C-2 and C-3 would be Baxter Road (Figure 2).	alignment begins at the southeast onte Vista Drive at the proposed mainline) located along the rightand Como Street. Two additional
General Plan Designation:	The Bundy Canyon Basin portion of the Project is designated as Medium High Density Residential. The remaining portions of the project site are located along street right-of-way, surrounded by areas designated as Medium Density Residential, Medium High Density Residential, Very High Density Residential, Business Park, Commercial Retail, Mixed-Use Planning Area, Light Industrial and Public Facilities.	
Zoning:	Residential, Watercourse, Open Are Development, Right-of-Way	a Combining Zone-Residential

1.2 Introduction

The Riverside County Flood Control and Water Conservation District (District) is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Wildomar MDP Lateral C Revision Project (Project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

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1.3 Surrounding Land Uses/Environmental Setting

The project site is located northeast and southwest of Interstate 15 (I-15) within APNs 367-110-007, 367-110-008, 367-433-015, 367-472-001, 367-472-002, 367-472-020, and along street right-of-way from Bundy Canyon Road to just south of Como Street in the City of Wildomar. The project vicinity is mostly characterized by Medium High Density Residential, Right-of-Way, and Public Facility land uses. Phase I of the Project (Bundy Canyon Basin) is designated as Medium High Density Residential. The remaining portions of the project site (Phase 2) are located along street right-of-way, surrounded by areas designated as Medium Density Residential, Medium High Density Residential, Very High Density Residential, Business Park, Commercial Retail, Mixed-Use Planning Area, Light Industrial, and Public Facilities.



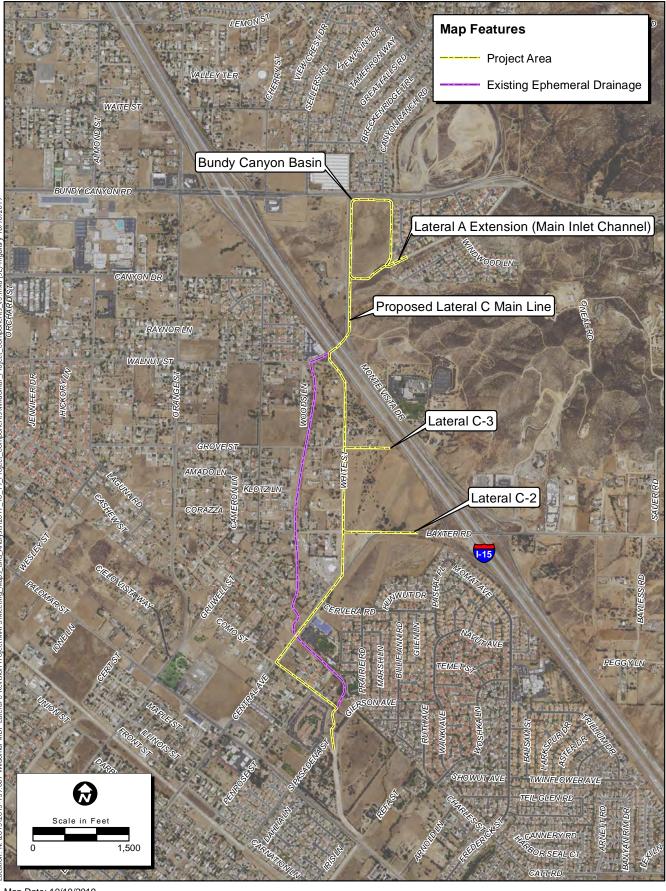
Map Date: 10/3/2017 Service Layer Credits: Sources: Esri, USGS, NOAA



Figure 1. Project Vicinity



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Map Date: 10/10/2019 Photo Source: ESRI





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SECTION 2.0 PROJECT DESCRIPTION

2.1 Project Purpose and Need

The Wildomar Master Drainage Plan (MDP) was adopted in August 1980 with the purpose of identifying drainage system needs to alleviate current and anticipated drainage problems within the City of Wildomar. The MDP included Lateral C as a concrete-lined trapezoidal channel from its confluence with Wildomar Channel to its upstream terminus at I-15. However, since the MDP was updated, the City of Wildomar has experienced significantly more development than what the MDP was previously designed for and as a result, the Lateral C facility as originally proposed in the MDP is no longer sufficient to support existing and future drainage needs for the area.

2.2 Project Description

The Riverside County Flood Control and Water Conservation District (District), in partnership with the City of Wildomar (City), is proposing to revise the originally proposed Wildomar MDP Lateral C facility. Lateral C, Stage 1, from Wildomar Channel to Palomar Street, was constructed in 1987, and Stage 2, from Palomar Street to Pasadena Street, was constructed in 1992. The remaining components of the Lateral C system have not been constructed; however, the remaining portions of the alignment were originally proposed to be aligned with Bundy Canyon Wash. The purpose of the original alignment was to capture storm runoff at the downstream end of the existing Caltrans double 10-ft. by 6-ft. reinforced concrete box (RCB) culvert under the I-15, approximately half a mile south of Bundy Canyon Road, and convey it to Wildomar Channel, just northeasterly of McVicar Street.

Phase 1 of the Project would include the development of Bundy Canyon Basin at the southeast corner of Bundy Canyon Road and Monte Vista Drive, including the extension of Lateral A. Phase 2 includes revisions to Lateral C. The revised alignment of Lateral C (mainline) would begin and end at the same locations. However, instead of a concrete lined trapezoidal channel aligned with the existing ephemeral drainage along Bundy Canyon Wash, a RCB would be constructed mostly within existing street right-of-way. Lateral C has been revised to allow for current low flows to maintain the existing conditions found within Bundy Canyon Wash. Both the existing ephemeral drainage and the proposed revision to the Lateral C alignment are shown in Figure 2. In addition to the revision of Lateral C, as a part of Phase 2 the District is also proposing Lateral C-2 and Lateral C-3 as part of the revised Wildomar MDP Lateral C system.

2.3 Project Design

The original design for the Wildomar MDP Lateral C system only included open channel facilities, whereas the revised system has been designed to include five components in order to address the current and reasonably foreseen future drainage needs of the community. The project components include the following:

Bundy Canyon Basin

The proposed basin is located at the southeast corner of Bundy Canyon Road and Monte Vista Drive, just upstream of the I-15. The basin has a right-of-way footprint of approximately 16.6 acres and a storage volume of 143 acre-ft. The basin inlet would be located at the southwestern, terminal end of an existing open, concrete lined channel (Wildomar Bundy Canyon Channel Lateral A) and situated between Valley Vista Circle and Sunnybrook Drive. The water flow from this channel would enter the proposed basin then outlet at the southwestern end of the basin. The basin outlet is proposed as a double 6-ft. wide by 5-ft. high RCB and connects to a proposed 14-ft wide by 8-ft. high RCB that connects to the existing double 10-ft. wide by 6-ft. high RCB culvert at I-15. The basin outlet would replace the existing concrete lined channel that is located south of the basin site and runs parallel to Monte Vista Drive. If design capacity permits, Bundy Canyon Basin would include a low flow design feature allowing for dry weather flow to concentrate within the southern portion of the basin.

Bundy Canyon Channel Lateral A Extension (Main Inlet Channel)
The existing trapezoidal channel adjacent to Tract 23281 would be extended to meet the proposed basin bottom. This will be accomplished by constructing a Transition Structure, USBR Type III Stilling basin, and a 14-ft. wide by 10-ft. high double RCB.

■ Lateral C (Mainline Facility)

The proposed underground storm drains downstream of the I-15 range in size from a double 10-ft. wide by 6-ft. high RCB to a single 14-ft. wide by 8-ft. high RCB. From downstream of the I-15, the storm drain would be located along White Street, southwesterly along Central Avenue, and southeasterly along Como Street to Bundy Canyon Wash. The most southern end of the Lateral C facility also includes a segment of open channel, approximately 680 linear feet of 24-ft. wide earthen bottom trapezoidal channel with rock-lined side slopes (2:1), and a depth ranging from 9 feet to 10.65 feet.

■ Lateral C-2

This facility is proposed as an approximately 1,180 linear feet 60-inch reinforced concrete pipe (RCP) along unimproved Baxter Road as shown on Figure 2.

■ Lateral C-3

This facility is proposed as an approximately 720 linear feet 60-inch RCP along unimproved Grove Street as shown on Figure 2.

2.4 Project Location

The project site is located within the City of Wildomar in southwest Riverside County. The proposed Bundy Canyon Basin is located on two vacant parcels totaling approximately 16.6 acres and situated on the southeast corner of Bundy Canyon Road and Monte Vista Drive. The Bundy Canyon Basin outlet structure begins at the southwest corner of the basin site and runs parallel to Monte Vista Drive for approximately 1,050 feet before ending at the existing Caltrans culvert under the I-15 freeway. The proposed storm drains are located mostly within existing paved and unpaved street right-of-way. More specifically, the Line C realignment begins just southwest of the I-15 freeway and continues south along the White Street right-of-

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way until it approaches Central Street. At Central Street, the proposed storm drain would continue southwest to Como Street where it continues along Como Street for approximately 1,200 feet. Line C-2 would begin at the White Street and Baxter Road interchange and continue east within the Baxter Road right-of-way for approximately 1,180 feet. Line C-3 would begin at the White Street and Grove Street intersection and continue within the Grove Street right-of-way for approximately 720 feet. The Project is located within Township 6 South, Range 4 West, Sections 26 and 35 West on the Wildomar 7.5 Series Topographic Quadrangle map.

Much of the project study area is characterized as developed and undeveloped-disturbed land. The surrounding area consists of rural-suburban development with sparse commercial development, mostly concentrated around the I-15 corridor. More specifically, development within this portion of the project area includes medium density single-family residences, a high school, and varied commercial businesses (e.g., a convenience store and restaurant). Bundy Canyon Wash is located adjacent and meanders approximately parallel to the proposed lateral C alignment. Roadways within the study area include Como Street, Baxter Road, Grove Street, and White Street.

Runoff drains from the hills east of the project site to the District's existing Bundy Canyon Channel Lateral A, just west of the intersection of Oak Canyon Drive and Bundy Canyon Road. From the downstream terminus of Lateral A, runoff drains along the natural watercourse southwesterly toward Monte Vista Street until it is intercepted by a concrete-lined trapezoidal channel owned by the City of Wildomar, which drains to the double 10-ft. wide by 6-ft. high RCB culvert under I-15. Downstream of the I-15 culvert, runoff is conveyed southerly through the Bundy Canyon Wash to Central Street. Along this reach the only improvements along the wash are two sets of corrugated metal pipe (CMP) culverts located at Walnut Street and at Grove Street, respectively. Due to the limited capacity of these culverts, runoff overtops the road at these locations during large storm events. Once runoff reaches Central Street, it drains through the existing 12-ft. wide by 6-ft. high RCB culvert under the road and continues southeasterly in the Bundy Canyon Wash until draining into the existing Wildomar Lateral C, Stage 2 facilities at Pasadena Street. During large storm events, runoff overtops the road and drains south along Central Street toward Wildomar Channel.

2.5 Project Timing

The revised Lateral C system would be constructed in two phases. It is expected that the Bundy Canyon Basin, Bundy Canyon Channel Lateral A Extension, and outlet structure would be constructed as part of Phase 1 and the Lateral C mainline, Lateral C-2, and Lateral C-3 (collectively part of Phase 2) would be constructed as need and funding permits. Staging areas for the Project would be located within the Bundy Canyon Basin project site.

Phase 1 would require excavation of approximately 520,000 cubic yards of material that would be disposed of offsite. Construction of the Basin is expected to begin in Fall/Winter 2021 and last approximately 180 days. Construction equipment would likely consist of excavators, tracked scrapers, bulldozers and dump trucks to haul earthwork. The construction equipment mix is shown in Table 2-1.

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Table 2-1
Phase 1 Construction Equipment

Construction Phase	Equipment	Quantity
Utility relocation	Tractors/loaders/backhoes	3
Project construction	Water Truck	2
	Excavators	2
	Scrapers	3
	Bulldozers	2
	Dump Trucks	8

Phase 2 construction would include utility trenching, project construction and paving. Approximately 50,000 cubic yards of material would be excavated of which 30,000 cubic yards would be reused on site and the remaining material would be disposed of offsite. Construction of laterals is expected to take eight months to complete. The construction equipment mix for Phase 2 is shown below in Table 2-2.

Table 2-2
Phase 2 Construction Equipment

Construction Phase	Equipment	Quantity
Utility relocation	Tractors/loaders/backhoes	1
Project construction	Excavators	2
	Rubber tired loaders	1
	Signal boards	2
	Tractors/loaders/backhoes	1
	Dump Trucks	5
Paving	Pavers	1
	Rollers	1
	Signal Boards	2
	Tractors/loaders/backhoes	1

Construction of both phases would occur 5 days a week [20 days per month] and is estimated to require approximately 20 people to be on site each day depending on the nature of construction occurring at any one time. Although construction activities for capital improvement projects of a governmental agency are exempt from the City's Noise Regulations (Chapter 9.48 of the Wildomar Municipal Code), the District's Standard Operating Procedures limits construction to the hours of 7:00 AM and 5:00 PM; therefore, construction would still be in compliance with the most stringent noise limitations outlined in the City's Municipal Code for private construction projects.

Utility Line Relocation

Construction would require multiple utility line relocations with no service interruption anticipated. The utility line relocations would be completed prior to and/or during project construction. The following utilities would likely require relocation:

- Power pole within the proposed Bundy Canyon Basin
- Sewer line within the proposed Bundy Canyon Basin and along Summer Sage Way

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- So Cal Gas line within Valley Vista Circle
- So Cal Edison electrical line within Summer Sage Way
- Charter Fiber Optic line along Summer Sage Way
- Elsinore Valley Municipal Water District (EVMWD) water line along Summer Sage Way

This analysis assumes that some of the affected utility lines would be relocated concurrent with the construction of the project, while others would be relocated by the respective utility providers prior to commencing project construction.

Once Phase 1 is complete (Bundy Canyon Basin), the District would typically conduct maintenance on an annual basis. Maintenance for basins typically includes mowing to limit vegetation growth, tracking of the side slopes to maintain its integrity, and as needed accumulated sediment removal to maintain as-built capacity.

Phase 2 maintenance activities would also be conducted on an annual basis. Catch basins, connector pipes and pipes less than 36 inches in diameter would be maintained by the City, while the mainline and laterals that are larger than 36 inches in diameter would be maintained by the District. Maintenance would be conducted to address any structural or clogging issues.

2.6 Regulatory Requirements, Permits, and Approvals

The following approvals and regulatory permits are likely to be required for implementation of the Project:

- U.S. Army Corps of Engineers Section 404 Permit
- Regional Water Quality Control Board 401 Certification
- California Department of Fish and Wildlife Section 1602 FGC- Lake and Streambed Alteration
 Agreement
- State Water Resources Control Board General Permit Order 2009-0009-DWQ, Storm Water
 Pollution Prevention Plan, and Best Management Practices

2.7 Consultation With California Native American Tribe(s)

The following California Native American tribes traditionally and culturally affiliated with the project area have been notified of the Project: Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians, and Soboba Band of Luiseño Indians. The Pechanga Band of Luiseño Indians and Soboba Band of Luiseño Indians have requested consultation pursuant to Public Resources Code section 21080.3.1. A summary of the consultation process, including the determination of significance of impacts to tribal cultural resources, is provided in Section 4.18 of this Initial Study.

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SECTION 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors Potentially Affected

Environmental Factors and Determination

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Aesthetics Hazards/Hazardous Materials | Recreation Agriculture and Forestry Resources ☐ Hydrology/Water Quality Transportation Air Quality Land Use and Planning Tribal Cultural Resources Utilities and Service Systems Biological Resources Mineral Resources Cultural Resources Noise Wildfire Energy Mandatory Findings of Paleontological Resources Significance Geology and Soils Population and Housing Greenhouse Gas Emissions **Public Services Determination** On the basis of this initial evaluation: I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. I find that although the Project could have a significant effect on the environment, there will not be a \boxtimes significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" П impact on the environment but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Project, nothing further is required. Kevin Cunningham Date Senior Flood Control Planner

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SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

Regional Setting

The City of Wildomar (City) is located between the cities of Murrieta and Lake Elsinore in the southwest portion of Riverside County, approximately two miles southeast of the Elsinore Mountains, five miles south of Lake Elsinore, and six miles northeast of Black Mountain. This area is generally characterized as a community of old and new homes with equestrian uses and other animal uses intermixed with modern housing tracts.

State Scenic Highways

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. Interstate 15 (I-15) bisects the City and is located west and southwest of the project site. This highway is designated as an Eligible State Scenic Highway - Not Officially Designated by the California Department of Transportation (Caltrans 2019).

Visual Character of the Project Site

The project site (comprising of the proposed revisions to the Lateral C alignment, Lateral C-2, Lateral C-3, Lateral A extension, and the proposed Bundy Canyon Basin) and surrounding vicinity are dominated by development, disturbances, and previous agricultural use. Some areas containing native vegetation are found within and adjacent to the project site. Several paved and dirt roads run throughout the project site. Two drainage channels (one unlined channel in the southern portion of the project site west of Central Avenue, and one concrete-lined channel along Monte Vista Drive southwest of the proposed Bundy Canyon Basin) and three riparian areas (north of Baxter Road, adjacent to Monte Vista Drive along the western boundary of the proposed Bundy Canyon Basin, and a corridor along the southern boundary of the proposed Bundy Canyon Basin located within a drainage) are found throughout the project site.

4.1.2 Aesthetics (I) Environmental Checklist and Discussion

Except as provided in Public Resource 21099, would the Project:	ces Code Section	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) have a substantial adverse effect vista?	on a scenic				

The project site is located in the southwest section of Riverside County, within the City of Wildomar. Scenic Vistas in the project area would include views of the surrounding mountain ridgelines. However, these views

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are partially obstructed by the existing natural topography and development in the project vicinity. The Project consists of revisions to the Wildomar MDP Lateral C system. Construction impacts would be temporary. Developed areas disturbed by the Project would be restored to pre-construction conditions. Due to the nature and placement of the proposed improvements within developed, undeveloped disturbed areas, and right-of-way (ROW), the Project would not have an adverse effect on a scenic vista; no impact would occur.

	ept as provided in Public Resources Code Section 99, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				

The project alignment is located west and southwest of I-15 mostly within Bundy Canyon Basin and street right-of-way. I-15 is a designated Eligible State Scenic Highway – Not Officially Designated by Caltrans (Caltrans 2019). The Project would update the MDP Lateral C alignment mostly within a developed area in the City of Wildomar and would not impact scenic resources within a state scenic highway. No impact would occur.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				

Please see the response to question 4.1.2 a) above. Construction related activities such as excavating, stockpiling materials, and equipment storage could result in temporary impacts to the visual character of the site. However, visual disturbances to the project site would be short-term and would cease once construction is completed. The developed portions of the project site would be restored to pre-construction conditions after the completion of construction, including areas within street ROW. Therefore, the long-term visual character of the site and surrounding areas would not be degraded as a result of the Project. A less than significant impact would occur.

	ept as provided in Public Resources Code Section 99, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				

Phase 1 and Phase 2 of the Project consist of improvements to Bundy Canyon Basin, extension of Lateral A, the construction of a RCB culvert within street right-of- way along White Street, Central Street, and Como Street, construction of Lateral C-2 (a proposed RCP along Baxter Road), and construction of Lateral C-3 (a proposed RCP along unimproved Grove Street). Due to the nature of the Project as drainage infrastructure mainly located within street ROW and the timing of construction and maintenance activities during daylight hours (7:00 AM to 5:00 PM) per the District's standard operating procedures; construction, operation, and maintenance of the Project would not produce any new sources of light or glare. No impact would occur.

4.1.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

The Bundy Canyon Basin (Phase 1) portion of the Project is designated as Medium High Density Residential. The remaining portions (Phase 2) of the project site are located along street right-of-way, surrounded by areas designated as Medium Density Residential, Medium High Density Residential, Very High Density Residential, Business Park, Commercial Retail, Mixed-Use Planning Area, Light Industrial and Public Facilities (City of Wildomar 2018b). The project site is not located on Prime Farmland nor is it under a Williamson Act Contract (CDC 2016; 2017). There are no local policies for agricultural resources that apply to the project site.

4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Wou	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?				

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According to the California Department of Conservation Important Farmland Map for Riverside County, Phase 1 and Phase 2 project facilities would be located on and adjacent to land classified as Farmland of Local Importance, Urban and Built-up Land, and Other Land. Project facilities would be mostly located below grade, along street right-of-way, and would not be located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDC 2017). No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				

Phase 1 and 2 project areas (project site) are not located within areas zoned for agricultural use (City of Wildomar 2018a). According to the California Department of Conservation Williamson Act Parcels Map for Riverside County, the project site is located on land designated as Non-Enrolled Land and Urban and Build-Up Land, and not subject to a Williamson Act contract (CDC 2016). Therefore, the Project would not result in a conflict with existing zoning for agricultural uses or a Williamson Act Contract. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				

According to the City of Wildomar Zoning Map, the project site is not located in an area zoned for forest land or timberland production (City of Wildomar 2018a). Therefore, the Project would not conflict with existing zoning, or cause for rezoning of, forest land, timberland, or timberland zoned for Timberland Production zoning. No impact would occur.

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?				

Please see the response to question 4.2.2 c) above. The project site is not zoned for forest land, timberland, or timberland production (City of Wildomar 2018a). The project site is currently developed and does not contain forestland or timberland. Additionally, surrounding areas are developed with residential, commercial, industrial, and business park land uses. No impact would occur.

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Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				

The project site and the surrounding properties are not currently used or zoned for agriculture (City of Wildomar 2018a). The project area is characterized as disturbed and developed and would not result in the conversion of forest land to non-forest use. No impact would occur.

4.2.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.3 Air Quality

4.3.1 Environmental Setting

An Air Quality and Greenhouse Gas Assessment was prepared for the Project (ECORP 2019a; Appendix A). The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The project site is located in the City of Wildomar within the South Coast Air Basin (SoCAB). The SoCAB includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter. The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

Both the U.S. Environmental Protection Agency (EPA) and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O₃) (precursor emissions include nitrogen oxide [NOx] and reactive organic gases [ROG], carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The SoCAB region is designated as a nonattainment area for the federal O₃ and PM_{2.5} standards and is also a nonattainment area for the state standards for O₃, PM₁₀, and PM_{2.5}.

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4.3.2 Regulatory Setting

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. The agency's primary responsibility is ensuring that the federal and State ambient air quality standards are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Project:

- Rule 402 (Nuisance) This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- Rule 403 (Fugitive Dust) This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible PM are prohibited from crossing any property line. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques are summarized below.
 - 1) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - 2) All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.
 - 3) All material transported offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - 4) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - 5) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.
- **Rule 1113 (Architectural Coatings)** This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce reactive organic gases (ROG)

emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

4.3.3 Air Quality (III) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				

As part of its enforcement responsibilities, the EPA requires each State with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the California Clean Air Act (CAA) requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and State ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the Southern California Association of Governments (SCAG), and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Project is subject to the SCAQMD's AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

Criterion 1

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations?

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Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of the Project's pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating Project consistency. As shown in Table 4.3-3, localized concentrations of carbon monoxide (CO), nitrous oxide (NO_X), and Particulate Matter (PM) (PM₁₀ and PM_{2.5}) would be below the established thresholds for each criteria pollutant and therefore, impacts would be less than significant. Therefore, the Project would not result in an increase in the frequency or severity of existing air quality violations. Because ROG's are not a criteria pollutant, there is no ambient standard or localized threshold for ROG's. Due to the role ROG's plays in ozone (O₃) formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

b) Would the project cause or contribute to new air quality violations?

As shown in Table 4.3-1, the Project would result in regional emissions that would be below the SCAQMD regional thresholds during both construction and operations. Therefore, the Project would not have the potential to cause or affect a violation of the ambient air quality standards.

c) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

The Project would result in less than significant impacts with regard to localized concentrations during Project construction. As such, the Project would not delay the timely attainment of air quality standards or AOMP emissions reductions.

Criterion 2

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the Project exceeds the assumptions utilized in preparing the forecasts presented in its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions: The *County of Riverside General Plan*, SCAG's *Growth Management* Chapter of the *Regional Comprehensive Plan and Guide* (RCPG), and SCAG's 2016 RTP/SCS. The RTP/SCS also provides socioeconomic forecast projections of regional population growth. The Project involves the improvement of stormwater drainage and flood protection facilities in order to improve public safety, which is not a trip generating land use. Rather, the Project would address existing stormwater management deficiencies and implement improvements consistent with the County's General Plan to protect life and property by improving existing flood protection

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barriers. Therefore, the Project would be considered consistent with the applicable General Plan. Furthermore, the Project does not involve any uses that would increase population beyond what is considered in the General Plan and, therefore, would not affect local plans for population growth. Thus, the Project is consistent with the types, intensity, and patterns of land use envisioned for the project vicinity in the RCPG. The population, housing, and employment forecasts, which were adopted by SCAG's Regional Council, are based on the local plans and policies applicable; these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into the 2016 AQMP, it can be concluded that the Project would be consistent with the projections.

b) Would the project implement all feasible air quality mitigation measures?

The Project would result in less than significant air quality impacts. Compliance with emission reduction measures identified by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113, described in the Regulatory Framework subsection above, are required for all projects in the SoCAB. Additionally, Mitigation Measure AQ-1, described below, requires the use of construction equipment of advanced efficiency. As such, the Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The Project would serve to implement regional goals to manage stormwater in the area. The Project is located adjacent to a developed portion of the City. The purpose of the Project is to make improvements to stormwater management. Therefore, the District is proposing the structure improvements.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The Project would not result in a long-term impact on the region's ability to meet State and federal air quality standards. The Project's long-term influence would also be consistent with the goals and policies of the SCAQMD's 2016 AQMP. Therefore, the Proposed Project would not conflict with or obstruct implementation of SCAQMD's 2016 AQMP. Impacts would be less than significant with the incorporation of Mitigation Measure AQ-1.

Would	d the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				

Construction

Regional Construction Significance Analysis

Construction associated with the Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include O_3 -precursor pollutants (i.e., ROG and

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 NO_X) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site excavation, project construction, and paving. Motor vehicle exhaust is associated with construction equipment and worker trips. PM is associated with the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

The Project would require the net export of approximately 520,000 cubic yards of soil from Phase 1 and 20,000 cubic yards of soil from Phase 2. See Attachment A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Construction-generated emissions associated with the Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Predicted maximum daily construction-generated emissions for the Project are summarized in Table 4.3-1. Actual construction of the Project would be dictated by several regulatory forces. As such, if construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover.

Table 4.3-1. Construction-Related Emissions (Regional Significance Analysis)								
Construction Year	Pollutant (pounds per day)							
Construction rear	ROG NOx CO SO2 PM10 PM2							
2021	7.20	77.60	46.25	0.09	22.00	12.37		
2022	6.84	72.30	44.56	0.09	20.00	11.56		
2023	1.46	8.43	10.72	0.02	0.60	0.43		
SCAQMD Potentially Significant Impact Threshold	75	100	550	150	150	55		
Exceed SCAQMD Threshold?	No	No	No	No	No	No		

Source: CalEEMod version 2016.3.1. Refer to Attachment A of Appendix A for Model Data Outputs.

Notes: The reduction/credits for construction emissions are based on measures included in CalEEMod and as required by the SCAQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour (mph). Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Modeling accounts for the excavation and stockpiling of 550,000 cubic yards of soil during construction.

As shown in Table 4.3-1, emissions generated during project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria air pollutant emissions generated during project construction would not result in a cumulatively considerable net increase of any criteria pollutants from which the project region is in nonattainment under an applicable federal or State ambient air quality standard.

Localized Construction Significance Analysis

The nearest sensitive receptors to the project site are the residences adjacent to the project site. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds (LSTs) for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects.

For the Project, the appropriate Source Receptor Area (SRA) for the LSTs is the Lake Elsinore area (SRA 25) since this area includes the project site. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. As previously described, the SCAQMD has produced look-up tables for projects that disturb less than or equal to five acres daily. The SCAQMD has also issued guidance on applying the CalEEMod emissions software to LSTs for projects greater than five acres. Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, Table 4.3-2 is used to determine the maximum daily disturbed acreage for comparison to LSTs.

Table 4.3-2. Equipment-Specific Grading Rates

Construction Phase	Equipment Type	Equipment Quantity	Acres Graded/Disturbed per Eight-Hour Day	Operating Hours per Day	Acres Graded per Day
Phase 1 Utility Relocation	Tractors/ Loaders/ Backhoes	3	0.5	8	1.5
				Total	1.5
	Water Trucks	2	0	8	0
	Excavators	2	0	8	0
Phase 1 Project Construction	Scrapers	3	1	8	3
Phase 1 Project Construction	Bulldozers	2	0.5	8	1
	Dump Trucks	8	0	8	0
				Total	4
Phase 2 Utility Relocation	Tractors/ Loaders/ Backhoes	1	0.5	8	0.5
,				Total	0.5
	Excavators	2	0	8	0
	Rubber Tired Loaders	1	0.5	8	0.5
Dhara O Daria et Occastoration	Signal Boards	2	0	8	0
Phase 2 Project Construction	Tractors/ Loaders/ Backhoes	1	0.5	8	0.5
	Dump Trucks	5	0	8	0
				Total	1
	Pavers	1	0	8	0
	Rollers	1	0	8	0
Phase 2 Paving	Signal Boards	2	0	8	0
	Tractors/ Loaders/ Backhoes	1	0.5	8	0.5
				Total	0.5
Maximum Total Acres Graded per Day					

Source: ECORP 2019a; Appendix A

As shown in Table 4.3-2, project implementation could potentially disturb up to four acres daily. Therefore, for a conservative analysis, the LST threshold value for a five-acre construction was sourced from the LST lookup tables.

The nearest sensitive receptors to the project site are the residences adjacent to the project site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters.

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Notwithstanding, the SCAQMD Methodology explicitly states: "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

The SCAQMD's methodology clearly states that "off-site mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. Table 4.3-3 presents the results of localized emissions during construction activity. The LSTs reflect a maximum disturbance of five acres daily at 25 meters for the Project.

A addition	Pollutant (pounds per day)				
Activity	NOx	CO	PM ₁₀	PM _{2.5}	
	No Mitig	gation			
Phase 1- Utility Relocation (2021)	40.31	19.23	21.80	12.10	
Phase 1- Project Construction (2021)	77.00	45.60	19.10	10.10	
Phase 1- Project Construction (2022)	61.80	43.93	19.83	9.86	
Phase 2- Utility Relocation (2022)	34.81	14.37	19.78	11.50	
Phase 2- Project Construction (2022)	47.55	30.47	10.69	5.44	
Phase 2- Paving (2022)	9.07	10.19	0.48	0.44	
Phase 2- Paving (2023)	7.96	10.13	0.40	0.37	
SCAQMD Localized Screening Threshold (Adjusted for five acres of disturbance at 25 meters)	371	1,965	13	8	
Exceed SCAQMD Threshold?	No	No	Yes	Yes	
Emissions wi	th Implementation	n of Mitigation Meas	ure AQ-1		
Phase 1- Utility Relocation (2021)	17.33	20.62	8.51	4.80	
Phase 1- Project Construction (2021)	41.23	49.33	7.90	4.50	
Phase 1- Project Construction (2022)	41.23	49.33	7.90	4.50	
Phase 2- Utility Relocation (2022)	13.90	15.93	7.63	4.45	
Phase 2- Project Construction (2022)	28.24	34.38	4.57	2.58	
Phase 2- Paving (2022)	7.40	11.00	0.43	0.43	
Phase 2- Paving (2023)	7.40	11.00	0.42	0.43	
SCAQMD Localized Screening Threshold (Adjusted for five acres of disturbance at 25 meters)	371	1,965	13	8	
Exceed SCAQMD Threshold?	No	No	No	No	

Source: CalEEMod version 2016.3.1. Refer to Attachment A of Appendix A for Model Data Outputs.

Notes: The reduction/credits for construction emissions are based on measures included in CalEEMod and as required by the SCAQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 mph. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Tier 3 engines for all construction equipment was applied per Mitigation Measure AQ-1. Modeling accounts for the excavation and stockpiling of 550,000 cubic yards of soil during construction.

As shown in Table 4.3-3, with the implementation of Mitigation Measure AQ-1, emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Mitigation Measure AQ-1 requires diesel-fueled construction equipment to have CARB-certified Tier 3 or better engines to reduce PM₁₀ and PM_{2.5}. While impacts would be considered less than significant with the implementation of Mitigation Measure AQ-1, the Project would be also subject to SCAQMD Rules 402, 403, and 1113, described in the Regulatory Framework subsection above, to further reduce specific construction-related emissions.

Operations

Regional Operational Significance Analysis

The Project involves the development of the Bundy Canyon Basin and revisions to Lateral C. The Project would not include the provisions of new permanent stationary or mobile sources of emissions and vehicle trips to the project area because maintenance would be minimal. Therefore, regional operations emissions would result in a less than significant long-term regional air quality impact.

Localized Operational Significance Analysis

According to the SCAQMD Localized Significance Threshold (LST) methodology, LSTs would apply to the operational phase of a Project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project does not include such uses. Therefore, in the case of the Project, the operational-phase LST protocol does not need to be applied.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?				

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Project-generated emissions of Diesel Particulate Matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; application of architectural coatings; and other miscellaneous activities. For construction activity, DPM is the primary Toxic Air Contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by

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the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Accordingly, DPM is the focus of this discussion.

Based on the emission modeling conducted the maximum mitigated construction-related annual emissions of PM_{2.5} exhaust, considered a surrogate for DPM, would be 1.73 pounds per day during 2021 construction activity, 1.73 pounds per day during 2022 construction activity, and 0.43 pound per day during 2023 construction activity (see Appendix A). (PM_{2.5} is considered a surrogate for DPM because more than 90 percent of DPM is less than one microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter [i.e., PM_{2.5}], according to CARB. Most PM_{2.5} derives from combustion, such as use of gasoline and diesel fuels by motor vehicles). Furthermore, even during the most intense month of construction, emissions of DPM would be generated from different locations on the project site, rather than a single location, because different types of construction activities (e.g., demolition, site preparation, building construction) would not occur at the same place at the same time.

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the OEHHA, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-, 30-, or nine-year exposure period; further, such assessments should be limited to the period/duration of activities associated with the Project. Consequently, an important consideration is the fact that construction of the Project is not anticipated to last nine consecutive years, the minimum duration of exposure from which to calculate health risk (Project construction is anticipated to approximately five months), and that on a day-to-day basis construction activity generally spans eight hours as opposed to throughout the entire day.

Therefore, considering the relatively low mass of DPM emissions that would be generated during even the most intense season of construction and the fact that construction would not last as long as the minimum duration of exposure from which to calculate health risk, construction-related TAC emissions would not expose sensitive receptors to substantial amounts of air toxics.

Furthermore, the Project has been evaluated against the SCAQMD's Localized Significance Thresholds (LSTs) for construction. As previously stated, LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4) and can be used to assist lead agencies in analyzing localized impacts associated with project-specific level of proposed projects. As shown in Table 4.3-2, with the implementation of Mitigation Measure AQ-1 the emissions of pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors.

Operational Air Contaminants

Operation of the Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project. Nor would the Project attract mobile

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sources that spend long periods queuing and idling at the site. Therefore, the Project would not be a source of TACs.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service (LOS) during the peak commute hours. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Project vicinity have steadily declined.

The Project would not generate any new traffic trips during operation and average daily trips would be the same with and without Project implementation. Because the Project would not increase traffic volumes at any intersection to more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.

Wou	ld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

Construction

During construction, the Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the project site. However, these emissions are short-term in nature and would rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area.

Operations

The SCAQMD CEQA Air Quality Handbook (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants,

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chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Impacts would be less than significant.

4.3.4 Mitigation Measures

AQ-1: Construction Equipment Requirements. In order to minimize air quality impacts to the maximum extent practicable, all diesel-fueled construction equipment, including but not limited to rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors, shall be CARB Tier 3 Certified or better as set forth in Section 2423 of Title 13 of the CCR, and Part 89 of Title 40 of the Code of Federal Regulations.

4.4 Biological Resources

A biological technical report was completed for the Project to document the existing biological resources, to assess habitat for its potential to support sensitive plant and wildlife species, and to determine whether impacts would occur to sensitive biological resources, as required under CEQA (ECORP 2020a). Two biological reconnaissance surveys were performed by ECORP biologists on June 25, 2019 and on October 5, 2017. The biological technical report is provided as Appendix B.

4.4.1 Environmental Setting

The project site is within an urban environment that is generally subjected to repeated and ongoing disturbance from human activities. Small areas of disturbed native vegetation communities and riparian vegetation were present in patches throughout the project site and 500-foot buffer. One state-sensitive vegetation community was observed on the project site but was highly disturbed and contained substantial non-native cover. In addition, three land cover types: disturbed areas, developed areas, and ruderal (old agriculture) areas were observed on the project site. The plant species observed within these cover types generally consisted of ornamental, nonnative, or invasive weedy species (ECORP 2020a). Plant species observed on the project site were generally characteristic of disturbed urban areas. A complete list of plant species observed during the survey on and adjacent to the project site is found in Appendix B. The majority of the project site provided habitat for species adapted to disturbances and urban environments. Two special-status wildlife species were observed during the reconnaissance survey conducted in 2019, coastal California gnatcatcher (federally listed as threatened and a California SSC) and loggerhead shrike (California SSC). A complete list of wildlife species observed or detected during the surveys on and adjacent to the project site is found in Appendix B (ECORP 2020a).

Soils types were determined using the Natural Resources Conservation Service (NRCS) Web Soil Survey (ECORP 2020a). Soils within the project site consist of Cieneba sandy loam, Cieneba rocky sandy loam, Greenfield sandy loam, Hanford coarse sandy loam, Honcut sandy loam, Monserate sandy loam, Placentia fine sandy loam, Ramona sandy loam, Riverwash, Tujunga loamy sand, and Yokohl loam.

Potential Waters of the U.S.

Several aquatic features were mapped within or immediately adjacent to the project site that are considered potentially jurisdictional to the U.S. Army Corps of Engineers (USACE), CDFW, and/or State Water Resources Control Board (SWRCB). These features are described in more detail in Appendix C (ECORP 2020b) and summarized in Tables 4.4-1 and 4.4-2 below.

Classification	Acreage ¹	Linear Feet
Vetlands:		
None	-	-
Other Waters (Non-wetland Waters):		
Bundy Canyon Wash (ED-02, ED-03, ED-04, and ED-10)	3.17	7,260
ED-01	1.14	2,431
ED-05	0.05	1,930
ED-06	0.02	741
ED-07	0.03	810
ED-08	0.07	510
ED-09	0.06	615
Total:	4.54	14,297

¹Acreages in this table represent a calculated estimation and are subject to modification following USACE's verification process. Waters areas are measured in State Plane (NAD83) coordinates. All measurements are in the defined units for this coordinate system (feet) and all calculations and summations are calculated in square feet. Results are converted to acreages for ease of use. However, this conversion may lead to minor rounding errors in the reporting of acreage summaries.

^{*}Locations of aquatic features are presented in the Aquatic Resources Delineation Report (Appendix C; ECORP 2020b)

Table 4.4-2. California Department of Fish and Wildlife Jurisdiction				
Туре	Acreage			
Streambed	15.37			
Disturbed Mulefat Thickets	0.45			
Disturbed Red Willow Thickets	0.42			
Disturbed Riversidean Alluvial Fan Sage Scrub	0.32			
Total	16.56			

Biological resources were assessed during the reconnaissance survey and are discussed below to address the Biological Resources Environmental Checklist questions. Because the Project is divided into two phases, impacts to biological resources for each phase are presented separately below.

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4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				

Special-Status Species

Phase 1. Phase 1 of the Project would involve excavation of the proposed Bundy Canyon Basin and the extension of Lateral A, which would include vegetation removal. Impacts to each special-status species identified as having a potential to occur are described below.

Table 4.4-3 contains the acreages of vegetation communities that may be affected by construction of Phase 1. The vegetation communities and land cover types within the Phase 1 project area all provide some level of suitable habitat for special-status species except for areas classified as developed and concrete channel.

Table 4.4-3. Phase 1 Vegetation Communities and Land Covers						
Community/Land Cover Name	Direct Impact Acreage (within Project Boundaries)	Indirect Impact Acreage				
California Buckwheat Scrub	0.25	0.00				
Mulefat Thickets	0.44	0.00				
Southern Willow Scrub	0.13	0.27*				
Disturbed Riversidean Alluvial Fan Sage Scrub	0.11	0.00				
Streambed	1.07	0.00				
Disturbed/Nonnative Grassland	16.54	0.00				
Developed	0.20	0.00				

^{*}due to dewatering

Fourteen species identified during the literature search, which were determined to have a moderate to low potential to occur, are considered adequately conserved by the MSHCP (smooth tarplant, Parry's spineflower, long-spined spineflower, Munz's onion, San Diego ambrosia, Jaeger's milk-vetch, thread-leaved brodiaea, round-leaved filaree, intermediate mariposa lily, San Miguel savory, slender-horned spineflower, many-stemmed dudleya, Palmer's grappling hook, and Hall's monardella). Impacts to these species do not require additional surveys or mitigation because Phase 1 is not located within a Narrow Endemic Plant Species Survey Area (NEPSSA) or Criteria Area.

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Other special status species, which were determined to have potential to occur, are not covered by the MSHCP (Douglas' fiddleneck, paniculate tarplant, white rabbit-tobacco, and California screw moss) and have a low potential to occur within Phase 1. The removal of marginally suitable habitat in the California buckwheat scrub and disturbed/nonnative grassland communities within Phase 1 for these plant species would not be expected to contribute substantially to the overall decline of these species. As such, any Project-related impacts to Douglas' fiddleneck, paniculate tarplant, white rabbit-tobacco, and California screw moss would be less than significant.

Two special-status wildlife species were observed and detected in the immediate vicinity of the proposed Bundy Canyon Basin, the coastal California gnatcatcher and loggerhead shrike. Both species are covered species under the MSHCP. However, both species are also protected under the federal MBTA and the California Fish and Game Code as nesting bird species. If construction activities for Phase 1 occur during the nesting bird season, ground-disturbing construction activities could directly affect these species and their nests through the removal of habitat and indirectly through increased noise, ground vibrations, and human activity. Impacts to this species would be less than significant with the implementation of Mitigation Measure BIO-1.

Four special-status wildlife species (southern California legless lizard, coast horned lizard, coastal whiptail, and San Diego black-tailed jackrabbit) have a high potential to occur in and/or adjacent to the proposed Bundy Canyon Basin. All species are California SSC and are covered species under the MSHCP. Impacts to the species covered under the MSHCP as a result of covered activities have already been analyzed within the context of the MSHCP and no further survey activities are required for these species.

Other special-status species (Quino checkerspot butterfly, coast range newt, western spadefoot, red-diamond rattlesnake, golden eagle, Swainson's hawk, white-tailed kite, coastal cactus wren, yellow-breasted chat, Los Angeles pocket mouse, and northwestern San Diego pocket mouse) identified during the literature search with moderate to low potential to occur are covered by the MSHCP. Burrowing owl, least Bell's vireo, and Stephens' kangaroo rat do have additional requirements under the MSHCP and these are discussed below. Other special-status wildlife species with a low potential to occur (California glossy snake, coast patch-nosed snake, pallid bat, western yellow bat, pocketed free-tailed bat, Dulzura pocket mouse, and southern grasshopper mouse) are not covered by the MSHCP; however, impacts to these species are not expected to be significant.

Two areas of riparian habitat are present on the boundaries of the proposed Bundy Canyon Basin improvements; southern willow scrub along the western boundary (adjacent to Monte Vista Drive) and mulefat thickets along the southern boundary in Bundy Canyon Wash. Neither of these riparian areas are suitable for least Bell's vireo nesting activities due to their small size and presence of disturbances; however, they could be used by the species as migratory stopovers. If present, impacts to least Bell's vireo would be less than significant with the implementation of Mitigation Measure BIO-1.

The majority of wildlife detected during the reconnaissance surveys included birds that are commonly found in disturbed and urban areas. Birds and raptors protected by the MBTA may utilize the area for foraging and nest on the site and surrounding trees. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measures BIO-1.

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Phase 2. Phase 2 of the Project would involve construction of the proposed Lateral C Mainline, Lateral C-2, and C-3 facilities. Impacts to each special-status species identified as having a potential to occur are described below.

Fourteen special-status species identified in the literature search, which were determined to have a moderate to low potential to occur particularly within undeveloped areas, are considered adequately conserved by the MSHCP (smooth tarplant, Parry's spineflower, long-spined spineflower, Munz's onion, San Diego ambrosia, Jaeger's milk-vetch, thread-leaved brodiaea, round-leaved filaree, intermediate mariposa lily, San Miguel savory, slender-horned spineflower, many-stemmed dudleya, Palmer's grappling hook, and Hall's monardella). Impacts to these species do not require additional surveys or mitigation because Phase 2 is not located within a NEPSSA or Criteria Area. Four species are not covered by the MSHCP (Douglas' fiddleneck, paniculate tarplant, white rabbit-tobacco, and California screw moss) and have a low potential to occur due to the lack of high-quality habitat present. As such, any project-related impacts to these four species would be less than significant.

Five special-status species identified during the literature search (southern California legless lizard, coast horned lizard, coastal whiptail, loggerhead shrike, and San Diego black-tailed jackrabbit) have a high potential to occur in and/or adjacent to the undeveloped areas around Baxter Road and Pasadena Street. All species are California SSC and are covered species under the MSHCP. Impacts to the species covered under the MSHCP as a result of covered activities have already been analyzed within the context of the MSHCP and no further survey activities are required for these species.

Other special-status species (western spadefoot, coast range newt, red-diamond rattlesnake, golden eagle, Swainson's hawk, white-tailed kite, coastal California gnatcatcher, yellow-breasted chat, northwestern San Diego pocket mouse, and Los Angeles pocket mouse) identified during the literature search have a moderate to low potential to occur are covered species under the MSHCP. Burrowing owl, least Bell's vireo, and Stephens' kangaroo rat do have additional requirements under the MSHCP, and these are discussed below. Special-status wildlife species with a low potential to occur (California glossy snake, coast patchnosed snake, pallid bat, western yellow bat, pocketed free-tailed bat, Dulzura pocket mouse, and southern grasshopper mouse) are not covered by the MSHCP; however, impacts to these species are not expected to be significant.

While burrowing owl is considered an adequately conserved species, the MSHCP still requires that projects within designated burrowing owl survey areas conduct a burrowing owl habitat assessment. Portions of Phase 2 are located within an MSHCP-designated survey area for burrowing owl. Burrowing owl was determined to have a moderate potential to occur due to the presence of suitable breeding and wintering habitat in the disturbed open areas including the undeveloped areas around Baxter Road and Pasadena Street. As such, direct impacts to burrowing owl through ground disturbance and habitat loss and indirect impacts from construction noise and vibrations may occur. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-2.

One area of riparian habitat is present north of Lateral C-2 and north of Baxter Road. This riparian area is not suitable for least Bell's vireo nesting activities due to its small size and presence of disturbances; however, it could be used by the species as a migratory stopover. Indirect impacts to least Bell's vireo during

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the migratory season may occur in the form of increased noise, ground disturbance, and human activity. Impacts to least Bell's vireo would be less than significant with the implementation of Mitigation Measure BIO-1.

Marginally suitable habitat is present for Stephens' kangaroo rat within Phase 2, which is located within the Stephens' kangaroo rat fee assessment area (RCHCA 1995; Wildomar Municipal Code 3.43.060). The District is a permittee of the MSHCP and is not subject to this mitigation fee; therefore, no additional mitigation from the District for SKR is required. The City of Wildomar is subject to the mitigation fee (RCHCA 1995; Wildomar Municipal Code 3.43.060).

The majority of wildlife detected during the reconnaissance survey included birds that are commonly found in disturbed and urban areas. In addition, birds and raptors protected by the MBTA may utilize the area for foraging and nest on the site and surrounding trees. If construction activities for Phase 2 occur during the bird breeding season, ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat and indirectly through increased noise, ground vibrations, and human activity. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measure BIO-1.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				

Phase 1. Sensitive vegetation communities did not appear in the literature search. Disturbed Riversidean alluvial fan sage scrub, a community with a State Rarity Ranking of S1 (critically imperiled and susceptible to extirpation), was mapped within and adjacent to the southwestern corner of the proposed Bundy Canyon Basin. This community also provides habitat for special-status wildlife species and nesting birds. Two riparian areas are present within the proposed Bundy Canyon Basin (southern willow scrub along the northwestern boundary and disturbed mulefat thickets along the southern boundary) that provide habitat for special-status wildlife species and nesting birds. Neither of these have a State Rarity Ranking in California but are considered sensitive biological resources (ECORP 2020a; Appendix B).

The Project would result in the permanent loss of riparian and streambed-dependent vegetation communities. Direct impacts in the form of vegetation removal would occur to 0.13 acre of southern willow scrub, 0.44 acre of disturbed mulefat thickets, and 0.11 acre of disturbed Riversidean alluvial fan sage scrub. Indirect impacts in the form of altering the water source (dewatering) that sustains the southern willow scrub would result in the permanent loss of an additional 0.14 acre of southern willow scrub. In total, the Project would result in the permanent loss of 0.27 acre of southern willow scrub.

Although impacts would occur to a portion of the natural-bottomed drainage to which the disturbed mule fat thickets and Riversidean alluvial fan sage scrub are associated, these communities are likely to persist in

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the areas not directly affected by the Project because they are currently composed of sparse, xeric vegetation that does not require substantial hydrology in order to be sustained. Riversidean alluvial fan sage scrub is known to persist within upper terraces of broad floodplains of larger streams, even without being exposed to frequent or regular flood events, although the vegetative composition of the habitat may change over time. The disturbed mule fat thickets will likely persist post-Project, although the natural-bottomed drainage would eventually become vegetated due to scouring events that are no longer happening. It is anticipated that the natural-bottomed drainage would eventually be replaced by Riversidean sage scrub-type vegetation.

Permitting conditions to offset these impacts will be identified during coordination through the regulatory permitting process with the regulatory agencies (USACE, CDFW, SWRCB) and may include compensatory mitigation, avoidance, or nonnative plant removal within the communities. Additionally, preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) will be necessary to satisfy MSHCP requirements.

Phase 2. Sensitive vegetation communities did not appear in the literature search; however, there is one riparian area located adjacent to Lateral C-2 on the northern side of Baxter Road that provides habitat for special-status wildlife species and nesting birds, red willow thickets. This community is considered a state-sensitive vegetation community and has a State Rarity Rank of S3. This area potentially provides habitat for special-status wildlife species and nesting birds. Construction of Phase 2 components including Lateral C-2 is dependent on the approval and implementation of existing development proposals downstream of I-15. There is an existing development proposal north of Baxter Road that would be constructed prior to Lateral C-2 being implemented. This development would likely impact the red willow thickets identified at this site. Likewise, features to the south of Baxter Road are not anticipated to be affected by this Project because a development project is planned for the empty parcel south of Baxter Road and east of Central Avenue. Therefore, impacts to vegetation communities as a result of Phase 2 of the Project are not anticipated.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				

A total of 4.54 acres of Waters of the U.S. have been mapped within the project area, consisting entirely of ephemeral drainages. A total of 16.56 acres of CDFW jurisdiction have been mapped within the project area. The mapped features within Phase 1 and Phase 2 of the Project in areas jurisdictional to the CDFW include streambeds and associated riparian habitats including Red Willow Thickets, Riversidean Alluvial Fan Sage Scrub, and Mule Fat Thicket.

Phase 1. Within Phase 1, Project related impacts would occur to portions of Ephemeral Drainage - 01 (ED-01) along the southern boundary of the proposed Bundy Canyon Basin including the concrete lined channel

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west and south of the proposed basin (existing Monte Vista Channel). Impacts to ED-01 may include riparian areas along Bundy Canyon Wash requiring regulatory permitting and the preparation of a Determination of Biologically Equivalent or Superior Preservation to satisfy MSHCP requirements.

Phase 2. Three ephemeral drainages were mapped within the Phase 2 area, all of which are potentially jurisdictional to USACE, CDFW, and SWRCB. A small patch of disturbed Red Willow Thickets is located north of the proposed Lateral C-2 and associated with ED-07, along the northern boundary of Baxter Road, which may be considered a riparian habitat. The drainage features and riparian habitat to the north of Baxter Road are anticipated to be impacted as part of existing development proposals. It should be noted that Phase 2 of the Project is dependent on approval and implementation of development within the immediate vicinity of Phase 2 project components. Likewise, the three ephemeral drainages and riparian habitat within Phase 2 project areas are not anticipated to be impacted by this Project but rather by adjacent proposed development. The development plans for these parcels, however, have not yet been finalized and a CEQA document has not yet been adopted. Permitting and analysis of impacts to these features are likely to arise from coordination with regulatory agencies regarding development projects planned to the north and south of Baxter Road. Impacts would be less than significant.

No wetland habitat occurs in or within the vicinity of the Phase 1 or Phase 2 area; therefore, no impacts to wetland habitat is expected.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				

Phase 1. The proposed Bundy Canyon Basin is bordered by Bundy Canyon Road and residential development to the north, residential development to the east, Monte Vista Drive and disturbed open space to the west, and a small drainage and disturbed native habitat to the south. The Phase 1 Project components are heavily disturbed and contain very little cover that would only allow for limited movement of smaller, resident populations of wildlife. No migratory wildlife corridors or native wildlife nursery sites were identified within the project site. Furthermore, no MSHCP-designated corridors or linkages are present on or adjacent to the project site. The two riparian areas adjacent to the proposed Bundy Canyon Basin improvements may be conducive to wildlife movement; however, these areas are not considered substantial corridors and they do not connect two large, undeveloped blocks of land that wildlife may need to move between. Therefore, no impact to wildlife corridors or nursery sites would occur.

Trees (native and nonnative), power poles, and other structures (e.g., abandoned buildings and cellular towers) on and adjacent to the project site provide suitable nesting substrates for raptor and songbirds. Shrubby vegetation was present mostly adjacent to the project site, which provides suitable nesting habitat for songbirds. Direct impacts to nesting raptor and songbird species could occur in the form of habitat loss

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through vegetation removal and mortality or injury due to habitat loss or nest abandonment. Indirect impacts may occur through increased human and vehicular activity, noise, dust, and ground vibrations. Implementation of Mitigation Measure BIO-1 would reduce these impacts to a level that is less than significant.

Phase 2. Phase 2 Project components are located within and adjacent to areas containing existing disturbances (e.g., paved and dirt roads, old agricultural areas, and residential and commercial development). The Phase 2 Project components are heavily disturbed and contain very little cover that would only allow for limited movement of smaller, resident populations of wildlife. No migratory wildlife corridors or native wildlife nursery sites were identified within the project site. Furthermore, no MSHCP-designated corridors or linkages are present on or adjacent to the project site. The riparian area adjacent to Lateral C-2 is likely not conducive to wildlife movement because of its small size and the fact that it lacks a linear shape connecting two large, undeveloped blocks of land that wildlife may need to move between. Therefore, no impact to wildlife corridors or nursery sites would occur.

Trees (native and nonnative), power poles, and other structures (e.g., abandoned buildings and cellular towers) on and adjacent to the project site provide suitable nesting substrates for raptor and songbirds. Shrubby vegetation was present mostly adjacent to the project site, which provides suitable nesting habitat for songbirds. Direct impacts to nesting raptor and songbird species could occur in the form of habitat loss through vegetation removal and mortality or injury due to habitat loss or nest abandonment. Indirect impacts may occur through increased human and vehicular activity, noise, dust, and ground vibrations. Implementation of Mitigation Measure BIO-1 would reduce these impacts to a level that is less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				

No ordinances or policies for the protection of trees or other biological resources have been adopted for the City of Wildomar. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources.

Woul	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

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The District is a permittee of the Western Riverside County MSHCP and is required to implement the terms and conditions of the MSHCP. Analyses as it pertains to MSHCP consistency were previously discussed in Biological Resources question a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?* A determination of consistency with the MSHCP is provided in detail in the Biological Technical Report (Appendix B).

4.4.3 Mitigation Measures

- BIO-1: Preconstruction Surveys/Biological Monitoring for Nesting Birds. If ground disturbing activities with the potential to disrupt nesting birds are scheduled to occur during the nesting bird season (approximately December 15 September 15), a pre-construction nesting bird survey shall be conducted by a qualified biologist no more than three days prior to commencement of construction activities. The nesting bird survey shall include the project site and a 500-foot buffer around the disturbance area. If nesting birds (including nesting raptors) are present, the qualified biologist shall determine an appropriate construction monitoring protocol and establish an appropriate avoidance buffer until nesting has been completed or the nest has been deemed inactive by a qualified biologist. If no nesting birds are observed during the survey, site preparation and construction activities may begin.
- **BIO-2: Preconstruction Burrowing Owl Survey.** For Phase 2 projects, a pre-construction survey for burrowing owls shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the Western Riverside MSHCP burrowing owl survey guidelines (County of Riverside 2006). If burrowing owls are observed during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP.

This mitigation measure does not apply to the Phase 1 project area.

4.5 Cultural Resources

4.5.1 Environmental Setting

Cultural Resources

A Phase I Cultural Resources Assessment was prepared by ECORP Consulting, Inc. (ECORP 2020c) for the Project to determine if cultural resources were present in or adjacent to the project site and assess the sensitivity of the project site for undiscovered or buried cultural resources. The cultural context of the project site including regional and local prehistory, ethnography, and regional and project site histories can be found in the Phase I report (ECORP 2020c; Appendix D).

The analysis of cultural resources was based on a records and literature search conducted at the Eastern Information Center (EIC) of the California Historical Resources Information System at the University of California, Riverside on August 11, 2017, a literature review, and a field survey on September 12, 2017. The

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literature search included the results of previous surveys within a one-mile (1,600 meters) radius of the Project location.

A search of the Sacred Lands File by the Native American Heritage Commission (NAHC) failed to indicate the presence of Native American sacred lands in the vicinity of the project site. The NAHC also provided ECORP with a list of 28 Native American individuals and organizations with traditional ties to the project site.

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				

A cultural resources survey was conducted for the project site on September 12, 2017 by ECORP Consulting, Inc. to identify cultural resources that could be affected by the Project. A cultural resources records search was conducted at the EIC and a search of Sacred Lands File of the NAHC was requested. The record search performed on August 11, 2017 indicated that a total of 64 cultural resources investigations were conducted within a one-mile radius of the project site from 1978 to 2015. Of these studies, 14 have taken place within or adjacent to the project site. These studies indicate that approximately 90 percent of the length of the project site has been previously surveyed for cultural resources. The records search results identified 23 previously recorded cultural resources within the one-mile search radius; however, no resources overlap or are located within the project site. Additionally, the California Historic Property Data File (HPDF) for Riverside County showed no cultural resources in or adjacent to the project site. During the field survey two cultural resources were identified. These resources consisted of a utility pole located in the southwest corner of the proposed location for the Bundy Canyon Basin (WL-001), and a segment of historic-age Baxter Road (WL-002) (ECORP 2020c).

Under state law (CEQA) cultural resources are evaluated using California Register of Historical Resources (CRHR) eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to Historical Resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied.

A Historical Resource is a resource that:

- 1. Is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission:
- 2. Is included in a local register of historical resources, as defined in Public Resources Code 5020.1(k);
- 3. Has been identified as significant in a historical resources survey, as defined in Public Resources Code 5024.1(g); or

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4. Is determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

For the Project, only the fourth definition of a Historical Resource is applicable because there are no resources previously determined eligible or listed on the CRHR, there are no resources included in a local register of historical resources, and no resources identified as significant in a qualified historical resources survey.

The eligibility criteria for the CRHR are as follows [CCR Title 14, Section 4852(b)]:

- 1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- 2. It is associated with the lives of persons important to local, California, or national history.
- 3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- 4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, § 4852(c)].

Impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(a)].

Resources WL-001 and WL-002 were evaluated using CRHR eligibility criteria to determine whether or not they constitute historical resources under CEQA. The evaluation found that these resources are not associated with significant historical events, found no association with specific individuals or groups of people significant in local or regional history, found that the features do not embody distinctive architectural or engineering characteristics, and found that the sites possess limited potential to yield important information about local or regional history above what is already known. Due to these factors, all sites are evaluated as not eligible for the CRHR under any criteria (ECORP 2020c).

Because resources WL-001 and WL-002 are not eligible for the CRHR, they are not Historical Resources as defined by CEQA regulations (CCR Title 14, § 15064.5(a)). Because there are no Historical Resources within the project site, there would be no significant impacts or effects to Historical Resources as a result of the Project.

However, there always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during project construction. Therefore, implementation of Mitigation Measure CUL-1 would reduce potential adverse impacts to a less than significant level.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				

Please see the response to question 4.5.2 a) above. No archaeological resources have been previously recorded on the project site and none were recorded during the field survey (ECORP 2020c). However, there remains the possibility that unrecorded cultural resources would be present beneath the ground surface and, if present, may be exposed during project construction. As stated in Mitigation Measure CUL-1, the District would retain an archaeologist to identify and evaluate any potential finds. With the implementation of Mitigation Measure CUL-1 impacts to significant archaeological resources would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				

Based on the records search from EIC, no formal cemeteries are located in or near the project site and no human remains have been reported in the project vicinity (ECORP 2020c). However, prehistoric sites, including temporary camps, occur along drainages in the hill's northeast of the project site, indicating the potential for prehistoric sites at the north end of the project alignment near the mouth of Bundy Canyon. Most Native American human remains are found in prehistoric archaeological sites. However, if potential human remains are encountered, implementation of Mitigation Measure CUL-2 would reduce impacts to less than significant.

4.5.3 Mitigation Measures

- **CUL-1: Accidental Discovery of Cultural Resources.** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find. The archaeologist shall have the authority to modify the nowork radius as appropriate, using professional judgment.
 - o If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
 - o If the professional archaeologist determines that the find represents a cultural resource from any time period or cultural affiliation, the handling of the cultural resource(s) shall follow the applicable recommendations as described in the Cultural Resources Management Plan (CRMP) prepared for the Project, as required by TCR-1.

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CUL-2: Accidental Discovery of Human Remains. If human remains or remains that are potentially human are found, the District or City shall retain a qualified professional archaeologist to ensure reasonable protection measures are taken to protect the discovery from disturbance. The archaeologist shall notify the Riverside County Coroner per § 7050.5 of the Health and Safety Code. Handling of the discovery shall follow the provisions set forth by § 7050.5 of the California Health and Safety Code and § 5097.98 of the California Public Resources Code.

4.6 Energy

4.6.1 Environmental Setting

Introduction

Energy consumption is analyzed in this Initial Study due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) during the construction phases.

Electricity/Natural Gas Services

Southern California Edison provides electrical services to Riverside County through State-regulated public utility contracts. Southern California Edison, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 14 million people with electricity across a service territory of approximately 50,000 square miles.

The Southern California Gas Company provides natural gas services to the project area. Southern California Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all non-residential uses in Riverside County from 2014 to 2018 is shown in Table 4.6-1. As indicated, the demand has remained increased since 2014.

Table 4.6-1. Non-Residential Electricity Consumption in Riverside County 2014-2018				
Year	Non-Residential Electricity Consumption (kilowatt hours)			
2018	8,275,205,307			
2017	8,309,270,050			
2016	8,274,151,076			
2015	8,195,948,845			
2014	8,772,332,956			

Source: ECDMS 2018

The natural gas consumption associated with all non-residential uses in Riverside County from 2014 to 2018 is shown in Table 4.6-2. As indicated, the demand has remained increased since 2014.

Table 4.6-2. Non-Residential Natural Gas Consumption in Riverside County 2014-2018				
Year	Non-Residential Natural Gas Consumption (therms)			
2018	139,193,875			
2017	139,166,211			
2016	143,274,204			
2015	128,307,248			
2014	123,412,690			

Source: ECDMS 2018

Total automotive fuel consumption in Riverside County from 2015 to 2019 is shown in Table 4.6-3. As shown, on-road and off-road fuel consumption have increased in the county since 2015.

Table 4.6-3. Automotive Fuel Consumption in Riverside County 2014-2018						
Year On-Road Fuel Consumption (gallons)		Off-Road Fuel Consumption (gallons)				
2019	989,277,311	33,582,402				
2018	994,480,021	32,517,206				
2017	999,566,784	31,597,203				
2016	994,659,442	30,709,064				
2015	982,191,452	29,463,529				

Source: CARB 2014

4.6.2 Energy (VI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				

The impact analysis focuses on the three sources of energy that are relevant to the Project: electricity, natural gas, and the equipment-fuel necessary for project construction. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary

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consumption of energy for a proposed land use project. For the purpose of this analysis, the amount of electricity and natural gas estimated to be consumed by the Project is quantified and compared to that consumed by non-residential land uses in Riverside County. Similarly, the amount of fuel necessary for project construction and is calculated and compared to that consumed in Riverside County.

The analysis of electricity gas usage is based on California Emissions Estimator Model (CalEEMod) modeling conducted by ECORP Consulting, Inc. (Appendix A) which quantifies energy use for Project operations. The amount of total construction-related fuel use was estimated using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Energy consumption associated with the Project is summarized in Table 4.6-4.

Table 4.6-4. Project Energy and Fuel Consumption					
Energy Type Annual Energy Consumption Percentage Increase Countyw					
Electricity Consumption ¹	0.00 %				
Natural Gas ¹ 0 therms		0.00 %			
Automotive Fuel Consumption					
• Project Construction ² 100,985 gallons 0.30%					

Source: ¹Electricity and Natural Gas consumption calculated by ECORP Consulting using CalEEMod 2016.3.2; ²Climate Registry 2016; ³EMFAC2014 Notes: The Project increases in electricity and natural gas consumption are compared with all of the residential buildings in Riverside County in 2018, the latest data available. The Project increases in automotive fuel consumption is compared with the countywide fuel consumption in 2019, the most recent full year of data.

As shown in Table 4.6-4, there would be no increase in electricity usage or natural gas consumption compared to that of non-residential land uses as a result of the Project. The Project would not be increasing electricity or natural gas consumption, and thus would not result in the inefficient, wasteful, or unnecessary consumption of energy.

The Project's gasoline fuel consumption during the construction period is estimated to be 100,985 gallons of fuel, which would increase the annual construction-related gasoline fuel use in the county by 0.30 percent during the time that project construction takes place. As such, project construction would have a nominal effect on local and regional energy supplies, especially over the long-term. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and require recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. For these reasons, this impact would be less than significant.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

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The Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. Relevant energy conservation plans specific to Wildomar include the County's General Plan. The Project involves the improvement of stormwater drainage and flood protection facilities in order to improve public safety, which would not result in the use of any energy, natural gas or fuel consumption once construction is complete. Additionally, all development in the County, including the Project, are required to adhere to all County-adopted policy provisions, including those in the Riverside County Climate Action Plan. The Project would not conflict or obstruct any local or state plans for renewable energy or energy efficiency.

The Project involves the improvement of stormwater drainage and flood protection facilities in order to improve public safety, which is not a trip generating land use. The Project would address existing stormwater management deficiencies and implement improvements consistent with the County of Riverside General Plan to protect life and property by improving existing flood protection barriers. Therefore, the Project would be considered consistent with the applicable General Plan. Furthermore, the Project does not involve any uses that would increase population beyond what is considered in the County of Riverside General Plan and, therefore, would not affect local plans for population growth.

For these reasons, this impact would be less than significant.

4.6.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.7 Geology and Soils

4.7.1 Environmental Setting

Geomorphic Setting

The project site is located in the City of Wildomar, in the Elsinore Valley at an elevation of 1,250 to 1,500 feet above mean sea level (msl). The Wildomar area consists of a relatively flat region with areas of low rolling hills near the fringes of the Temescal and Santa Ana Mountains to the west, and numerous seasonal drainages to the east. The Elsinore Valley is bordered by Lake Elsinore to the north, low hills to the east, Temecula Valley to the southeast, and the Elsinore Mountains to the west and southwest. The north portion of the project alignment is near the mouth of Bundy Canyon which drains the hills to the east. The drainage from Bundy Canyon runs along the west side of the project alignment into the valley and flows into Murrieta Creek (ECORP 2020c).

Regional Seismicity and Fault Zones

An "active fault," according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered "inactive." The Wildomar segment of the Elsinore fault, which lies approximately 0.25 mile to the southwest, is the closest known potentially active fault to the project site (CDC 1980).

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Soils

Soils types were determined using the Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2019). Soils within the project site consist of Cieneba sandy loam, eroded, 8 to 15 percent slopes; Cieneba sandy loam, eroded, 15 to 20 percent slopes; Cieneba rocky sandy loam, eroded, 15 to 50 percent slopes; Greenfield sandy loam, eroded, 2 to 8 percent slopes; Greenfield sandy loam eroded, 8 to 15 percent slopes; Hanford coarse sandy loam, eroded, 8 to 15 percent slopes; Honcut sandy loam, 2 to 8 percent slopes; Monserate sandy loam, eroded, 8 to 15 slopes; Monserate sandy loam, shallow, eroded, 5 to 15 percent slopes; Placentia fine sandy loam, 0 to 5 percent slopes; Ramona sandy loam, eroded 8 to 15 percent slopes; Riverwash; Tujunga loamy sand, channeled, 0 to 8 percent slopes; and Yokohl loam, severely eroded, 8 to 25 percent slopes.

4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

Wo	ıld tl	ne Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	effe	ectly or indirectly cause substantial adverse ects, including the risk of loss, injury, or death olving:				
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii)	Strong seismic ground shaking?				\boxtimes
	iii)	Seismic-related ground failure, including liquefaction?				
	iv)	Landslides?				

i and ii) The project site has one potentially active fault within its vicinity; the Wildomar segment of the Elsinore fault, which lies approximately 0.25 mile to the southwest of the project site. There are no faults located within an Alquist-Priolo Earthquake Fault Zone within the project site. Because none of these faults cross or trend toward the project site, fault-line surface rupture is not considered a hazard. Consequently, the Project would have no impact regarding exposing people or structures to rupture of a known earthquake fault. No impact would occur.

iii) Liquefaction is a phenomenon where water-saturated granular soils lose shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs as a consequence of cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include loss

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of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements and differential settlements. Liquefaction generally occurs where the groundwater table is less than 50 feet below the surface.

According to the County of Riverside General Plan Elsinore Area Plan, the project area has a moderate susceptibility to liquefaction (County of Riverside 2015a). However, the County of Riverside General Plan (General Plan) states that the representation of areas with liquefaction potential in the General Plan is only intended as a notification to seek further site-specific information and analysis for future development. The General Plan recommends that conducting a site-specific geotechnical study is the only practical and reliable way to determine specific liquefaction potential for future development (County of Riverside 2019). As such, the District contracted with Inland Foundation Engineering, Inc. for the preparation of a geotechnical investigation report for the project site. The results of the geotechnical investigation indicate that the alluvial soil within the unimproved drainage course along the southern boundary of the proposed basin is susceptible to liquefaction in its existing condition if historic high groundwater conditions are present (Inland Foundation Engineering, Inc. 2020; Appendix F). Based on these results it was determined that the proposed Project would be feasible from a geotechnical and geologic standpoint, provided that the recommendations in the geotechnical investigation report addressing potential liquefaction issues, are properly implemented. Design and construction of the proposed Project would follow the recommendations of the site specific geotechnical investigation prepared by a registered civil, structural engineer, and/or engineering geologist and at a minimum would be required to adhere to seismic requirements in the most current version of the California Building Code (CBC) and the requirements and standards contained in the applicable chapters of the County of Riverside and City of Wildomar Municipal Codes (Inland Foundation Engineering 2020). As such, impacts resulting from liquefaction susceptibility would be less than significant.

iv) Landslides can generally occur in areas that have steep slopes and can be caused by seismic activity and/or extended periods of rain resulting in high water saturation of soils. The project site consists of some areas with low to locally moderate susceptibility to seismically induced landslides and rock falls (County of Riverside 2015b). The Project would be predominantly located on existing right-of-way within the City of Wildomar. Compliance with the 2019 California Building Code (CBC) would result in a less-than-significant impact regarding exposing people or structures to hazardous landslide conditions.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in substantial soil erosion or the loss of topsoil?				

Best Management Practices (BMPs) are included as part of the Storm Water Pollution Prevention Plan (SWPPP) prepared for the Project and would be implemented to manage erosion and the loss of topsoil during construction-related activities (see the Hydrology and Water Quality [4.10] section of this Initial Study). Soil erosion impacts would be reduced to a less than significant level.

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Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onor off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				

The project site is relatively flat, lacking steep slopes; therefore, landslides are not anticipated. Liquefaction generally occurs where the groundwater table is less than 50 feet below the surface. According to the County of Riverside General Plan Elsinore Area Plan, the project site has a moderate susceptibility to liquefaction (County of Riverside 2015b). The Project would construct below ground or at grade drainage improvements. Structures associated with the Project would be required to comply with County, State, and/or Federal design criteria and/or other accepted non-building structure standards to reduce the risks associated with seismically induced ground failures. Therefore, the Project would have a less than significant impact related to landslide, lateral spreading, subsidence, liquefaction, or collapse.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				

As stated above, nine soil groups are represented within the project site. The project site is primarily comprised of Honcut sandy loam with 2 to 8 percent slopes. According to the NRCS Web Soil Survey database, these soils are considered well drained (NRCS 2019). Additionally, no habitable structures are proposed as part of the Project. Due to the soil characteristics mentioned above, the Project is not anticipated to create a substantial risk to life or property. No impact would occur.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				

The Project consists of the construction of a flood control basin and underground drainage structures that would be constructed per specifications under the Wildomar Master Drainage Plan (MDP). The Project does not propose the use or construction of septic tanks; therefore, no impact as a result of the presence of soils incapable of supporting the use of septic tanks or alternative waste water disposal systems would occur.

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Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

A paleontological field reconnaissance survey was conducted for the Project on October 18, 2017 by Cogstone Resource Management, Inc. to verify the location of any previously identified or new, accessible paleontological localities within the project site, and to assess the potential for the project site sediments to contain fossil resources. A paleontological records search was also conducted utilizing the Western Science Center in Riverside County, online records from the University of California Museum of Paleontology database, and the Paleobiology Database (Cogstone 2020; Appendix E). As a result of the field survey, no fossils were found, although the sediments of the young alluvial fan valley alluvium deposits, the old alluvial fan, and the Pauba Formation observed were potentially suitable for fossil preservation. Additionally, the records search found that no fossil localities are known from the project site or within one mile of the project site; however, numerous localities have been recorded within ten miles of the Project in the same sedimentary units that are present in the project area. As such, a paleontological sensitivity analysis of the project site and its vicinity was conducted. The paleontological sensitivity analysis utilized was the Potential Fossil Yield Classification (PFYC) System, a multilevel ranking system developed by professionals from the Bureau of Land Management (BLM) to assess the sensitivity of sediments for fossils within the project site. The PFYC system utilizes the geological setting and number of known fossil localities to determine paleontological sensitivity. Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. According to the Paleontological Resources Assessment, the project alignment is located in areas ranging from very low to high paleontological sensitivity (Cogstone 2020). The Project proposes drainage system improvements with planned excavation depths for Phase 2 laterals of approximately 11 feet up to the maximum excavation depth at the proposed Bundy Canyon Basin ranging from 45 to 50 feet. Based on the depth of excavation and the paleontological sensitivity of the project site, the Project has the potential to encounter paleontological resources in areas with a PFYC ranking of moderate or greater. Project areas classified as moderate or greater include the southern half of Bundy Canyon Basin (Phase 1), Lateral C mainline facility along White Street from Grove Street approximately 500 feet to the south, Lateral C mainline facility along Como Street from Central Street to its terminus at Bundy Canyon Wash, Lateral C-2 along Baxter Road from Central Street to its easternmost terminus, and the entire Lateral C-3 facility (Phase 2) (please refer to Figure 3 on the next page). Implementation of Mitigation Measure GEO-1 would reduce any impacts to paleontological resources to less than significant.

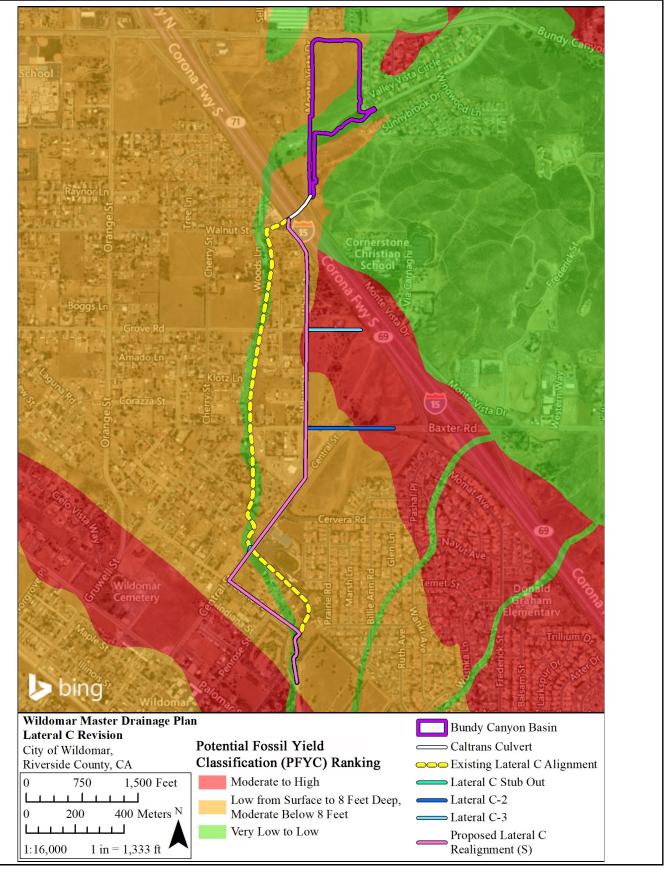




Figure 3. Work Areas with a Potential Fossil Yield Classification (PFYC)

System Ranking of Moderate or Greater

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4.7.3 Mitigation Measures

GEO-1: Paleontological Resources Impact Mitigation Plan. Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Plan (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction requirements for all work consisting of excavations at depths greater than 8 feet below the original ground surface within areas that have a Potential Fossil Yield Classification (PFYC) ranking of moderate or greater.

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO₂, CH₄, and N₂O. Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (ECORP 2019a; Appendix A).

Table 4.8-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps over 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂ (ECORP 2019a). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weight each gas by its global warming potential. Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere (ECORP 2019a).

Table 4.8-1. Greenhous	se Gases
Greenhouse Gas	Description
CO ₂	CO ₂ is a colorless, odorless gas. CO ₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO ₂ emissions. The atmospheric lifetime of CO ₂ is variable because it is so readily exchanged in the atmosphere.
CH4	CH ₄ is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH ₄ is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH ₄ to the atmosphere. Natural sources of CH ₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH ₄ is about12 years.
N ₂ O	N ₂ O is a clear, colorless gas with a slightly sweet odor. N ₂ O is produced by both natural and human-related sources. Primary human-related sources of N ₂ O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N ₂ O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years.

Sources: ECORP 2019a; Appendix A

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; suffice it to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

4.8.2 Regulatory Framework

Riverside County Climate Action Plan (CAP)

The Riverside County CAP (2019) main objectives are to provide a more livable, equitable, and economically vibrant community through the incorporation of sustainability features and reduction of GHG emissions.

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The goals and policies identified in the CAP are geared towards improving sustainability in Riverside County and incorporating environmental responsibility into its daily management. To achieve compliance with statewide GHG reduction targets the County of Riverside has put into effect local policies that will reduce GHG emissions by 15 percent by 2020. These policies encourage energy efficiency and renewable energy in buildings, transit-oriented planning, water conservation and increase water diversion. The CAP provides a focused roadmap for advancing environmental sustainability and reducing GHG emissions in the County.

Riverside County GHG Screening

As part of the 2018 updated CAP, the County implemented cost-effective strategies for reducing community-wide GHG emissions associated with new development projects. These strategies include applying an emissions level that is determined to be less than significant for small projects and utilizing the Screening Tables to mitigate project GHG emissions that exceed a threshold of 3,000 metric tons of CO₂e per year. The purpose of the Screening Tables is to provide guidance in measuring the reduction of GHG emissions attributed to certain design and construction measures incorporated into development projects.

4.8.3 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				

Construction

Construction-related activities that would generate GHGs include worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 4.8-2 illustrates the specific construction-generated GHG emissions that would result from construction of the Project. Actual construction of the Project would be dictated by several regulatory forces. As such, if construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover.

Table 4.8-2. Construction-Related Greenhouse Gas Emissions				
Emissions Source	CO₂e (Metric Tons/Year)			
2021	175			
2022	787			
2023	63			
Total	1,025			

Source: CalEEMod version 2016.3.1. See Attachment B of Appendix A for emission model outputs.

Notes: Emission projections account for the net export of approximately 520,000 cubic yards of soil from Phase 1 and 20,000 cubic yards of soil from Phase 2.

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As shown in Table 4.8-2, Project construction would result in the generation of approximately 1,025 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Impacts resulting from the construction of the Proposed Project would be less than significant.

Operations

In terms of operational GHG emissions, the Project involves the development of Bundy Canyon Basin and revisions to Lateral C. The Project would not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, would not generate quantifiable GHG emissions. Additionally, vehicle trips to the project area due to maintenance would be minimal. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

The Riverside County CAP is a strategic planning document that identifies sources of GHG emissions within the County's boundaries, presents current and future emission estimates, identifies a GHG reduction target for future years, and presents strategies, policies, and actions to reduce emissions from the energy, transportation, land use, water use, and waste sectors. The GHG reduction strategies in the CAP build on inventory results and key opportunities prioritized by the County staff and members of the public. The CAP consists of strategies that identify steps the County will take to support reductions in GHG emissions. The County will achieve these reductions in GHG emissions through a mix of voluntary programs and new strategic standards. All standards presented in the CAP respond to the needs of development through achieving more efficient and sustainable resources.

Both the existing and the projected GHG inventories in the CAP were derived based on the land use designations and associated designations defined in the County of Riverside General Plan. The Project involves the improvement of stormwater drainage and flood protection facilities in order to improve public safety. The Project does not involve any uses that would increase population beyond what is considered in the General Plan. Since the Project is consistent with the General Plan it is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan, and as a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by the County to develop the CAP.

In addition to complying with the land use assumptions and population/job growth projections used by the County to develop the CAP, project compliance with the County's GHG Plan is demonstrated through the CAP development review process, which ensures the implementation of appropriate GHG-reduction requirements to projects. Specifically, this process employs Screening Tables to mitigate project GHG emissions that exceed a threshold of 3,000 metric tons of CO₂e per year. The purpose of the Screening

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Tables is to provide guidance in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. The 3,000 metric tons of CO₂e per year value is used in defining small projects that are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis described below. As shown above, the Project would generate less than 3,000 metric tons of CO₂e per year during construction and operations. Therefore, the Project would comply with the emissions reduction targets in the County's GHG Plan. A less than significant impact would occur in this regard.

The Project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs.

Cumulative GHG Impacts

Climate change is a global problem. And GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have much longer atmospheric lifetimes of one year to several thousand years that allow them to be dispersed around the globe.

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As previously discussed, the Project would not conflict with the 2016 RTP/SCS. As a result, the Project would not conflict with any GHG reduction plans. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

4.8.4 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

A hazardous material is defined as a hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency or if it displays characteristics defined as hazardous by a federal, state, or local agency. The California Health and Safety Code, Section 25501 defines a hazardous material as follows:

"Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering

agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Pursuant to Government Code Section 65962.5, both the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. The project facilities are not listed by the DTSC or SWRCB as a hazardous substances site on the list of hazardous waste sites compiled pursuant to Government Code Section 65962.5 ("Cortese List"). A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations within the project site (DTSC 2019; SWRCB 2019).

4.9.2 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				

The construction phase of the Project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, pesticides, and other similar materials. Best Management Practices (BMPs) stipulating proper storage of hazardous materials and vehicle refueling would be implemented during construction as part of the Stormwater Pollution Prevention Plan (SWPPP). All transport, handling, use, and disposal of substances such as petroleum products, paints, and solvents related to the operation and maintenance of the Project would comply with all Federal, State, and local laws regulating the management and use of hazardous materials. The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				

As stated in the response to question 4.8.1 a) above, hazardous materials used during construction of the Project would be transported, handled, used, and disposed of in accordance with all Federal, State, and local laws regulating the management and use of hazardous materials. A SWPPP, listing BMPs to prevent construction pollutants and products from violating any water quality standard or waste discharge requirements, would be prepared and implemented. Impacts would be less than significant.

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	Wildomar MDP Lateral C R				
Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
Corne Pleas assoc comp There	e are two schools located within one-quarter mile of erstone Christian School and California Lutheran Higge see the responses to questions 4.8.1 a) and 4.8.1 b) siated BMPs the emissions and handling of hazardous by with Federal, State, and local laws regulating the effore, the Project would not create a significant haza ficant.	th School, bo above; with the emissions, ma emanagemen	th located east ne implementati aterials, substan at and use of h	of the projection of a SWF ces, or waste azardous ma	PPP and would aterials.
Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
proje the St datab	iew of the Department of Toxic Substances Controlises site is not located on any identified hazardous materiate Water Resources Control Board's (SWRCB) Leaking base and the Environmental Protection Agency's (EPA) and the Environmental Protection Agency (EPA) a	terials sites (C ng Undergrou) EnviroMappo	OTSC 2019). In a nd Storage Tanl er indicated tha	ddition, a re k (LUST) Geo t there are n	view of stracker o listed
Wor	uld the Project:	Potentially Significant	Less than Significant with	Less than Significant	No Impact

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				

There are no airports within two miles of the project site. The nearest public airports to the project site are Ontario International Airport, Riverside Municipal Airport, and McClellan-Palomar Airport, each located

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more than 30 miles from the project site (County of Riverside 2015b). Given the distance of the project site to the nearest airports, there would be no safety hazards for people residing or working within the project site or vicinity. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				

Operation of the Project would not interfere with an adopted emergency response plan. However, the construction of the Project has the potential to interfere with emergency response access to areas near the project site (County of Riverside 2015b). Prior to any lane closures, the District (or its contractor) will have a Traffic Control Plan in place to ensure proper access to residences and businesses by emergency vehicles during construction and to maintain traffic flow. Impacts to emergency access would be less than significant.

Would	the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
in	xpose people or structures, either directly or ndirectly, to a significant risk of loss, injury or eath involving wildland fires?				

The Project is located in a developed area of the City of Wildomar; there are no wildlands within the project site or its vicinity (County of Riverside 2015b). No impact would occur.

4.9.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

Regional Hydrology

The City of Wildomar is located within the Santa Margarita Watershed in western Riverside County. The Santa Margarita Watershed encompasses approximately 750 square miles and drains the southwest section of Riverside County, which includes the cities of Menifee, Murrieta, Wildomar, and unincorporated areas of Riverside County. Surface water bodies within the Santa Margarita Watershed include Murrieta Creek, Temecula Creek, and the Santa Margarita River. Runoff from within the boundaries of the Santa Margarita Watershed collect in Murrieta and Temecula creeks, eventually combining to form the Santa Margarita River. This confluence eventually drains into the Pacific Ocean on Marine Corps Base Camp Pendleton, just north of the City of Oceanside.

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Site Hydrology and On-Site Drainage

In general, the project area is characterized by developed, disturbed, and previous agricultural use areas. Elevation ranges within the site range from approximately 1,250 to 1,500 feet above msl. There are six ephemeral drainages in the project area, including Bundy Canyon Wash. Most of these features are less than one foot in width, being small ephemeral drainages that host stormwater flows from relatively small drainage areas. Bundy Canyon Wash is located adjacent and meanders approximately parallel to the revised Lateral C alignment.

4.10.2 Hydrology and Water Quality (X) Environmental Checklist and Discussion

Woul	d the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				

Construction Related Water Quality Impacts

The Project consists of revisions to the Wildomar MDP Lateral C System. During construction, the District would implement a Storm Water Pollution Prevention Plan (SWPPP), listing Best Management Practices (BMPs) to prevent construction pollutants and products from violating any water quality standard or any waste discharge requirements. These on-site BMPs would treat stormwater before it discharges into drainages. Additionally, the State has published a set of BMPs for both pre- and post-construction periods, which would be applied to the Project. The District would identify the appropriate BMPs for the Project. Compliance with the provisions of the best management practices would reduce impacts associated with water quality standards and discharge requirements to a less than significant level.

Operational Related Water Quality Impacts

During operation, the Project would collect, convey, and discharge stormwater runoff originating from developed areas that may already produce pollutants. The District is required to comply with the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit issued by the Regional Water Quality Control Board. The amount of contaminants discharged in stormwater drainage varies based on a variety of factors, including pollutants on surfaces and the amount of rainfall. The NPDES permit requires a SWPPP to be developed and implemented and the SWPPP to identify best management practices for construction and operation in project design. Compliance with these established programs would ensure that the Project would not result in substantial discharges of typical stormwater pollutants. A less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				

The District is proposing revisions to the Wildomar Master Drainage Plan Lateral C stormwater management facilities consisting of realignment and improvements. The Project is located adjacent to a developed portion of the City of Wildomar and would not involve the withdrawal of groundwater. When complete the Project would provide the area with improved drainage and protection from flooding and would not interfere with groundwater recharge. A less than significant impact would occur.

Wou	Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	of t alte thr	ostantially alter the existing drainage pattern the site or area, including through the eration of the course of a stream or river or ough the addition of impervious surfaces, in a nner that would:				
	i)	result in substantial erosion or siltation on- or off-site;				
	ii)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				\boxtimes
	iii)	create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv)	impede or redirect flood flows?				\boxtimes

The Project would construct drainage infrastructure to address the current and reasonably foreseen future drainage needs of the community. The project is expected to convey water through improved infrastructure and would not substantially increase future erosion potential on or off site. Additionally, during construction of the Project, a SWPPP including BMPs would be implemented to minimize erosion potential and water quality degradation of the project site and offsite water courses. Therefore, impacts associated with the Project to streams or rivers due to erosion or siltation are considered less than significant.

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- **ii)** The Project would provide the area with improved drainage and flood protection. A beneficial impact would occur.
- The Project would provide the area with improved drainage and flood protection by conveying more runoff than existing facilities. Surface runoff emanating from the project site would be directed to the realigned and improved underground drainage facilities that would be able to accommodate anticipated flows. Thus, runoff volumes associated with the Project would not exceed the capacity of the proposed drainage facilities. Although the Project could result in polluted runoff, compliance with regulatory requirements for water quality and BMPs (see response to question 4.10.2 (a) above) would minimize these impacts to a less than significant level.
- **iv)** The Project consists of drainage facility improvements capable of conveying a 100-year storm event. The Project would provide flood protection to the Wildomar area through efficient conveyance of flows. A beneficial impact would occur.

Would the Proj	ect:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
· ·	azard, tsunami, or seiche zones, risk pollutants due to project inundation?				

According to County of Riverside General Plan Special Flood Hazard Areas Map, the project site is not located in an area designated as a special flood hazard area. The project site is located approximately four miles southeast of Lake Elsinore and 25 miles east of the Pacific Ocean. Due to the distance from a large body of water it would not be subject to seiche or tsunami. Therefore, the Project would not be at risk of releasing pollutants as a result of flood hazard, tsunami or seiche. No impact would occur.

Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

The Project would construct improved drainage facilities and comply with the requirements of the local NPDES Stormwater Program by implementing a SWPPP listing BMPs to prevent construction pollutants and products from violating any water quality standards or waste discharge requirements. The Project is located within the Santa Margarita Watershed Management Area (WMA) and would comply with the requirements of the Regional MS4 Permit (Order No. R9-2013-0001, as amended by R9-2015-0001 and R9-2015-0100) issued by the California Regional Water Quality Control Board. Therefore, construction and operation of the Project would not conflict or obstruct implementation of the local water quality control plan. No impact would occur.

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4.10.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.11 Land Use and Planning

4.11.1 Environmental Setting

The project site is located east of I-15 along street right-of-way, from Bundy Canyon Road to just south of Como Street and within Bundy Canyon Wash in the City of Wildomar. The project vicinity is mostly characterized by Medium High Density Residential, Right-of-Way, and Public Facility land uses. The Bundy Canyon Basin portion (Phase 1) of the Project is designated as Medium High Density Residential. The remaining portions of the project site (Phase 2) are located along street right-of-way, surrounded by areas designated as Medium Density Residential, Medium High Density Residential, Very High Density Residential, Business Park, Commercial Retail, Mixed-Use Planning Area, Light Industrial and Public Facilities (City of Wildomar 2018b).

4.11.2 Land Use and Planning (XI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?				\boxtimes

The project site is surrounded by residential, commercial, industrial, and business park land uses. The Project would construct drainage improvements within the undeveloped proposed Bundy Canyon Basin site and existing street right-of-way. Due to the nature and extent of the Project within an undeveloped site and existing street right-of-way, it would not physically divide an established community. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

The Wildomar MDP serves as a plan guide for the long-term construction scheduling of primary drainage facilities to provide adequate protection from flooding to the City of Wildomar. The Project would be designed and implemented to follow and comply with the guidance found in the MDP. No impact would occur.

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4.11.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.12 Mineral Resources

4.12.1 Mineral Resources (XII) Environmental Checklist and Discussion

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				

According to the County of Riverside General Plan Mineral Resource Zones map, the project site is located within Mineral Resource Zone 3 (MRZ-3) (significance of mineral deposits undetermined) (County of Riverside 2015b). There are no mining activities being conducted on the site and no mining activities are planned for this site. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. No impact would occur.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
important mir	oss of availability of a locally- neral resource recovery site a local general plan, specific plan use plan?				

Please see response to question 4.11.1 a) above. The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan (County of Riverside 2015). No impact would occur.

4.12.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.13 Noise

4.13.1 Environmental Setting

Noise is generally defined as sound that is loud, disagreeable, or unexpected. Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations.

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Sensitive Receptors

Some land uses are considered more sensitive to noise than others, these are classified as sensitive receptors. This is due to the amount of noise exposure and the types of activities typically involved at the receptor location. Noise exposure at the receptor location is predicated on the magnitude and frequency of said noise event, exposure duration, and exterior-to-interior sound attenuation. Examples of sensitive receptors include residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks which are generally more sensitive to noise than commercial and industrial land uses. Sensitive receptors near the project site include the residences north and east of the proposed Bundy Canyon Basin, the residences along White Street and Central Street, Living Hope Lutheran Church located at 31970 Central Street, and California Lutheran High School located at 31970 Central Street.

City of Wildomar General Plan

Upon incorporation in 2008 the City of Wildomar adopted the County of Riverside General Plan; therefore, County ordinances will remain in place until the City of Wildomar adopts ordinances superseding them.

Riverside County General Plan

The County of Riverside General Plan contains the following policies related to effects of noise and vibration to specific land uses that are relevant to the Project (County of Riverside 2015b).

- **N 1.5** Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County. (Al 105, 106, 108)
- **N 12.1** Minimize the impacts of construction noise on adjacent uses within acceptable practices. (AI 105, 108)
- **N 12.2** Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas. (Al 105, 108)
- **N 12.3** Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the County for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as
 - a. Temporary noise attenuation fences;
 - b. Preferential location of equipment; and
 - c. Use of current noise suppression technology and equipment. (Al 107)
- **N 12.4** Require that all construction equipment utilizes noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. (Al 105, 108)

- **N 13.5** Consider the issue of adjacent residential land uses when designing and configuring all new, non-residential development. Design and configure on-site ingress and egress points that divert traffic away from nearby noise-sensitive land uses to the greatest degree practicable. (Al 106, 107)
- **N 15.1** Restrict the placement of sensitive land uses in proximity to vibration-producing land uses. (Al 105)
- **N 15.2** Consider the following land uses sensitive to vibration:
 - Hospitals;
 - · Residential Areas;
 - Concert Halls;
 - Libraries;
 - Sensitive Research Operations;
 - · Schools; and
 - Offices
- **N 15.3** Prohibit exposure of residential dwellings to perceptible ground vibration from passing trains as perceived at the ground or second floor. Perceptible motion shall be presumed to be a motion velocity of 0.01 inches/second over a range of 1 to 100 Hz.

4.13.2 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				

The County of Riverside Noise Ordinance No. 847 and Chapter 9.48 of the City of Wildomar's Municipal Code exempts noise produced by facilities owned or operated by a governmental agency and noise generated in the construction of capital improvement projects of a governmental agency. Additionally, the Project would follow the District's Standard Operating Procedures limiting construction between the hours of 7:00 AM to 5:00 PM, consistent with the most stringent noise limitations outlined in the City's municipal code for private construction projects. Noise generated by the construction of the Project would be temporary and no permanent noise sources would be created. Impacts would be less than significant.

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Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in generation of excessive groundborne vibration or groundborne noise levels?				

Construction of the Project would involve the temporary use of large construction equipment which would result in temporary vibrational noise. Vibrational noise is a concern when sensitive receptors are in close proximity to the vibration sources. The Project would be located within the right-of-way of existing streets in the City of Wildomar, in an area with residential, worship, and school land uses. These land uses are considered sensitive receptors (County of Riverside 2015a). However, construction and operational maintenance activities would be restricted to day time hours consistent with the City's municipal code (please see the response to question 4.13.2 a) above), thereby eliminating the potential for vibration impacts during sensitive nighttime hours. Once operational, the Project would not be a source of ground-borne vibration; therefore, impacts would be less than significant.

Woı	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

There are no private airstrips or public use airports within two miles of the project site. The nearest public airports to the project site are Ontario International Airport, Riverside Municipal Airport, and McClellan-Palomar Airport all located more than 30 miles from the project site (County of Riverside 2015b). Given the distance of the project site to the nearest airports, the Project would not expose people residing or working in the project area to excessive noise levels within two miles of a public airport. No impact would occur.

4.13.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.14 Population and Housing

4.14.1 Environmental Setting

The City Wildomar primarily consists of a mixture of modern housing tracts, mature homes, and acreages with horses. The community of Wildomar became a City on July 1, 2008. At that time, the population for the City of Wildomar was 28,000 residents. Prior to its incorporation as a City, the community of Wildomar was

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primarily a ranching and farming community. Since the construction of I-15, the City of Wildomar has experienced a mixture of urban and rural growth.

4.14.2 Population and Housing (XIV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				

The Project does not propose the construction of new housing or businesses and therefore is not anticipated to directly or indirectly induce population growth in the area. The Project would construct drainage infrastructure improvements to protect existing facilities and other planned development in the City of Wildomar pursuant to the County of Riverside General Plan (County of Riverside 2015b) . No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?				

The Project consists of the construction of drainage infrastructure improvements within existing right-of-way in a mostly developed portion of the City of Wildomar. The Project would not involve the removal of existing houses; therefore, it would not involve the displacement of people. No impact would occur.

4.14.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.15 Public Services

4.15.1 Environmental Setting

Police Services

The Riverside County Sheriff's Department provides police protection services to the City of Wildomar. Local policing for the City of Wildomar operates from the Lake Elsinore Sheriff's Station located at 333 Limited Avenue, Lake Elsinore, CA 92530 (City of Wildomar 2019).

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Fire Services

The Riverside County Fire Department/CALFIRE provides fire protection services for the City of Wildomar. Within the City of Wildomar the Riverside County Fire Department operates out of Station 61 located at 32637 Gruwell Street, Wildomar, CA 92595. Additionally, the Riverside County Fire Department through its integrated, cooperative regional fire protection program provides primary fire response services to Wildomar calls from Station 68 in Menifee, Station 75 in Bear Creek, and Station 94 in Elsinore (City of Wildomar 2019).

Schools

The Lake Elsinore Unified School District (LEUSD) located at 545 Chaney Street, Lake Elsinore, CA 92530 provides educational services to the City of Wildomar and surrounding areas. The LEUSD currently operates 23 schools, as well as alternative education programs, serving approximately 21,565 students (LEUSD 2019).

Parks

The City of Wildomar operates three parks (Marina O'Brien, Regency-Heritage, and Windsong) providing approximately 15 acres of parkland.

4.15.2 Public Services (XV) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Fire Protection?				\boxtimes
	Police Protection?				\boxtimes
	Schools?				\boxtimes
	Parks?				
	Other Public Facilities?				

Police Services

Construction activities associated with the Project would be temporary and cease at project completion. Operation of the Project would not create a substantial number of jobs that would induce population

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growth necessitating additional services or extending response times for police protection services. No impact would occur.

Fire Protection

The Project would not require additional services or extended response times for fire protection services. The Project would help reduce flood hazards in the project area and thus, has the potential to reduce any additional need for emergency services resulting from flood related emergencies. No impact would occur.

Schools

The Project would not include new housing or result in substantial employment opportunities that would affect local school enrollment. No school facilities would be affected by the Project. No impact would occur.

Parks

The Project would be located along existing street right-of-way and within Bundy Canyon Basin and would not interfere with or have adverse impacts on parks. Furthermore, the Project would not involve new housing or result in substantial new employment opportunities that would necessitate the need for new parks. No impact would occur.

Other Public Facilities

The Project is not expected to induce population growth; therefore, there would be no additional demand for schools, parks, or other public facilities. The Project would not result in the need for new or physically altered government facilities nor affect time or other performance objective. No impact would occur.

4.15.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.16 Recreation

4.16.1 Recreation (XVI) Materials Checklist

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				

The Project involves the improvement of stormwater drainage and flood protection facilities in order to improve public safety. The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. No impact would occur.

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				

The Project consists of underground drainage system improvements along street right-of-way and within Bundy Canyon Basin and would not include recreational facilities. As such, the Project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impact would occur.

4.16.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.17 Transportation

4.17.1 Transportation (XVII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				

Traffic impacts associated with the Project would be limited to the construction period and during maintenance activities of the proposed MDP facilities. Construction of Phase 1 components including the proposed Bundy Canyon Basin would not require lane closures, as those MDP facilities would be located on designated sites outside of roadways. The Phase 2 components associated with the Project would be built primarily within existing street ROWs and require road closures during construction and maintenance activities. The District will have a Traffic Control Plan in place when working on facilities that would require lane closures or significant rerouting of traffic. A less than significant impact would occur.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				

CEQA Guidelines section 15064.3, subdivision (b) details the use of vehicle miles traveled (VMT) to assess the significance of transportation impacts. As detailed in CEQA Guidelines section 15064.3, subdivision (c),

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a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide. The Project meets the Governor's Office of Planning and Research's (OPR's) definition of a small project (less than 110 daily trips) and would be screened out of a VMT analysis:

Screening Threshold for Small Projects. Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day) generally may be assumed to cause a less-than significant transportation impact (OPR 2018).

Traffic impacts associated with the Project would be limited to the construction period and during maintenance activities of the proposed MDP facilities. The Project would not exceed the 110 daily trip threshold. As such, the Project would result in a less than significant impact.

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				

Phase 1 project components are mostly located within the footprint of the proposed Bundy Canyon Basin and do not include reconfigurations to existing roads. Phase 2 project components are located within the existing right-of-way of White Street, Central Street, Como Street, Grove Street, and Baxter Road. No road reconfigurations are proposed for Phase 2 components. A less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?			\boxtimes	

Phase 1 components associated with the Project are located south of Bundy Canyon Road and west of Monte Vista Drive within an undeveloped area (see Figure 2) and would not affect emergency access. Phase 2 project components are located along White Street, Central Street, Como Street, Grove Street, and Baxter Road. Construction activities would be temporary with operational maintenance occurring annually. Therefore, the Project would not result in inadequate emergency access during construction or operation. Additionally, the District will have a Traffic Control Plan in place which would reduce any disruption of traffic to a less than significant level.

4.17.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

Ethnohistory. The project area is located in the territory once controlled by the Cupan group of Takic-speaking people referred to as the Luiseño. The term Luiseño applies to Native Americans who were missionized by friars from San Luis Rey mission, whereas the term Juaneño refers to the Cupan group of Takic-speaking people associated with the San Juan Capistrano mission. Although Kroeber and Harrington separated the Luiseño and Juaneño on the basis of linguistic differences, White (1963:91) suggested that they are ethnologically and linguistically one ethnic group (Bean and Shipek 1978:550) (Appendix D).

The Luiseño occupied most of the area drained by the San Luis Rey and Santa Margarita Rivers (but not including upper Wilson Creek and Tucalota Creek), as well as the lower part of the San Jacinto River. The Luiseño lived in sedentary and autonomous village groups, each with specific subsistence territories encompassing hunting, collecting, and fishing areas. Villages were typically located in valley bottoms, along streams, or along coastal strands near mountain ranges where water was available and village defense was possible. Inland populations had access to fishing and gathering sites on the coast, which they used during the winter months (Bean and Shipek 1978).

Luiseño subsistence was based on the gathering of acorns, seeds, greens, bulbs, roots, berries, and other vegetal foods. This was supplemented by hunting mammals such as deer, antelope, rabbit, woodrat, ground squirrels, and mice, as well as birds including quail, doves, and ducks. Bands along the coast also exploited marine resources, such as sea mammals, fish, crustaceans, and mollusks. Inland, trout and other fish were taken from mountain streams (Bean and Shipek 1978).

Hunting was done both individually and by organized groups. Tool technology for food acquisition, storage, and preparation reflects the size and quantity of items procured. Small game was hunted with the use of curved throwing sticks, nets, slings, or traps. Bows and arrows were used for hunting larger game. Dugout canoes, basketry fish traps, and shell hooks were used for near-shore ocean fishing. Coiled and twined baskets were made for food gathering, preparation, storing, and serving. Other items used for food processing included large shallow trays for winnowing chaff from grain, ceramic and basketry storage containers, manos and metates for grinding seeds, and ceramic jars for cooking (Bean and Shipek 1978).

Villages had hereditary chiefs who controlled religious, economic, and territorial activities (Bean and Shipek 1978; Boscana 1933). An advisory council of ritual specialists and shamans was consulted for environmental and other knowledge. Large villages located along the coast or in inland valleys may have had more complex social and political structures than settlements controlling smaller territories (Bean and Shipek 1978; Strong 1929).

Distinctive pictographs are widely known across Luiseño and other Takic-speaking areas. Usually red and geometric in form, these images have been associated with the shamanistic quest for spirit helpers as well as the sphere of social relations, settlement pattern, and landscape symbolism (Shepard 1996).

The Luiseño cosmology centered around a dying-god motif and a creator-culture hero named Wiyot (Bean and Shipek 1978:557). Wiyot was a legendary religious leader who was the son of earth-mother (tama

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yawut). The ancestral people followed the leader in their migration from the north to their homeland. As the legend goes, when Wiyot was sick and dying, the people took him to a number of sacred hot springs to cure him. It was said that Wiyot died at the Elsinore Hot Springs. Therefore, the Elsinore Hot Springs has religious significance for the Luiseño, as the locality known as Itengvu Wumoumu (DuBois 1908:134; Harrington 1978:199).

After the San Luis Rey Mission was established in 1798 on the lower San Luis Rey River, most Luiseño were converted and taken to the mission. Poor living conditions at the missions and introduced European diseases led to a rapid decline of the Luiseño population. Following closure of the missions by the Mexican government, Luiseño dispersed throughout southern California. Some worked on the Mexican ranchos, others moved to newly founded towns established for them, some sought refuge among inland groups, and a few managed to acquire land grants. Later, many moved to, or were forced onto, reservations established by the U.S. government. Although many of their cultural traditions had been suppressed during the Mission Period, the Luiseño were successful at retaining their language and certain rituals and ceremonies. Starting in the 1970s, there was a revival of interest in the Luiseño language and culture (Bean and Shipek 1978:558).

Assembly Bill 52. Pursuant to Assembly Bill 52 (AB 52) and Public Resources Code section 21080.3.1, an AB 52 invitation to initiate tribal consultation for the Project was sent on June 7, 2017 to Tribe(s)/Band(s) based on the traditional use area maps that were previously provided to the District. Tribe(s)/Band(s) contacted for AB 52 consultation responded to this request by either deferring their right to consult on the Project to Tribe(s)/Band(s) that are closer to the project area, indicating that they did not have any additional information to provide regarding the project area, or providing sufficient evidence of known tribal cultural resources (TCRs) that occur within the project vicinity and thus initiating formal consultation.

4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	 i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or 				

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ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American		
	Tribe.		

- i) During the cultural resources field survey for the Project two cultural resources were identified. These resources consisted of a utility pole located in the southwest corner of the proposed location for the Bundy Canyon Basin (WL-001), and a segment of historic-age Baxter Road (WL-002) (ECORP 2020c). Resources WL-001 and WL-002 were evaluated using CRHR eligibility criteria to determine whether or not they constitute historical resources under CEQA. The evaluation found that these resources are not eligible for the CRHR under any criteria (ECORP 2020c). Because resources WL-001 and WL-002 are not eligible for the CRHR, they are not Historical Resources as defined by CEQA regulations (CCR Title 14, § 15064.5(a)). However, there always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during project construction. Therefore, implementation of Mitigation Measure CUL-1 would reduce potential adverse impacts to a less than significant level.
- ii) Based on discussion with the AB 52 Consulting Tribe(s)/Band(s), the project area and areas to the south and west were determined to be situated within a culturally sensitive area. There is a complex of related sites and features having cultural value and meeting the definition of a tribal cultural resource (TCR). The sites and features surrounding the Project consist of several place names and milling features. In addition, the Project is located approximately one mile south of a Traditional Cultural Property (TCP) that has been registered with the Sacred Lands File. Due to the presence of known TCRs and places within close proximity to the project site, there is a moderate potential for the Project to impact unknown TCRs on the project site. As such, the following mitigation measures shall be implemented in order to minimize potential impacts to unknown TCRs. With the inclusion and implementation of Mitigation Measures TCR-1 and TCR-2, impacts to TCRs would be less than significant.

4.18.3 Mitigation Measures

TCR-1: Tribal/Cultural Resources Management Plan. The District shall prepare or cause for the preparation of a Tribal/Cultural Resources Management Plan (CRMP) prior to ground disturbing activities. The CRMP shall be based on the final construction grading plans prepared by the District and may include requirements for pre-construction cultural sensitivity training, notification, and monitoring protocol. The CRMP will consider the concerns of the consulting Tribes and the consulting Tribes will have an opportunity to review and comment on the draft CRMP.

In the event that the consulting Tribes are not able to reasonably accommodate the District's requests and/or needs regarding monitoring, the District may proceed with Mitigation Measure TCR-2 as needed:

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TCR-2: Archeological Monitoring. The District may, at its discretion, conduct archeological monitoring and/or reconnaissance of the project site using a qualified archeologist that is not a Tribal monitor or representative of a Native American Tribe. This would occur only as needed during ground-disturbing construction activities.

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

Water Service

The Elsinore Valley Municipal Water District (EVMWD) provides the City of Wildomar, including the project site, with water services. The EVMWD provides water to an approximately 96 square mile area and serves approximately 144,000 residents. Communities serviced by the EVMWD include Lake Elsinore, Canyon Lake, Murrieta, Wildomar, and the unincorporated communities of the Farm, Lakeland Village, Cleveland Ridge, Rancho Capistrano-El Cariso Village, Horsethief Canyon, Sedco and Temescal Canyon. The water provided by the EVMWD is primarily imported water sourced from the Colorado River and Northern California. Additional sources of water include local groundwater and Canyon Lake.

Wastewater

EVMWD provides wastewater and sewer services for the City of Wildomar. EVMWD's sewer system currently operates three sewer treatment plants. Current infrastructure operated by EVMWD includes 310 miles of sewer pipelines and 31 lift stations (EVMWD 2019).

Solid Waste

The City of Wildomar's solid waste and refuse services are provided by *Waste Management*. Waste Management provides services for the disposal of trash, recyclables, and green waste.

Electrical and Natural Gas Service

Electrical and natural gas services to customers in the City of Wildomar are provided by Southern California Edison and the Gas Company respectively.

4.19.2 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				

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Both Phases of the Project involve the construction of flood control facilities in order to improve public safety. Construction of the Project may require multiple utility line relocations; however, this activity can usually be completed with no service interruptions. The utility line relocations would be completed prior to and/or during project construction and as such, the impacts have been evaluated throughout this Initial Study. Where necessary, mitigation measures have been incorporated to reduce all potentially significant impacts. As such, a less than significant impact would occur, and no additional mitigation is required.

Woı	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				

The Project does not involve activities that would require permanent water supplies. Water supplies required during the construction of the Project would be limited to water utilized for dust suppression on site. New or expanded entitlements would not be required for either phase of this project. Any subsequent development that occurs would be subjected to a separate CEQA evaluation to determine appropriate availability of water supplies. As such, a less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				

The Project would improve stormwater management and would not produce wastewater. No new wastewater treatment facilities are required as a result of the Project. No impacts would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				

Due to the nature of the Project, maintenance activities are not anticipated to generate substantial ongoing solid waste during operation. Any waste generated during construction would be minimal and would be disposed of at the nearest landfill permitted to accept the construction waste. It is not likely that the

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project would prohibit achieving State and/or local solid waste reduction goals. A less than significant impact would occur.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

Waste generated by the Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste. No impact would occur.

4.19.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.20 Wildfire

4.20.1 Wildfire (XX) Environmental Checklist and Discussion

land	cated in or near state responsibility areas or so classified as very high fire hazard severity es, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				

According to the Fire Hazard Severity Zones in State Responsibility Areas (SRA) Map for Riverside County (west), the project site is located on land designated as a very high fire hazard severity zone in SRA (CALFIRE 2019). Operation of the Project would not interfere with an adopted emergency response plan. However, the construction of the Project has the potential to interfere with emergency response access to areas near the project site (County of Riverside 2015b). Prior to any lane closures, the District (or its contractor) will have a Traffic Control Plan in place to ensure proper access to residences and businesses by emergency vehicles during construction and to maintain traffic flow. Impacts to emergency access would be less than significant.

lands classi	n or near state responsibility areas or fied as very high fire hazard severity ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
exace	o slope, prevailing winds, and other factors, rbate wildfire risks, and thereby expose ct occupants to, pollutant concentrations a wildfire or the uncontrolled spread of a re?				

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The Project would construct drainage infrastructure improvements and would not include the permanent siting of employees or housing on the project site. Therefore, the Project would not expose project occupants to pollutant concentrations from wildfire as a result of slope, prevailing winds, or other factors. No impact would occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				

The Project would construct drainage infrastructure improvements for improved stormwater management. Maintenance would occur annually within the proposed Bundy Canyon Basin. The Project would not require the installation or maintenance of additional infrastructure that would exacerbate fire risk resulting in temporary or ongoing impacts to the environment. No impact would occur.

land	ocated in or near state responsibility areas or ds classified as very high fire hazard severity es, would the project, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

The Project would construct drainage infrastructure improvements for improved stormwater management. Due to the nature and purpose of the project, a beneficial impact to potential post fire hazard as a result of downstream flooding or landslides is anticipated.

4.21 Mandatory Findings of Significance

mitigation measures listed in this Initial Study.

4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
adopt	roject has the potential to adversely affect: Biologica tion and implementation of Mitigation Measures BIO d be reduced to less than significant levels.				
Doe	s the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
	cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	significant, af		With the miti	gation
The P	cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects	•	iter mitigation. V		_
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Appendix B – Biological Technical Report

Appendix C – Aquatic Resources Delineation Report

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Aquatic Resources Delineation Report

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Geotechnical Report

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APPENDIX H

Wildomar Master Drainage Plan Lateral C Revision