

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Van Norman Complex Routine Operation
and Maintenance Program

PREPARED BY



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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AB	Assembly Bill
AMM	Avoidance and Minimization Measure
AQMP	Air Quality Management Plan
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH ₄	methane
City	City of Los Angeles
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent
Construction General Permit	General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities
dB	decibel
dBA	A-weighted decibel
DTSC	California Department of Toxic Substance Control
GHG	greenhouse gas
GWP	global warming potential
I	Interstate
IRP	Power Integrated Resource Plan
LACM	Natural History Museum of Los Angeles
LADWP	Los Angeles Department of Water and Power
LAR	Los Angeles Reservoir
L _{eq}	energy equivalent noise level
LST	localized significance threshold
MM	mitigation measure
MRZ	Mineral Resource Zone
MT	metric ton
NAAQS	National Ambient Air Quality Standards
N ₂ O	nitrous oxide
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O ₃	ozone
PCE	passenger-car equivalent

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Acronym/Abbreviation	Definition
PM _{2.5}	particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter)
PM ₁₀	particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter)
PSLTRP	Power Strategic Long-Term Resource Plan
RCNM	Roadway Construction Noise Model
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SMARA	State Mining and Reclamation Act of 1975
SO _x	sulfur oxides
TAC	toxic air contaminant
TCR	tribal cultural resource
UV	Ultraviolet
VHFHSZ	Very High Fire Hazard Safety Zone
VNC	Van Norman Complex
VOC	volatile organic compound
Williamson Act	California Land Conservation Act of 1965

1 INTRODUCTION

1.1 Project Overview

The Los Angeles Department of Water and Power (LADWP) intends to approve, and will seek facility-wide permits related to, its long-term, routine operation and maintenance program at the Van Norman Complex (VNC). The VNC is a 1,340-acre industrial complex located in the Granada Hills area of the City of Los Angeles (City). The VNC consists of existing facilities—including, among other things, water storage reservoirs, detention basins, conveyance channels, and treatment facilities—that cumulatively function to receive, store, treat, and distribute water to the City. LADWP must perform routine vegetation management and maintenance activities on several existing facilities throughout the VNC to ensure proper functionality of the facilities and its water and power systems. The following terms are used in this document: the “project area” is the VNC; the “work areas” are the places within the project area where maintenance activities will occur; and a “study area” is a work area plus a 500-foot survey area buffer. Some species have specific survey areas that are a subset of the study area; specific survey areas are described in more detail in the biological letter report provided in Appendix B of this document. The work areas analyzed in this California Environmental Quality Act (CEQA) document consist of the following:

- Upper Debris Basin
- Middle Debris Basin
- Bee Drainage Channel
- San Fernando Gate Drain
- Upper San Fernando Drain Line
- Upper San Fernando Drain Line Features 1 and 2
- Yarnell Debris Basin
- Bull Creek Extension Channel
- Los Angeles Reservoir (LAR) Ultraviolet (UV) Plant Drainage and V-Ditch
- Upper Northeast Drainage
- San Fernando Creek
- Lower San Fernando Detention Basin
- LAR North Dike Stormwater Basin
- East Channel

1.2 California Environmental Quality Act

CEQA serves as the main framework for evaluating potential environmental impacts of proposed projects in California. CEQA emphasizes the need for public disclosure and identifying and addressing potentially adverse environmental changes associated with proposed projects. Unless the project or program is deemed categorically or statutorily exempt, CEQA is applicable to any project or program that must be approved by a public agency in order to be processed and established. The proposed project considered herein does not fall under any of the statutory or categorical exemptions listed in the 2018 CEQA Statute and Guidelines (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.); therefore, it must meet CEQA requirements. LADWP would implement and operate the proposed project and, as a municipal utility, is acting as the CEQA lead agency.

LADWP, as the lead agency, has prepared this Initial Study in accordance with the CEQA Guidelines to evaluate potential environmental impacts and to determine whether an environmental impact report, a negative declaration, or a mitigated negative declaration should be prepared for the proposed project. LADWP has also prepared this Initial Study to satisfy the CEQA requirements of other agencies that may provide approvals and/or permits for the proposed project. The document is accessible to the public, in accordance with CEQA, in order to receive feedback on the proposed project's potential impacts.

1.3 Availability of the Notice of Intent and Initial Study/Mitigated Negative Declaration

The Initial Study/Mitigated Negative Declaration for the proposed project is being distributed directly to numerous agencies, organizations, and interested groups and persons during the 30-day public review period. The Initial Study/Mitigated Negative Declaration is also available at the following locations:

Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, California 90012

San Fernando Branch Library
217 Maclay Avenue
San Fernando, California 91340

Granada Hills Branch Library
10640 Petit Avenue
Granada Hills, California 91344

Sylmar Branch Library
14561 Polk Street
Sylmar, California 91342

2 PROJECT DESCRIPTION

2.1 Background

LADWP is the City's municipal utility, and supplies water and electricity to the 4 million residents, businesses, and visitors in the City. LADWP owns and operates the VNC, which is a critical 1,340-acre industrial property located in the San Fernando Valley approximately 20 miles northwest of downtown Los Angeles (Figure 1, Regional Map). As part of maintaining its infrastructure, LADWP seeks to obtain permits for routine vegetation management and maintenance activities in the work areas throughout the VNC.

The VNC serves many functions, including those relating to water and power service, flood control, and police and fire training. The VNC is the termination point for the Los Angeles Aqueducts, and contains the Los Angeles Reservoir (LAR), the largest in-basin reservoir in the City. LADWP operates the VNC, and the waterways therein, to protect this vital potable water source.

The topography of the VNC is characterized by rolling, gentle hills that generally form a concave south-sloping landscape. The VNC is heavily disturbed as a result of modifications and improvements made over years of operation. The VNC's first facilities were built between 1912 and 1921, when LADWP constructed dams and created the Upper and Lower Van Norman Reservoirs to store water from the Los Angeles Aqueduct. In 1970, LADWP constructed a small bypass reservoir and a dam (Department of the Interior 1974). In 1971, a 6.5-magnitude earthquake struck the area, and caused considerable structural damage to the Lower Van Norman Dam, which prompted LADWP to take the Upper and Lower Van Norman Reservoirs out of service. LADWP replaced the reservoirs with a new medium-sized reservoir, the LAR, in the 1970s in the middle of the complex. In subsequent years, LADWP continued to construct additional water facilities at the VNC, including water treatment facilities, detention basins, drainages, and channels, as well as non-water related facilities, such as an office and training station for the Los Angeles Police Department and Los Angeles Fire Department. In addition, a variety of habitats began to emerge on the landscape that was once underwater, including riparian and herbaceous riparian habitat, and emergent marshland.

2.2 Project Location

Van Norman Complex

The VNC is located within the Granada Hills area of the City, approximately 20 miles northwest of downtown Los Angeles. The VNC is south of the Santa Susana Mountains, west of the community of Sylmar, northwest of the Interstate (I) 5 and I-405 interchange, and east of residential uses in Granada Hills. More specifically, the VNC is located adjacent to Sepulveda Boulevard and I-5 to the east; Balboa Boulevard to the northwest; Woodley Avenue to the west; and Rinaldi Street, I-405, and a commercial and residential development to the south. The North Valley Youth Baseball Fields and the Metropolitan Water District Jensen Water Treatment Plant are located immediately adjacent to the

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northwest end of the VNC. The City's General Plan designates the VNC as both Open Space and Public Facilities, and it is zoned accordingly (Los Angeles Department of City Planning n.d.).

Surrounding Uses

The VNC is surrounded by commercial, residential, open space, and recreational land uses. Specific land uses located in the immediate vicinity of the VNC include the following:

- **North:** I-5, Metropolitan Water District Jensen Water Treatment Plant, North Valley Youth Baseball Fields
- **East:** I-5 and North Sepulveda Boulevard
- **South:** Granada Hills Little League fields, commercial development, residential development
- **West:** Residential development, Knollwood Golf Course and Country Club

2.3 Existing Setting

The VNC encompasses several LADWP and City facilities. LADWP seeks to perform vegetation management and routine maintenance activities in the project area, which is composed of approximately 15 work areas. The facilities where maintenance would occur are listed in Table 2-1, Facilities, and depicted in Figure 2, Project Area.

Table 2-1. Facilities

Map Number ^a	Facilities
1	Upper Debris Basin
2	Middle Debris Basin
3	Bee Drainage Channel
4	San Fernando Gate Drain
5	Upper San Fernando Drain Line
6	Upper San Fernando Drain Line Feature 1
7	Upper San Fernando Drain Line Feature 2
8	Yarnell Debris Basin
9	LAR UV Plant Drainage and V-Ditch
10	San Fernando Creek
11	Lower San Fernando Detention Basin, including East Channel Earthen Extension, East Channel (Riprap), Lower Southeast Drainage, Northeast Drainage, Upper Southeast Drainage, and Western Channel
12	Bull Creek Extension Channel
13	Upper Northeast Drainage
14	LAR North Dike Stormwater Basin
15	East Channel

Notes: LAR = Los Angeles Reservoir; UV = ultraviolet.

^a Refers to Figure 2.

The facilities are described in further detail in this section.

Map Number 1: Upper Debris Basin

The Upper Debris Basin is located near the northwest corner of the VNC (see Figure 2). It includes a well-defined drainage feature with steep banks and adjacent terraces that support upland vegetation. The bottom of the drainage feature exhibits a substrate of sand with a fine layer of silt interspersed with areas of sand, gravel, and cobble. Vegetation is typically sparse on the channel bottom, consisting of seedlings and saplings of mulefat (*Baccharis salicifolia*), sandbar willow (*Salix exigua*), and castor bean (*Ricinus communis*). Individuals of sandbar willow and mulefat grow sporadically in a narrow zone on the lower portions of the banks along with upland species such as white sweet clover (*Melilotus albus*). There are no wetlands associated with this drainage segment. Water that accumulates in the Upper Debris Basin discharges to the Middle Debris Basin (see Figure 3A, Upper and Middle Debris Basins) that, in turn, discharges to the Bull Creek Extension Channel. The primary function of the approximately 3-acre Upper Debris Basin is to capture sediments carried from the surrounding watersheds and to perform flood control functions necessary to protect facilities within the VNC.

Map Number 2: Middle Debris Basin

Immediately downstream of the Upper Debris Basin is the Middle Debris Basin (see Figure 2), which includes a low-flow channel, and features areas of streambed and associated riparian habitat. The existing low-flow channel accounts for 2.91 acres and includes the bed and lower portion of the banks, which range from approximately 26 feet to 47 feet in width. The low-flow channel exhibits a substrate of sand with a fine layer of silt interspersed with areas of sand, gravel, and cobble. Vegetation is typically sparse on the channel bottom, consisting of seedlings and saplings of mulefat. The banks support areas of mulefat, sandbar willow, arroyo willow (*Salix lasiolepis*), Fremont cottonwood (*Populus fremontii*), and giant reed (*Arundo donax*). Mulefat and willow scrub are present on and at the top of the banks, with most of the riparian vegetation on the terrace west of the low-flow channel/streambed. The Middle Debris Basin, like the Upper Debris Basin, functions both as a sediment/flood-control basin.

Maintenance within the Upper and Middle Debris Basins has been previously authorized in accordance with Streambed Alteration Agreement (SAA) 5-209-97, and more recently by SAA 1600-2004-0288-R5 (Revision 2), which terminates December 31, 2022. SAA 1600-2004-0288-R5 authorized temporary impacts to 0.7 acres of riparian habitat.

Map Number 3: Bee Drainage Channel

At the southern terminus of the Middle Debris Basin is a drainage channel designated as the Bee Drainage Channel (see Figure 2), which extends for approximately 700 feet to its confluence with the channel associated with the Middle Debris Basin. The channel originates at an outfall with an approximately 15-foot by 90-foot section of grouted riprap that supports black willow (*Salix gooddingii*), as well as some cattails and tall umbrella sedge (*Cyperus eragrostis*) (see Figure 3B, Bee Drainage Channel).

Map Number 4: San Fernando Gate Drain

The San Fernando Gate Drain sits at the northernmost portion of the VNC (see Figure 2), and spans approximately 500 feet. The ‘gate’ portion of the feature is a concrete outlet that is fed by a large underground pipe that collects runoff from San Fernando Road (see Figure 3C, San Fernando Gate Drain), which collects drainage from a railroad right-of-way and I-5. The drainage channel begins at a 1-foot by 4-foot outfall and extends for approximately 500 feet to where the drainage terminates at an inlet pipe. Similar to the drainage segments described thus far, this drainage feature exhibits a substrate of sand with a fine layer of silt interspersed with areas of sand, gravel, and cobble. Vegetation is typically sparse on the channel bottom, consisting of non-native weedy species including castor bean, spot-leaf spurge (*Euphorbia maculata*), stinkwort (*Dittrichia graveolens*), and Canadian horsetail (*Erigeron Canadensis*). There is no riparian habitat associated with this drainage segment.

Map Number 5: Upper San Fernando Drain Line

The Upper San Fernando Drain Line (see Figure 2) originates immediately downstream of the Tailrace Channel, which consists of water from the Los Angeles Aqueduct (large capsule-shaped channel at north end of complex; not part of proposed project). The Upper San Fernando Drain Line discharges to a pipe that discharges to the East Channel and subsequently to the Lower San Fernando Detention Basin. The channel has been excavated in uplands to convey flows across this portion of the VNC and supports southern cattail (*Typha domingensis*), smartweed (*Persicaria lapathifolia*), and watercress (*Nasturtium officinale*), with white sweet clover on the banks (see Figure 3D, Upper San Fernando Drain Line).

Map Number 6: Upper San Fernando Drain Line Feature 1

Feature 1 of the Upper San Fernando Drain Line (see Figure 2) is a drainage course that extends approximately 400 feet to where it opens into a low area dominated by southern cattail, arroyo willow, red willow (*Salix laevigata*), sand spikerush (*Eleocharis monteridensis*), and hardstem bulrush (*Schoenoplectus acutus*) (see Figure 3E, Upper San Fernando Drain Line Feature 1). Pipes measuring 1-foot in diameter connect this area to the adjacent Upper San Fernando Drain Line, which is separated from the riparian area by an earthen access road.

Map Number 7: Upper San Fernando Drain Line Feature 2

Feature 2 of the Upper San Fernando Drain Line originates to the east and from an outfall where the San Fernando Drain Line begins (see Figure 2), and opens into an area dominated in the upper half by arroyo willow. The upper half of the channel is lined with broken concrete and other rock. The lower half supports a mix of southern cattail, with areas of white sweet clover on the banks and in the channel (see Figure 3F, Upper San Fernando Drain Line Feature 2).

Map Number 8: Yarnell Debris Basin

The Yarnell Debris Basin is located within the east–central portion of the VNC (see Figure 2). A series of pipes discharge to the uppermost portion of the Yarnell Debris Basin—including one 6-foot diameter, one 8-foot diameter, and one 9-foot diameter pipe—each of which carries stormwater from beneath I-5 and Sepulveda Boulevard. In addition, two 5-foot by 7-foot concrete boxes discharge to the basin, both of which receive stormwater from a concrete trapezoidal

channel that parallels Sepulveda Boulevard. Immediately below the three pipes and two boxes, the channel is lined with concrete for approximately 100 feet, after which the channel is earthen. The area lined with concrete accumulates sediments that vary in depth from approximately 6 inches to 1 foot. The earthen drainage channel ranges from 10 feet to 11 feet, and extends through the arroyo willow forest for approximately 1,060 feet to where the vegetation transitions to herbaceous dominated areas that primarily support smartweed, with localized areas of salt grass (*Distichlis spicata*), Mexican rush (*Juncus mexicanus*), and alkali mallow (*Malvella leprosa*). The lower portion of the Yarnell Debris Basin also supports a low area dominated by arroyo and red willow interspersed throughout with sandbar willow, black willow, and Fremont cottonwood occurring to a lesser degree. The Yarnell Debris Basin is a secondary containment area for the Sylmar Converter Stations, a LADWP Power System facility.

Map Number 9: Los Angeles Reservoir Ultraviolet Plant Drainage and V-Ditch

The LAR UV Plant is a second ultraviolet disinfection facility currently being constructed southeast of the LAR to treat water leaving the LAR and entering the City's water distribution system. The LAR UV Plant is being constructed to help LADWP further comply with the U.S. Environmental Protection Agency's Long Term 2 Enhanced Surface Water Treatment Rule. The LAR UV Plant Drainage and V-Ditch refer to the stormwater conveyance channel that runs along the western boundary of the LAR UV Plant (see Figure 2). The LAR UV Plant Drainage feature originates immediately below I-5 and begins as a small erosional feature a few feet in width. The drainage is then carried under an access road by a culvert. Below the access road, the feature becomes a constructed channel that directs runoff from the slopes of I-5 to the Lower San Fernando Detention Basin. Slope gradients are fairly level, with slightly lower elevations within the southern portion of the work area. Distinctive geographic features include the LAR, approximately 850 feet northwest of the work area. The LAR UV Plant Drainage and V-Ditch appear to be some of the more disturbed sites within the VNC (see Figure 3H, LAR UV Plant Drainage and V-Ditch).

The channel supports dense growth of desert brittlebush (*Encelia farinosa*), extending from the access road for about 570 feet to another access road. At the lower access road, flows are discharged through a 24-inch-diameter culvert. Beginning just above the discharge point, the drainage feature below the lower access road consists of a 6-foot wide, "U-Shaped," concrete channel segment, with the area capable of carrying flows approximately 4.5 feet wide. From its point of origin, the concrete channel segment extends for approximately 175 feet where it makes a 90-degree bend and parallels one of the major access roads to the Lower San Fernando Detention Basin. The concrete channel extends for approximately 350 feet to the culverted crossing associated with the LAR UV Plant.

From the culverted crossing, the concrete channel segment extends in a southwesterly direction for another approximately 500 feet to where it turns to the south for another 250 feet to where the concrete ends. A segment of this channel is currently being modified under SAA Notification No. 1600-2017-0113-R5 as part of the LAR UV Plant Project. The modification will include the installation of a 24-inch reinforced corrugated pipe culvert and a concrete headwall at each end of the pipe. Completion of this work is anticipated to be in Summer 2019. The banks on both sides of the concrete channel are dominated by California buckwheat (*Eriogonum fasciculatum*) and desert brittlebush. Where the concrete channel terminates, an earthen channel extends to another access road and this reach of the channel

supports southern cattail, arroyo willow, and sandbar willow. Below the road crossing, the channel is incised 3 feet to 5 feet deep, and the banks are dominated by desert brittlebush, castor bean, shortpod mustard (*Hirschfeldia incana*), and upland non-native grasses, with no wetland or riparian vegetation. SAA Notification No. 1600-2017-0113-R5 also authorizes the installation of a 12-inch-diameter drain line that will cross this segment. The drainage feature then extends toward the Lower San Fernando Detention Basin to where the channel feature becomes indistinct.

Map Number 10: San Fernando Creek

San Fernando Creek originates south of the Lower San Fernando Dam at an outfall structure that discharges water from the Lower San Fernando Detention Basin (see Figure 2). From the outfall, the drainage extends approximately 1,265 feet to its confluence with the Bull Creek Extension Channel. The segment of San Fernando Creek is perennial due to the discharge of water from the Lower San Fernando Detention Basin, and exhibits a stream ranging from 9 feet to 18 feet with fringing wetlands dominated by southern cattail, red willow, arroyo willow, and yellow willow (*Salix lutea*) (see Figure 3I, San Fernando Creek).

Map Number 11: Lower San Fernando Detention Basin

The Lower San Fernando Detention Basin is a primary detention basin in the VNC (see Figure 2). It is located south of the LAR and totals approximately 71.7 acres (see Figure 3J, Lower San Fernando Detention Basin). This area primarily supports disturbed upland habitat (55 acres)¹ with some native upland habitat (4.7 acres), riparian thicket and woodland habitat (8.1 acres), cattail marsh (3.1 acres), and open water (0.25 acres) interspersed. The Lower San Fernando Detention Basin has a prominent canopy made up of Fremont cottonwood; a dense mid-story composed of several willow species, including an arroyo and red willow canopy; and an understory dominated by Douglas's sagewort (*Artemisia douglasiana*), mulefat, stinging nettle (*Urtica dioica*), California wild grape (*Vitis californica*), and cocklebur (*Xanthium strumarium*). The Lower San Fernando Detention Basin supports an area of emergent marsh that ranges from approximately 100 to 250 feet in width and extends for approximately 1,100 feet to where water discharges to an outfall structure that carries water through a pipe to San Fernando Creek.

The Lower San Fernando Detention Basin can receive water from the Bull Creek Extension Channel during overflow events, and can accommodate a peak maximum flow scenario of approximately 8,000 cubic feet per second. Several discrete features occur within the Lower San Fernando Detention Basin, as described below.

Lower Northwest Drainage

The upper portion of this drainage feature is an extension of the Upper Northwest Drainage, and within the Lower San Fernando Detention Basin, the drainage extends to the southeast to where it is no longer distinct.

¹ These acreages represent conditions at the time of the biological and delineation surveys in 2018 and 2019; however, riparian and marsh habitat and areas of open water vary from year to year.

Northeast Drainage

The Northeast Drainage begins immediately below an outfall structure that discharges flows from the Upper Northeast Drainage originating in the Lakeside Debris Basin. Vegetation associated with upper approximately two-thirds of the Northeast Drainage consists of herbaceous vegetation within the channel bottom, including Spanish false fleabane (*Pulicaria paludosa*), stinkwort (*Dittrichia graveolens*), and white sweet clover (*Melilotus albus*). The banks include occasional individuals of red willow (*Salix laevigata*); however, the banks are largely dominated by non-native castor bean (*Ricinus communis*). The lower one-third of the channel supports dense thickets of the Spanish false fleabane and white sweet clover (*Melilotus albus*), with small patches of southern cattail (*Typha domingensis*) and scattered red willow, arroyo willow (*Salix lasiolepis*), and Fremont cottonwood (*Populus fremontii*). Slopes along the lower one-third of the channel support a mix of willows and cottonwoods mixed with castor bean and white sweet clover. This feature discharges to the emergent marsh within the Lower San Fernando Detention Basin.

Upper Southeast Drainage

The Upper Southeast Drainage begins immediately below an outfall structure that discharges flows originating off site and extends approximately 1,500 feet from the outfall as it enters the emergent marsh area. Vegetation associated with the Southeast Drainage consists of herbaceous vegetation within the channel bottom, including dense thickets of yellow-star thistle (*Centaurea solstitialis*), Russian thistle (*Salsola tragus*), Spanish false fleabane, stinkwort, white sweet clover, and common tarweed (*Centromadia pungens* ssp. *pungens*).

Lower Southeast Drainage

The Lower Southeast Drainage originates off site and drains to the Lower San Fernando Detention Basin through a drainage lined with broken concrete. Discharges originate locally within a recycling facility and, from where the drainage enters the Lower San Fernando Detention Basin, extends approximately 220 feet to where the riparian habitat begins. The upper 220 feet supports a mix of upland scrub, including coyote bush (*Baccharis pilularis*), desert brittlebush (*Encelia farinosa*), and upland grasses and forbs such as summer mustard (*Hirschfeldia incana*). This feature discharges to the emergent marsh within the Lower San Fernando Detention Basin.

East Channel Earthen Extension

The concrete portion of the East Channel (described below) discharges to a 350-foot-long riprap-lined earthen segment that, in turn, discharges to the upper portion of the Lower San Fernando Detention Basin. Within the Lower San Fernando Detention Basin, the Earthen Channel ranges in width from approximately 30 to 40 feet and extends for approximately 940 feet to where the Earthen Channel discharges to an area of emergent marsh. The Earthen Channel supports arroyo willow, red willow, and black willow (*Salix gooddingii*) with an understory of southern cattail (*Typha domingensis*).

Eastern Wetland

Immediately east of and adjacent to the Earthen Channel described above is an area of herbaceous wetlands dominated by non-native rabbitsfoot grass (*Polypogon monspeliensis*). This area is connected by sheet flow to the area of emergent marsh within the Lower San Fernando Detention Basin.

Work Area 12: Bull Creek Extension Channel

The Bull Creek Extension Channel (see Figure 2) is a concrete-lined structure that originates where the Middle Debris Basin terminates and the channel discharges to the Bull Creek Extension Channel (see Figure 3K, Bull Creek Extension Channel). The channel extends for approximately 9,600 linear feet to its confluence with San Fernando Creek. The width of the channel varies from approximately 25 feet to 30 feet. In addition to the Bull Creek Extension Channel, LADWP constructed a concrete overflow that discharges high flows to the Lower San Fernando Detention Basin.

Work Area 13: Upper Northeast Drainage

The Upper Northeast Drainage is an unvegetated earthen-bottomed drainage located on the southeastern boundary of the VNC (see Figure 2). The Upper Northeast Drainage enters the VNC through a culvert that extends beneath I-5, originating within the Lakeside Debris Basin outside of the VNC. Discharges from the Lakeside Debris Basin through the Upper Northeast Drainage are routed into the Lower San Fernando Detention Basin through a 150-inch-diameter corrugated metal pipe culvert that crosses beneath I-5. Although the bottom of the streambed is unvegetated, vegetation occurs on the slopes surrounding the drainage (see Figure 3L, Upper Northeast Drainage), and includes arroyo willow thickets, California sagebrush scrub, and Fremont cottonwood forest alliance.

Work Area 14: Los Angeles Reservoir North Dike Stormwater Basin

The LAR North Dike Stormwater Basin is a stormwater basin located northwest of the LAR (see Figure 2). Similar to the Yarnell Debris Basin, the presence of water at the LAR North Dike Stormwater Basin is subject to variable levels of inundation due to seasonal weather conditions, as well as activities with LADWP operations. Hydrophytic or emergent herbaceous vegetation (e.g., cattail marsh, smartweed patches, and young willows) may grow within areas where open water recedes (see Figure 3M, LAR North Dike Stormwater Basin). Vegetation communities at this basin includes cattail marsh, water sedge and lakeshore sedge meadows, and California buckwheat scrub.

Work Area 15: East Channel

The East Channel is a concrete-lined channel that conveys flows from the northern edge of the LAR, along the LAR's eastern edge, and into the Lower San Fernando Detention Basin (see Figure 2). In the East Channel, small patches of cattails occur within sediment accumulated along seams in the concrete (see Figure 3N, East Channel).

2.4 Project Operations and Maintenance

The specific activities performed at each work area would vary due to the unique characteristics of the work areas (e.g., some work areas are completely natural, while others are predominantly constructed). However, activities would generally include removal of overgrown vegetation, mowing herbaceous vegetation, and removal of accumulated sediment and debris. LADWP staff would perform the maintenance activities annually or on an as-needed basis. LADWP would rotate maintenance activities supporting riparian habitat in the Upper Debris Basin, Middle Debris Basin, and Lower San Fernando Detention Basin such that each area would be subject to maintenance no more than once every 3 years. As described in Avoidance and Minimization Measure (AMM) Bio-1, LADWP would conduct work

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outside of the bird breeding/nesting season, or conduct nesting bird surveys and monitoring to ensure that there would be no noise impacts to nesting birds. Additionally, within the blue elderberry stands near the Middle Debris Basin, maintenance would be limited to hand pruning of the lower limbs, as needed, and maintenance of the understory. Maintenance activities in the Upper and Middle Debris Basins would be consistent with the existing SAA 1600-2004-0288-R5 revision 2; these activities are detailed below.

In performing the proposed maintenance activities, LADWP would use equipment ranging from hand tools, mowers, loaders, bobcat dozers, and backhoes (see Table 2-2). The following section contains further discussion regarding the proposed maintenance activities at a higher level of detail.

Table 2-2. Summary of Proposed Maintenance Activities

Map Number*	Work Area	Proposed Maintenance Activities	Proposed Equipment
1	Upper Debris Basin	Remove overgrown vegetation, remove accumulated sediment	Excavator, Bobcat dozer or backhoe, loader, hand tools
2	Middle Debris Basin	Remove overgrown vegetation, remove accumulated sediment	Excavator, Bobcat dozer or backhoe, loader, hand tools
3	Bee Drainage Channel	Remove overgrown vegetation, remove accumulated sediment	Bobcat dozer or backhoe, loader, hand tools
4	San Fernando Gate Drain	Remove non-native vegetation, remove accumulated sediment	Excavator, Bobcat dozer or backhoe, loader, hand tools
5	Upper San Fernando Drain Line	Excavate to remove cattails	Excavator, loader, hand tools
6	Upper San Fernando Drain Line Feature 1	Remove overgrown bulrush and cattails; clear and grub overgrown vegetation	Excavator, Bobcat dozer or backhoe, loader, hand tools, tractor and mower
7	Upper San Fernando Drain Line Feature 2	Clear and grub overgrown vegetation	Bobcat dozer or backhoe, hand tools
8	Yarnell Debris Basin	Mow herbaceous vegetation in lower part of basin	Tractor and mower
9	LAR UV Plant Drainage and V-Ditch	Remove overgrown vegetation	Tractor and mower, hand tools
10	San Fernando Creek	Clear overgrown vegetation	Excavator, Bobcat dozer or backhoe, loader, hand tools
11	Lower San Fernando Detention Basin, including East Channel Earthen Extension, East Channel (Riprap), Lower Southeast Drainage, Northeast Drainage, Upper Southeast	Remove overgrown vegetation (trees and native vegetation to be left in place)	Tractor and mower, hand tools

Table 2-2. Summary of Proposed Maintenance Activities

Map Number*	Work Area	Proposed Maintenance Activities	Proposed Equipment
	Drainage, and Western Channel		
12	Bull Creek Extension Channel	Remove accumulated sediment and debris	Crane with bucket, loader, hand tools
13	Upper Northeast Drainage	Remove overgrown vegetation	Loader, hand tools
14	LAR North Dike Stormwater Basin	Remove accumulated sediment and debris, remove and trim overgrown vegetation	Excavator, loader, hand tools
15	East Channel	Trim and remove overgrown vegetation	Bobcat dozer or backhoe, loader, hand tools

Notes: LAR = Los Angeles Reservoir; UV = ultraviolet.

* Refers to Figure 2.

Streambed Authorization Agreement 1600-2004-0268-R5

LADWP and the California Department of Fish and Game (now the California Department of Fish and Wildlife [CDFW]) entered into SAA 1600-2004-0268-R5 in July 2010. The SAA authorizes LADWP to conduct certain long-term maintenance activities at the Upper Debris Basin and Middle Debris Basin through 2022, including the following:

- a. Throughout the UDB [Upper Debris Basin] and MDB [Middle Debris Basin], a 50-foot wide by 644-foot long and 2–3 feet deep low-flow channel may be excavated, affecting an estimated 0.70 acres. This work may occur annually or on an as-needed basis.
- b. Additional maintenance may occur within a 75-foot maintenance zone as part of the maintenance of the basins. This can include the removal of dead trees, tree limbs, downed vegetation, and the trimming of tree branches (no higher than 4” from the bottom).
- c. The only vegetation alternation that may occur outside of the 75-foot zone includes the removal of downed vegetation that may cause a flow blockage. Otherwise, dead trees shall be left in place to provide habitat.
- d. Selective vegetation removal at the project site may occur where overgrown vegetation interferes with: 1) the right-of-way easement with the high-voltage transmission lines; 2) access roads; 3) is a fire hazard as defined by the Fire Department.
- e. After each sediment removal activity, persistent non-native plants shall be removed from the basin areas. Target plants include *Arundo*, castor bean, tamarisk, tree tobacco and eucalyptus.
- f. [Development of] an *Arundo* management plan to address the removal of all *Arundo* (giant reed) at the Van Norman Complex.[...] *Arundo* removal shall occur at least twice annually.

LADWP will be seeking a long-term SAA for the entire VNC that would include maintenance of the Upper and Middle Debris Basins. LADWP will be requesting that the conditions in the existing SAA be carried over to the long-term SAA, and that any additional impacts to riparian vegetation because of required maintenance within the 75-foot buffer zone be authorized with agreed upon mitigation. The new long-term SAA would supersede the existing SAA for the Upper and Middle Debris Basins.

2.5 Project Related Actions

The analysis in Chapter 3 of this Initial Study evaluates the potential impacts associated with implementation of the proposed project. The proposed project would implement measures to avoid and minimize impacts to the environment—including measures required by applicable laws and regulations, and any additional measures adopted by LADWP as part of the proposed project (i.e., AMMs). LADWP would be responsible for the appropriate implementation of the AMMs, and would verify their implementation as part of the Mitigation Monitoring and Reporting Program (see Appendix F). The AMMs are discussed throughout Chapter 3 of this Initial Study. Due to the length of the AMMs, some AMMs are only partially provided within Chapter 3 of this Initial Study. For the full text of each AMM, please see Appendix F.

2.6 Project Phasing

Project operations would occur on an annual or as-needed basis. Maintenance activities supporting riparian habitat in the Upper Debris Basin, Middle Debris Basin, and Lower San Fernando Detention Basin would be rotated such that each area would be subject to maintenance no more than once every 3 years. Proposed maintenance activities would not occur concurrently because LADWP would likely use the same in-house crew at each work area. Proposed maintenance activities anticipated to take the longest (i.e., 9 to 14 days) would occur at the Upper Debris Basin and the Middle Debris Basin. Proposed maintenance activities are anticipated to occur between September and December of each year.

2.7 Discretionary Approvals Required for the Project

The following discretionary permits and approvals may be needed from the following agencies for certain activities proposed as part of the long-term operations and maintenance of the VNC (for example, where activities are within certain waters and wetlands and may adversely affect species listed as threatened or endangered):

Federal Permits

- U.S. Fish and Wildlife Service (USFWS)
- U.S. Army Corps of Engineers

State Permits

- CDFW

- Los Angeles Regional Water Quality Control Board (RWQCB)

References

Los Angeles Department of City Planning. n.d. "Zone Information and Map Access System." Accessed September 2018.

Department of the Interior. 1974. "The Van Norman Reservoirs Area, Northern San Fernando Valley, California."
Geological Survey Circular 691-A, B. Published 1974. Accessed October 2018.
<https://pubs.usgs.gov/circ/1974/0691a/report.pdf>.

3 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2018) to determine if the proposed project may have a significant effect on the environment.

1. Project title:

Van Norman Complex Routine Operation and Maintenance Program

2. Lead agency name and address:

Los Angeles Department of Water and Power
Environmental Affairs
111 North Hope Street, Room 1044
Los Angeles, California 90012

3. Contact person and phone number:

Christopher Lopez
Environmental Planning and Assessment
Los Angeles Department of Water and Power
213.367.3509

4. Project location:

The VNC is located in the Granada Hills area of the City, approximately 20 miles northeast of downtown. The approximately 1,340-acre industrial complex sits at the foothills of the Santa Susana Mountains in the northern portion of the San Fernando Valley. The project area is located approximately 0.5 miles northwest of the I-5 and I-405 interchange. It is generally bounded by Sepulveda Boulevard and I-5 to the east and northeast; Balboa Avenue to the northwest; Woodley Avenue to the west; and Rinaldi Street, I-405, and commercial and residential development to the south.

5. Project sponsor's name and address:

Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012

6. City Council Districts:

District 7 and District 12

7. Neighborhood Council Districts:

Sylmar Neighborhood Council and Granada Hills North Neighborhood Council

8. General Plan designation:

Refer to Section 1.3, Availability of the Notice of Intent and Initial Study/Mitigated Negative Declaration, of this Initial Study.

9. Zoning:

Refer to Section 1.3 of this Initial Study.

10. Description of project:

Refer to Chapter 2, Project Description, of this Initial Study.

11. Surrounding land uses and setting:

Refer to Section 1.3 of this Initial Study.

12. Other public agencies whose approval may be required:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- California Department of Fish and Wildlife
- Los Angeles RWQCB

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

Consultation is underway. Refer to Section 3.18, Tribal Cultural Resources, of this Initial Study for further details.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code, Section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code, Section 5097.96, and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code, Section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this proposed project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklists on the following pages.

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

DETERMINATION

On the basis of this initial evaluation:

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

Charles C. Hollenberg
Signature

10/30/2019
Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

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8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 Aesthetics

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
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Less-Than-Significant Impact. The City's General Plan defines scenic views or vistas as panoramic public view access to natural features, including views of the ocean, striking or unusual natural terrain, or unique urban or historic features (City of Los Angeles 2001). Namely, the San Gabriel Mountains, the Santa Monica Mountains, the Palos Verdes Hills, the Pacific Ocean, and the Los Angeles River and its associated tributaries and flood plains are identified as prominent topographic features (City of Los Angeles 2001). Public vantage points of scenic vistas can be from parklands, private and publicly owned sites, and public rights-of-way (City of Los Angeles 2001). The proposed maintenance activities would result in visual changes that are minor in magnitude and would be located within the context of existing facilities at the VNC. Proposed maintenance activities, such as sediment removal and vegetation maintenance, would primarily maintain the existing facilities, with very little to no visual change. The presence of construction equipment needed to perform maintenance

activities would be short term and temporary. In addition, these activities would not occur in areas frequented by, or even visible to, the general public. The project area is inaccessible to the general public, and the area is not visible from surrounding roadways (e.g., I-5). Thus, impacts of the proposed project on scenic vistas would be **less than significant**.

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

No Impact. There are no officially designated state scenic highways located within the project area. Portions of the I-5 and I-210 are eligible state scenic highways located immediately north, northeast, and northwest of the project area (Caltrans 2018). However, as discussed in Section 3.1(a), the proposed maintenance activities would result in very little to no visual changes and would be located within the context of existing facilities at the VNC. The proposed project would not affect any trees, rock outcroppings, or historic buildings. Thus, the project would result in **no impact** associated with scenic resources within a state scenic highway.

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

Less-Than-Significant Impact. Section 21071 of the California Public Resources Code defines an “urbanized area” as “(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.” As of January 1, 2019, the California Department of Finance estimated the population within the City to be 4,040,080 persons (CDOF 2019). Therefore, the project would be located in an urbanized area. To preserve and enhance the existing visual character and quality of the surrounding environment, the City has adopted various development standards, architectural guidelines, and zoning regulations that govern future development within the City. Because the proposed project would involve the maintenance and repair of existing facilities and would not involve construction of any built structures, the project would not conflict with any ordinance or regulation governing scenic quality, as the City does not have adopted regulations that relate to scenic quality and that pertain to maintenance activities. Furthermore, any sediment removal or vegetation management that would occur during maintenance activities would result in only minor, incremental visual changes that would be characteristic of activities that already occur at the VNC. Similarly, the visual presence of vehicles and personnel during maintenance activities would be temporary and would represent a continuation of existing routine activities. For these reasons, the impact of proposed maintenance activities on the character or quality of the project area and its surroundings would be **less than significant**.

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

No Impact. No new permanent or temporary lighting would be installed as part of the proposed project. Maintenance activities are typically conducted during daytime hours. Because the proposed project does not include any lighting, there would be **no impact** related to new sources of lighting.

References

- Caltrans (California Department of Transportation). 2018. "Scenic Highways." Accessed September 2018. <http://www.dot.ca.gov/design/lap/livability/scenic-highways>.
- CDOF (California Department of Finance). 2019. "E-1: City/County/State Population Estimates with Annual Percent Change January 1, 2018 and 2019." *Department of Finance Demographic Research Unit Population Estimates for California Cities*. May 1, 2019. Accessed August 22, 2019. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/documents/E-1_2019PressRelease.pdf.
- City of Los Angeles. 2001. "Conservation Element." In *City of Los Angeles General Plan*. September 26, 2001. Accessed September 2018. <https://planning.lacity.org/cwd/gnlpln/consvelt.pdf>.

3.2 Agriculture and Forestry Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. The Farmland Mapping and Monitoring Program shows the majority of the VNC as Other Land, with areas inside the project area categorized as Urban and Built-Up Land (State of California Department of Conservation n.d.). The land immediately adjacent to the project area is categorized as Urban and Built-Up Land. Two small segments of land southeast of the intersection of I-5 and I-405, approximately 0.4 miles southeast of the VNC, are Unique Farmland and Prime Farmland. I-405 and Eden Memorial Park are situated between the project area and these segments of Farmland. There is no Farmland located within or immediately adjacent to the project area, and as such, the project is not expected to have an impact on Farmland. The proposed maintenance activities would not result in any changes to the existing land use within or near the project area. Thus, the proposed project would not convert Farmland to non-agricultural use, resulting in **no impact**.

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

No Impact. According to the Los Angeles Department of City Planning (n.d.) Zone Information and Map Access System, the project area contains two separate land use designations, Public Facilities and Open Space. The Granada Hills-Knollwood Community Plan also designates the project area as Public Facilities and Open Space (Los Angeles Department of City Planning 2015). The project area is not zoned for agricultural use, and it is not under a California Land Conservation Act of 1965 (Williamson Act) contract. Additionally, the proposed maintenance activities would not result in a change to existing zoning or land use designations, and thus would not conflict with existing zoning. The project would result in **no impact** to existing zoning for agricultural use or a Williamson Act contract.

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

No Impact. As mentioned in Section 3.2(b), the project area contains two land use designations, Public Facilities and Open Space (Los Angeles Department of City Planning n.d.). According to the Conservation Element of City's General Plan, the only remaining substantial forestland within the immediate Los Angeles area is within the Angeles National Forest and on the north slope of the Santa Susana Mountains. The project area does not contain forestland or timberland as defined by the Public Resources Code or Government Code. The proposed maintenance activities would not conflict with existing zoning or cause rezoning of forestland or timberland. Thus, the proposed project would result in **no impact** to forestland or timberland.

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

No Impact. As mentioned in Section 3.2(c), the only substantial remaining forestland in the Los Angeles area is within the Angeles National Forest and on the north slope of the Santa Susana Mountains. The project area does not consist of forestland. The proposed maintenance activities would not result in the loss of forestland or conversion of forestland to non-forest use. Thus, the project would result in **no impact** to forestland.

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

No Impact. As stated in Sections 3.2(b–c), the project area is zoned as Public Facilities and Open Space. There is no existing agriculture, forestland, or timberland located in the project area. There are two small segments of Prime Farmland and Unique Farmland to the southeast of the VNC, east of I-405. The proposed project consists of maintenance activities that would not result in substantial changes to the existing environment in a way that would convert Farmland to non-agricultural use or convert forestland to non-forest use. The proposed maintenance activities would not result in any changes to the existing land use within or surrounding the project area. The proposed project would not result in the conversion of Farmland to non-agricultural use or the conversion of forestland to non-forest use, and thus would result in **no impact** to Farmland or forestland.

References

- City of Los Angeles. 2001. "Conservation Element." In *City of Los Angeles General Plan*. September 26, 2001. Accessed September 2018. <https://planning.lacity.org/cwd/gnlpln/consvelt.pdf>.
- Los Angeles Department of City Planning. 2015. *Granada Hills-Knollwood Community Plan*. October 28, 2015. Accessed June 2018. <https://planning.lacity.org/complan/pdf/ghlcptxt.pdf>.

Los Angeles Department of City Planning. n.d. "Zone Information and Map Access System." Accessed June 2018.

State of California Department of Conservation. n.d. Farmland Mapping and Monitoring Program. Accessed June 2018. <http://www.conservation.ca.gov/dlrp/fmmp>.

3.3 Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-Than-Significant Impact. The project area is located in the Granada Hills area of the City, within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD administers the SCAB's Air Quality Management Plan (AQMP), which is a comprehensive document outlining an air pollution control program for attaining the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The most recently adopted AQMP for the SCAB is the 2016 AQMP (SCAQMD 2017). The 2016 AQMP focuses on available, proven, and cost-effective alternatives to traditional air quality strategies while seeking to achieve multiple goals in partnership with other entities seeking to promote reductions in greenhouse gases (GHGs) and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The purpose of a consistency finding with regard to the AQMP is to determine if a project is consistent with the assumptions and objectives of the regional air quality plans, and if it would interfere with the region's ability

to comply with federal and state air quality standards. The SCAQMD has established criteria for determining consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD CEQA Air Quality Handbook. These criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.
- **Consistency Criterion No. 2:** Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion, project-generated criteria air pollutant emissions have been estimated and analyzed for significance and are addressed under Section 3.3(b). Detailed results of this analysis are included in Appendix A, Air Quality and Greenhouse Gas Calculations. As presented in Section 3.3(b), the proposed project would not generate criteria air pollutant emissions that exceed the SCAQMD's thresholds, and it would therefore be consistent with Criterion No. 1.

The second criterion regarding the potential of the proposed project to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase is primarily assessed by determining consistency between the proposed project's land use designations and its potential to generate population growth. In general, projects are considered consistent with, and not in conflict with or obstruct implementation of, the AQMP if the growth they produce in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (SCAQMD 1993). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, and employment by industry) developed by the Southern California Association of Governments (SCAG) for its 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (SCAG 2016). SCAQMD uses this document, which is based on general plans for cities and counties in the SCAB, to develop the AQMP emissions inventory (SCAQMD 2017).² The SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

² Information necessary to produce the emissions inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board (CARB), the California Department of Transportation, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy are integrated in the 2016 AQMP (SCAQMD 2017).

The proposed project consists of the routine vegetation management and maintenance activities at multiple facilities throughout the VNC in order to ensure that the facilities are functioning properly. The routine maintenance would be performed by existing LADWP staff and would not create additional employment. As such, since the proposed project is not anticipated to result in population growth or generate an increase in employment that would conflict with existing employment population projections, it would not conflict with or exceed the assumptions in the 2016 AQMP. Accordingly, the proposed project is consistent with the SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy forecasts used in the SCAQMD AQMP development.

In summary, based on the considerations presented for the two criteria, impacts relating to the proposed project's potential to conflict with or obstruct implementation of the applicable AQMP would be **less than significant**.

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

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

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

Regarding NAAQS and CAAQS attainment status,³ the SCAB is designated as a nonattainment area for federal and state O₃ and PM_{2.5} standards (CARB 2017; EPA 2018). The SCAB is also designated as a nonattainment

³ An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. The standards for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare are

area for state PM₁₀ standards; however, it is designated as an attainment area for federal PM₁₀ standards. The SCAB is designated as an attainment area for federal and state CO and NO₂ standards, as well as for state sulfur dioxide standards. Although the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.⁴

The proposed project would result in emissions of criteria air pollutants for which the U.S. Environmental Protection Agency and the California Air Resources Board (CARB) and have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Projects that emit these pollutants have the potential to cause, or contribute to, violations of these standards. The SCAQMD CEQA Air Quality Significance Thresholds, as revised in March 2015, set forth quantitative emission significance thresholds for criteria air pollutants that, if exceeded, would indicate the potential for a project to contribute to violations of the NAAQS or CAAQS. Table 3-1 lists the revised SCAQMD Air Quality Significance Thresholds (SCAQMD 2015).

Table 3-1. South Coast Air Quality Management District Air Quality Significance Thresholds

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

Source: SCAQMD 2015.

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

^a The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

set by the U.S. Environmental Protection Agency and California Air Resources Board. Attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards.

⁴ The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

- ^b Toxic air contaminants include carcinogens and noncarcinogens.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O₃, which is a nonattainment pollutant, if the proposed project's maintenance or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 3-1. These emission-based thresholds for O₃ precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O₃ impacts to occur) because O₃ itself is not emitted directly, and the effects of an individual project's emissions of O₃ precursors (i.e., VOCs and NO_x) on O₃ levels in ambient air cannot be determined through air quality models or other quantitative methods.

The following discussion quantitatively evaluates project-generated emissions and impacts that would result from implementation of the proposed project. Since the proposed project is considered routine operation and maintenance, the impact assessment compares the emissions to the SCAQMD operational thresholds.

Project Maintenance Emissions

Proposed project activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road equipment and dust) and off-site sources (i.e., on-road trucks and worker vehicle trips). Emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists.

As discussed in detail below, implementation of the project would generate criteria air pollutant emissions from off-road equipment, vehicle travel, and material handling. Internal combustion engines used by off-road equipment, trucks, and worker vehicles would result in emissions of VOCs, NO_x, CO, PM₁₀, and PM_{2.5}. PM₁₀ and PM_{2.5} emissions would also be generated by earthmoving necessary to maintain the project area, material handling for truck loading/unloading activity, on-road vehicles traveling on paved roads, and from brake and tire wear. The proposed project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during any dust-generating activities. To limit fugitive dust, the proposed project would include watering twice daily and a speed limit of 15 miles per hour for unpaved roads.

It is anticipated that project activities would not include application of architectural coatings, such as exterior application/interior paint and other finishes, or application of asphalt pavement. Accordingly, associated VOC off-gassing emissions from coatings and asphalt are not estimated herein.

Maintenance assumptions were developed based on the current best available information for the proposed project. Since the same maintenance crew would likely be performing the routine maintenance throughout the project area, there would be no simultaneous maintenance occurring at the various sites.

Schedule

A detailed depiction of expected maintenance schedules—including information regarding phasing, equipment used during each phase, trucks, and worker vehicles—is provided in Appendix A and summarized in Section 2.6, Project Phasing, of this Initial Study.

Emissions Estimation Methodology and Assumptions

Proposed project activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for particulate matter, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated.

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from the operation and maintenance activities⁵ of the proposed project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with project activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters—including the land use type used to represent the proposed project and its size, schedule, and anticipated use of off-road equipment—were based on information provided by LADWP or default model assumptions if project specifics were unavailable.

Based on information provided by LADWP, it was assumed that the first year of maintenance of the proposed project would commence in September 2019,⁶ would last approximately 5 months, and would end in January 2020. However, as a conservative scenario, the first year of maintenance was assumed to occur completely within 2019. The subsequent recurring annual maintenance was assumed to begin in 2020, and occur annually thereafter from September through January. The project phasing schedule and duration, vehicle trip assumptions, and off-road equipment used for estimating project-generated emissions are shown in Table 3-2.

Table 3-2. Maintenance Scenario Assumptions

Maintenance Phase	Duration (Initial Year/Thereafter)	One-Way Vehicle Trips		Equipment		
		Average Daily Worker Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Upper Debris Basin	10 days/5 days	8	8	Excavator	1	6

⁵ Off-road construction equipment would be used in the operation and maintenance activities of the proposed project.

⁶ The analysis assumed a project start date of September 2019, which represents the earliest date maintenance would initiate. Assuming the earliest start date for the proposed project represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emissions factors for later years would be slightly less due to more stringent standards for off-road equipment and heavy-duty trucks, as well as fleet turnover to replace older equipment and vehicles.

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Table 3-2. Maintenance Scenario Assumptions

Maintenance Phase	Duration (Initial Year/Thereafter)	One-Way Vehicle Trips		Equipment		
		Average Daily Worker Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Middle Debris Basin	14 days/9 days	8	8	Tractor/loader/backhoe	1	6
				Rubber tired loader	1	6
				Excavator	1	6
				Tractor/loader/backhoe	1	6
Bee Drainage Channel	2 days/2 days	8	2	Rubber tired loader	1	6
				Tractor/loader/backhoe	1	6
San Fernando Gate Drainage Feature	2 days/2 days	8	4	Excavator	1	6
				Rubber tired loader	1	6
Upper San Fernando Drain Line	5 days/3 days	8	2	Excavator	1	6
				Rubber tired loader	1	6
Upper San Fernando Drain Line Feature 1	3 days/1 day	8	4 ^a	Excavator ^a	1	6
				Rubber tired dozer ^a	1	6
				Rubber tired loader ^a	1	6
				Tractor/loader/backhoe	1	6
Upper San Fernando Drain Line Feature 2	1 day/1 day	4	2	Rubber tired dozer	1	6
Yarnell Debris Basin	1 day/1 day	4	0	Tractor/loader/backhoe	1	6
LAR UV Plant Drainage and V-Ditch	1 day/1 day	4	0	Tractor/loader/backhoe	1	6
San Fernando Creek	7 days/1 day	8	4 ^a / 2	Excavator	1	6
				Rubber tired dozer	1	6
				Rubber tired loader	1	6
Lower San Fernando Detention Basin	6 days/6 days	4	0	Tractor/loader/backhoe	2	6
Bull Creek Extension (Sediment Basin)	2 days/2 days	8	2	Rubber tired loader	1	6
				Crane	1	6
Upper Northeast Drainage	1 day/1 day	8	2	Rubber tired loader	1	6
LAR North Dike Stormwater Basin	7 days/5 days	8	4	Excavator	1	6
				Rubber tired loader	1	6
East Channel	3 days/3 days	8	2	Tractor/loader/backhoe	1	6
				Rubber tired loader	1	6

Notes: LAR = Los Angeles Reservoir; UV = ultraviolet.

See Appendix A for details.

^a Initial year only.

The proposed project would involve the use of internal combustion engines in off-road equipment, trucks, and worker vehicles, which would result in emissions of VOCs, NO_x, CO, PM₁₀, and PM_{2.5}. PM₁₀ and PM_{2.5} emissions would also be generated by entrained dust, which results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil. The proposed project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during any dust-generating activities. Estimated maximum daily criteria air pollutant emissions from all on-site and off-site emission sources is provided in Table 3-3, Estimated Maximum Daily Project Emissions, and compared to the SCAQMD operational thresholds.

Table 3-3. Estimated Maximum Daily Project Emissions

Year	VOCs	NO _x	CO	SO _x	PM ₁₀ ^a	PM _{2.5} ^a
	<i>Pounds per Day</i>					
2018	0.89	9.43	7.57	0.02	26.16	2.80
2019 and thereafter	0.67	7.56	5.77	0.01	26.14	2.78
Maximum Daily Emissions	0.89	9.43	7.57	0.02	26.16	2.80
<i>SCAQMD threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold exceeded?	No	No	No	No	No	No

Source: SCAQMD 2015.

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

See Appendix A for detailed results.

^a These estimates reflect control of fugitive dust (watering twice daily and speed limit of 15 miles per hour) required by SCAQMD Rule 403 (SCAQMD 2005).

As shown in Table 3-3, daily emissions would not exceed the SCAQMD significance thresholds for VOCs, NO_x, CO, SO_x, PM₁₀, or PM_{2.5} during proposed maintenance activities.

As discussed in Section 3.3(b), the SCAB has been designated as a federal nonattainment area for O₃ and PM_{2.5}, and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. The proposed project would generate VOC and NO_x emissions (precursors to O₃) and emissions of PM₁₀ and PM_{2.5}. However, as indicated in Table 3-3, project-generated emissions would not exceed the SCAQMD emissions-based operational significance thresholds for VOCs, NO_x, PM₁₀, or PM_{2.5}.

Cumulative localized impacts would potentially occur if a project were to occur concurrently with another off-site project. Schedules for potential future projects near the project area are currently unknown; therefore, potential impacts associated with two or more simultaneous projects would be considered speculative.⁷

⁷ The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145).

However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM₁₀ and PM_{2.5} emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all sites in the SCAQMD.

Therefore, the proposed project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be **less than significant**.

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

Less-Than-Significant Impact. Localized project impacts are assessed below.

Sensitive Receptors

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

The proposed project would occur throughout the VNC. Residential land uses are located in close proximity to the project area, with the nearest residence approximately 350 feet to the west of San Fernando Creek.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the VNC as a result of proposed project activities. The impacts were analyzed using methods consistent with those in the SCAQMD's *Final Localized Significance Threshold Methodology* (2008). The project is located within Source-Receptor Area 7 (East San Fernando Valley). This analysis applies the SCAQMD LST values for a 1-acre site within Source-Receptor Area 7 with a receptor distance of 100 meters (330 feet), given that daily disturbed area for the proposed project would be less than 1 acre. This is conservative since the closest sensitive receptor is 350 feet away (107 meters).

Proposed maintenance activities would result in temporary sources of on-site criteria air pollutant emissions associated with off-road equipment exhaust and material handling activities. According to the Final Localized Significance Threshold Methodology, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2008). Trucks and worker trips associated with the proposed project are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways since emissions would be relatively brief in nature and would cease once the vehicles pass through the main streets. Therefore, off-site emissions from trucks and worker vehicle trips are not included in the LST analysis.

The maximum daily on-site emissions generated during maintenance of the proposed project for each year are presented in Table 3-4, Operation Localized Significance Thresholds Analysis, and compared to the SCAQMD localized significance criteria for Source-Receptor Area 7 to determine whether project-generated on-site emissions would result in potential LST impacts.

Table 3-4. Operation Localized Significance Thresholds Analysis

Year	NO ₂	CO	PM ₁₀	PM _{2.5}
	<i>Pounds per Day (On Site)^a</i>			
2019	5.63	3.71	0.24	0.20
2020 and thereafter	5.12	3.68	0.21	0.18
Maximum Daily On-site Emissions	5.63	3.71	0.24	0.20
<i>SCAQMD LST Criteria</i>	94	1,158	7	2
Threshold Exceeded?	No	No	No	No

Source: SCAQMD 2008.

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

See Appendix A for detailed results.

^a Localized significance thresholds are shown for a 1-acre disturbed area corresponding to a distance to a sensitive receptor of 100 meters in Source-Receptor Area 7 (East San Fernando Valley).

As shown in Table 3-4, the proposed project would not generate emissions in excess of site-specific LSTs; therefore, localized impacts of the proposed project would be **less than significant**.

CO Hotspots

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

The Trip Generation Analysis for Vegetation Management and Maintenance Activities at the Van Norman Complex, LADWP technical memorandum (Dudek 2018) for the proposed project determined that it would generate less than 25 to 42 AM or PM peak-hour vehicle trips. Furthermore, traffic generated by the proposed project would be temporary and would last between 1 day and 14 days, depending on the work area. All project

activities would occur on the VNC site and would not require any (temporary) closures to public streets. Due to the relatively low, and temporary, traffic volumes generated by the proposed project, it would not have a measurable impact on the adjacent street network, and therefore, would not create a significant traffic impact.

Accordingly, the proposed project would not generate traffic that would contribute to potential adverse traffic impacts that may result in the formation of CO hotspots. This conclusion is supported by the analysis in Section 3.17, Transportation, which demonstrates that traffic impacts would be less-than-significant. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Based on these considerations, the proposed project would result in a **less-than-significant** impact to air quality with regard to potential CO hotspots.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. As discussed under the LST analysis, the nearest sensitive receptors to the proposed project are residences located approximately 100 meters (330 feet) from the nearest work area. Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. “Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have noncarcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) effects.⁸ Diesel particulate matter is one TAC that would potentially be emitted during activities associated with the proposed project.

Diesel particulate matter emissions would be emitted from heavy equipment operations and heavy-duty trucks. Heavy-duty construction equipment is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions. As described for the LST analysis and shown in Table 3-3, PM₁₀ (representative of diesel particulate matter) exposure would be minimal. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with a project. Thus, the duration of the proposed maintenance activities would only constitute a small percentage of the total 30-year exposure period. Due to this relatively short period of exposure (less than 14 days per site) and minimal particulate emissions on site, TACs generated by the proposed project would not result in concentrations

⁸ Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various noncarcinogens from a project to published reference exposure levels that can cause adverse health effects.

sufficient to cause significant health risks. Overall, the proposed project would not result in substantial TAC exposure to sensitive receptors near the proposed project, and impacts would be **less than significant**.

Health Impacts of Criteria Air Pollutants

Operation of the proposed project would generate criteria air pollutant emissions; however, the project would not exceed the SCAQMD mass-emission thresholds.

The SCAB is designated as nonattainment for O₃ for the NAAQS and CAAQS. Thus, existing O₃ levels in the SCAB are at unhealthy levels during certain periods. The health effects associated with O₃ generally result in reduced lung function. Because the proposed project would not involve activities that would result in O₃ precursor emissions (i.e., VOCs or NO_x) that would exceed the SCAQMD thresholds, as shown in Table 3-3, the proposed project is not anticipated to substantially contribute to regional O₃ concentrations and its associated health impacts.

In addition to O₃, NO_x emissions contribute to potential exceedances of the NAAQS and CAAQS for NO₂. Exposure to NO₂ and NO_x can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. As shown in Table 3-3, proposed project operations would not exceed the SCAQMD NO_x threshold, and existing ambient NO₂ concentrations would be below the NAAQS and CAAQS. Thus, the proposed project is not expected to result in exceedances of the NO₂ standards or contribute to associated health effects.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, thereby reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. CO hotspots were discussed previously as a less-than-significant impact. Thus, the proposed project's CO emissions would not contribute to the health effects associated with this pollutant.

The SCAB is designated as nonattainment for PM₁₀ under the CAAQS and nonattainment for PM_{2.5} under the NAAQS and CAAQS. Particulate matter contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease; nonfatal heart attacks; irregular heartbeat; aggravated asthma; decreased lung function; and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing (EPA n.d.). As with O₃ and NO_x, and as shown in Table 3-2, the proposed project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the SCAQMD's thresholds. Accordingly, the proposed project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for this pollutant.

In summary, the proposed project would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants, and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Therefore, impacts would be **less than significant**.

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

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

Odors would be potentially generated from vehicles and equipment exhaust emissions from the activities associated with the proposed project. Odors produced during the proposed project activities would be attributable to concentrations of unburned hydrocarbons from tailpipes of off-road equipment. Such odors would be temporary, dissipate relatively rapidly with distance, and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors from the proposed project would be **less than significant**.

Land uses and industrial operations typically associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would not result in the creation of a land use that is commonly associated with odors. Therefore, proposed project operations would result in an odor impact that would be **less than significant**.

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3.4 Biological Resources

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INITIAL STUDY
VAN NORMAN COMPLEX ROUTINE OPERATION AND MAINTENANCE PROGRAM

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following analysis is based, in part, on the biological technical letter report (Appendix B, Biological Resources Report) that was completed for the project in September 2018. The biological technical letter report assessed the existing biological conditions and the potential biological impacts of the proposed project. As described in Chapter 2, Project Description, LADWP would implement AMMs as part of the proposed project to avoid or minimize adverse impacts to fish and wildlife resources during the proposed maintenance activities. A detailed description of the AMMs is included as Attachment G of Appendix B. The following provides a summary of each AMM:

- **AMM-BIO-1 Resource Protection:** A designated biologist shall be on site to monitor all ground- or vegetation-disturbing activities within sensitive habitat or aquatic areas, with the authority to halt or redirect activity to order any reasonable measure to avoid or minimize impacts to fish and wildlife resources. Additionally, this avoidance measure contains guidelines regarding maintenance restrictions in sensitive plant communities, conducting work outside of bird breeding/nesting season, conducting focused surveys, and protecting any species of concern that are present.

- **AMM-BIO-2 Habitat Protection:** In consultation with the designated biologist, the work area perimeter shall be demarcated to protect surrounding habitat, and maintenance activities shall take place during daylight hours only. No night work or lights would be authorized.
- **AMM-BIO-3 Placement of In-stream Structures:** When water is present, the designated biologist shall check daily for stranded aquatic life, and make all reasonable efforts to capture and relocate wildlife to the closest body of water adjacent to the work area. Any materials placed in the seasonally dry portions of a stream shall be removed, and no castings or spoil from excavation shall be placed on the stream side of the project area.
- **AMM-BIO-4 Turbidity and Siltation:** This avoidance measure contains guidelines and best management practices for erosion control, sediment and runoff control, and the treatment of contaminated water. Precautions shall be taken to minimize turbidity and siltation.
- **AMM-BIO-5 Equipment and Access:** Staging and storage areas for equipment and materials shall be located outside of the stream, in an area selected based on its lack of vegetation.
- **AMM-BIO-6 Pollution, Litter, and Cleanup:** This avoidance measure contains guidelines for equipment to be used during the proposed project including maintenance, refueling, and clean up equipment to avoid deleterious effects on aquatic and terrestrial life or riparian habitat. Pollutants and debris shall not be allowed to contaminate the soil, and all litter and pollution laws shall be complied with. In addition, the measure contains guidelines for appropriate trash disposal and removal of all temporary flagging, fencing, or barriers from the project area upon project completion.
- **AMM-BIO-7 Exotic Species Removal and Control:** This avoidance measure contains guidelines and best management practices for exotic species removal and control, to prevent the introduction, transfer, and spread of invasive species, including plants, animals, and microbes.

The study area for the biological technical letter report included the proposed work areas within the existing facilities, and a 500-foot buffer around the work areas (Figure 4, Biological Resources Study Area).

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

Less-Than-Significant Impact with Mitigation Incorporated. Several biological field surveys were conducted within the VNC between May 2018 and July 2018, including general plant and wildlife surveys, vegetation mapping, habitat assessment for special-status species, and focused surveys for special-status and or regulated species. Additionally, a review of pertinent literature regarding special-status biological resources present or potentially present within the VNC was conducted. The project area includes developed areas and infrastructure, some native and non-native upland vegetation, and riparian vegetation. The work areas occur within or around channels, drainages, and catch basins, where accumulating sediment or overgrown vegetation

limits proper functioning of VNC drainage facilities. The surrounding area is dominated by disturbed and developed land associated with routine utility operations at the VNC.

Special-Status Plants

No special-status plant species were observed during general biological reconnaissance surveys. All special-status species identified in the literature review were determined to either have a low potential to occur or were not expected to occur based on an assessment of habitat within the project area. Therefore, **no impacts** to special-status plant species would occur.

Special-Status Wildlife

There are five listed wildlife species that have a potential to occur within the project area: least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Polioptila californica californica*), southwestern willow flycatcher (*Empidonax traillii extimus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and Swainson's hawk (*Buteo swainsoni*). The federally and state-endangered least Bell's vireo was confirmed present during focused surveys. The federally threatened coastal California gnatcatcher and the federally and state-endangered southwestern willow flycatcher were not detected during focused protocol surveys for these species, and it was determined that there is a low potential for them to occupy the project area in the future. Yellow-billed cuckoo is presumed extirpated from the project area. The state-listed threatened Swainson's hawk has a low potential to occur. Due to presence of least Bell's vireo, potential impacts to special-status wildlife species could be potentially significant. Impacts to least Bell's vireo are discussed in terms of potential direct and indirect impacts to individuals and to habitat. Direct impacts to individuals could include collisions with maintenance equipment or destruction of nests during maintenance activities should maintenance activities occur during the breeding season. Indirect impacts could result from an increase in noise, dust, and pollution during maintenance activities that would negatively impact nest success. As previously discussed, AMMs would be implemented by LADWP to avoid or minimize the effects of adverse impacts to wildlife resources. The proposed project would implement AMM-BIO-1, Resource Protection, which includes avoidance of nesting birds by conducting maintenance outside of nesting bird season or, if nesting bird season cannot be avoided, conducting pre-activity surveys with avoidance of the nest and a suitable buffer if nests are present. AMM-BIO-1 includes pre-activity surveys within 1 week prior to start of work. Should special-status species be detected, LADWP would develop and implement a plan for the protection of these species. Indirect impacts to special-status species would be minimized through implementation of AMM-BIO-2, Habitat Protection, which avoids conducting proposed maintenance activities at night, and AMM-BIO-6, Pollution, Litter, and Cleanup, which includes best management practices for managing spills, leaks, and trash.

As discussed in Appendix B and summarized in Table 3-5, Impacts to Suitable and Occupied Least Bell's Vireo Habitat, the proposed project would impact riparian habitat suitable for least Bell's vireo. Within the Upper Debris

Basin, Middle Debris Basin, and Lower San Fernando Debris Basin, impacts to riparian vegetation would be temporary, as the vegetation would have the opportunity to regenerate in between proposed maintenance events. Impacts to riparian vegetation within all other facilities would be permanent. Impacts to least Bell's vireo riparian habitat is a significant impact requiring mitigation in addition to the AMMs in place. Mitigation Measure (MM)-BIO-1, Mitigation for Impacts to Least Bell's Vireo Habitat, requires habitat preservation, enhancement, and/or creation of habitat and coordination with CDFW and USFWS to mitigate impacts to least Bell's vireo habitat. With implementation of MM-BIO-1, impacts to listed species would be **less than significant**.

Table 3-5. Impacts to Suitable and Occupied Least Bell's Vireo Habitat

Vegetation Community	Permanent Impact to Unoccupied Suitable LBVI Habitat (acres)	Temporary Impacts		
		Occupied LBVI Habitat (acres)	Suitable LBVI Habitat (acres)	Total Temporary Impacts (acres)
Lower San Fernando Detention Basin	—	—	—	6.55
Arroyo willow thickets	—	—	0.36	—
Mulefat thickets	—	0.08	0.15	—
Fremont cottonwood forest	—	—	3.66	—
Red willow thickets	—	0.03	2.27	—
Upper Debris Basin	—	—	—	1.51
Mulefat thickets	—	0.12	0.07	—
Red willow–arroyo willow/mulefat	—	0.34	0.03	—
Sandbar willow	—	—	0.68	—
LAR UV Plant Drainage Feature	—	—	—	—
Arroyo willow thickets	0.02	—	—	—
Fremont cottonwood/sandbar willow	0.15	—	—	—
San Fernando Creek	—	—	—	—
Red willow thickets	0.25	—	—	—
Red willow–arroyo willow	0.78	—	—	—
Upper San Fernando Drain Line	—	—	—	—
Red willow thickets	0.24	—	—	—
Red willow–arroyo willow/mulefat	0.35	—	—	—
Upper San Fernando Drain Line Feature 1	—	—	—	—
Red willow–arroyo willow/mulefat	0.94	—	—	—
Upper San Fernando Drain Line Feature 2	—	—	—	—
Arroyo willow thickets	0.08	—	—	—
Total	2.81	0.57	7.49	8.06

Notes: LBVI = least Bell's vireo; LAR = Los Angeles Reservoir; UV = ultraviolet.

Non-Listed Wildlife Species

Four non-listed wildlife species have a moderate potential to occur within the project area: Blainville's horned lizard (*Phrynosoma blainvillii*), San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*), loggerhead shrike (*Lanius ludovicianus*), and Cooper's hawk (*Accipiter cooperii*). The state fully protected white-tailed kite (*Elanus leucurus*) has a low potential to occur within the project area. Direct impacts could include crushing of low-mobility species during grading, collisions with maintenance equipment, and destruction of bird nests during maintenance activities. Direct impacts to these species would be avoided through implementation of AMM-BIO-1, which includes monitoring by a designated biologist of all ground-disturbing maintenance activities, as well as the relocation of non-listed, special-status, ground-dwelling vertebrates out of harm's way to the extent feasible. AMM-BIO-1 also includes avoidance of nesting birds. Potential indirect impacts would be minimized as previously described, with implementation of AMM-BIO-2 and AMM-BIO-6. With implementation of AMM-BIO-1, AMM-BIO-2, and AMM-BIO-6, impacts to non-listed wildlife species would be **less than significant**.

Nesting Birds

One red-tail hawk nest was observed within the project area during the survey efforts. Additionally, all of the project area includes suitable habitat for nesting bird species. Proposed maintenance activities could result in direct and indirect impacts to other nesting birds, including the loss of nests, eggs, and fledglings, if vegetation clearing and ground-disturbing activities occur during the avian nesting season (typically January 1 through August 31). Implementation of AMM-BIO-1, which includes avoidance measures for nesting birds, would result in **less-than-significant impacts** to nesting birds.

MM-BIO-1 Removal or disturbance of habitat suitable for least Bell's vireo shall be conducted outside the typical nesting period for this species (approximately March 15 through August 15). Mitigation for permanent impacts to habitat shall be at a ratio of 1:1, or as otherwise determined by applicable resource agency permits. Mitigation shall be a combination of habitat preservation, enhancement, and/or creation through purchase of credits at an approved in-lieu fee program or mitigation bank, or an agency approved permittee responsible mitigation project.

Prior to removal or disturbance of suitable and/or occupied least Bell's vireo habitat, and presuming there is risk of "take" under federal or state law, the Los Angeles Department of Water and Power (LADWP) shall consult with the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service on implementation of this mitigation measure (MM-BIO-1) and other minimization and avoid measures as necessary to avoid "take." If "take" is unavoidable, LADWP shall secure the appropriate incidental take authorization or permit under Section 7 of the federal Endangered Species Act and Section 2081 of the California Endangered Species Act. Any measures determined to be necessary through the Section 7 or Section 2081 shall be implemented.

With implementation of AMM-BIO-1, AMM-BIO-2, AMM-BIO-6, and MM-BIO-1, impacts related to special-status species would be **less than significant**.

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

Less-Than-Significant Impact. The project area includes developed areas and infrastructure, some native and non-native upland vegetation, and riparian vegetation that occurs along the project area. Special-status vegetation communities include those that are designated by CDFW as a rank of S1, S2, or S3. In addition, communities that are regulated by CDFW under Sections 1600–1616 of Fish and Game Code and/or communities that provide suitable habitat for special-status species may also be considered special status under CEQA. Impacts to these communities are summarized in Table 3-6, Impacts to Special-Status Communities.

Table 3-6. Impacts to Special-Status Communities

Vegetation Community or Land Cover	Permanent Impacts				Temporary Impacts		Total Temporary Impacts (acres)
	CDFW Rank S1, S2, or S3 And Suitable for LBV (acres)	Not Ranked S1, S2, or S3 by CDFW		Total Permanent Impacts (acres)	CDFW Rank S1, S2, or S3 and Suitable for LBV (acres)	Not Ranked S1, S2, or S3 by CDFW and Suitable for LBV (acres)	
		Suitable for LBV (acres)	Not Suitable for LBV (acres)				
Not CDFW Streambed							
Arroyo willow thickets	—	0.02	—	0.02	—	—	—
Fremont cottonwood forest	—	—	—	—	3.66	—	3.66
Mulefat thickets	—	—	—	—	—	0.15	0.15
Subtotal	—	0.02	—	0.02	3.66	0.15	3.81
CDFW Vegetated Streambed							
Arroyo willow thickets	—	0.08	—	0.08	—	0.36	0.36
Cattail marshes	—	—	1.57	1.57	—	—	—
Fremont cottonwood forest	—	—	—	—	—	—	—
Fremont cottonwood/sandbar willow	0.15	—	—	0.15	—	—	—
Mulefat thickets	—	—	—	—	—	0.54	0.54
Red willow thickets	0.48	—	—	0.48	2.30	—	2.30

Table 3-6. Impacts to Special-Status Communities

Vegetation Community or Land Cover	Permanent Impacts				Temporary Impacts		Total Temporary Impacts (acres)
	CDFW Rank S1, S2, or S3 And Suitable for LBV (acres)	Not Ranked S1, S2, or S3 by CDFW		Total Permanent Impacts (acres)	CDFW Rank S1, S2, or S3 and Suitable for LBV (acres)	Not Ranked S1, S2, or S3 by CDFW and Suitable for LBV (acres)	
		Suitable for LBV (acres)	Not Suitable for LBV (acres)				
Red willow–arroyo willow association	0.78	—	—	0.78	—	—	—
Red willow–arroyo willow/mulefat thickets association	1.30	—	—	1.30	0.37	—	1.36
Sandbar willow	—	—	—	—	—	0.68	0.68
Subtotal	2.71	0.08	1.57	4.36	2.67	1.58	5.24
Total	2.71	0.10	1.57	4.38	6.33	1.73	8.06

Notes: CDFW = California Department of Fish and Wildlife; LBV = least Bell's vireo.

Direct impacts to special-status vegetation communities would include removal due to sediment clearing and vegetation management. As described in the project description, maintenance of riparian habitat would be limited to every 3 years; therefore, impacts within the Upper Debris Basin, Middle Debris Basin, and Lower San Fernando Debris Basin would be temporary, as vegetation would have the opportunity to regenerate in between maintenance events. Additionally, maintenance activities within blue elderberry stands would be limited to hand pruning of the lower limbs of the trees and maintenance of the understory. Therefore, maintenance activities within 4.3 acres of blue elderberry stands would not result in impacts to this community. Impacts to special-status communities within all other facilities would be permanent. Loss of special-status vegetation communities is potentially significant; however, the special-status communities overlap with suitable least Bell's vireo habitat and/or CDFW jurisdictional streambeds that would be mitigated through implementation of MM-BIO-1 and MM-BIO-2, respectively.

Monitoring would be conducted as described under AMM-BIO-1 to confirm that timing limitations within special-status communities would be implemented, as outlined in the project description and AMMs. Implementation of AMM-BIO-7, which identifies removal of non-native species, would ensure native species have the opportunity to regrow within maintained areas. Additional direct impacts could also result from inadvertent removal of special-status vegetation communities outside of designated work areas. The potential for inadvertent impacts outside of the work area would be minimized through implementation of AMM-BIO-2, which includes demarcating the perimeter of the work area to prevent damage to adjacent habitat.

Indirect impacts to vegetation communities include impacts from the generation of fugitive dust, the release of chemical pollutants, and the adverse effect of invasive plant species. Indirect impacts to special-status vegetation communities would be minimized through implementation of AMM-BIO-6, which includes best management practices for managing spills, leaks, and trash, and AMM-BIO-7, Exotic Species Removal and Control, which identifies methods implemented for removing and managing invasive species.

With implementation of AMM-BIO-1, AMM-BIO-2, AMM-BIO-6, AMM-BIO-7, and MM-BIO-1, impacts to special-status vegetation and riparian communities would be **less than significant**.

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

Less-Than-Significant Impact with Mitigation Incorporated. The jurisdictional delineation conducted on behalf of LADWP identified 17.47 acres throughout the VNC that is potentially subject to regulation by the U.S. Army Corps of Engineers under Clean Water Act Section 404 and the RWQCB under Clean Water Act Section 401 because this acreage meets the definition of Waters of the United States pursuant to the final rule titled Clean Water Rule: Definition of “Waters of the United States,” published at 80 FR 37104 (June 29, 2015) (“2015 Rule”) and codified in 33 Code of Federal Regulations (CFR) 328 (2015). Of the 17.47 acres, 11.44 acres is potentially jurisdictional wetlands. An additional 4.60 acres in the VNC that exhibits aquatic characteristics is not subject to regulation by the U.S. Army Corps of Engineers under Clean Water Act Section 404 because this acreage is explicitly excluded from the definition of Waters of the United States under the 2015 Rule, as codified in 33 CFR 328.3(b) (2015). None of the areas within this acreage exhibits wetland characteristics.

See Figures 5A–5K, Jurisdictional Delineation, for the location and extent of waters of the United States within the project area. The delineation also identified areas under the potential jurisdiction of CDFW.

Table 3-7, Temporary Impacts to Potential Waters of the United States and State, and Table 3-8, Potential Impacts to Jurisdictional Streambeds, summarize potential impacts to potential waters of the United States, waters of the state, and areas under CDFW jurisdiction. The approximate acreages of potential jurisdictional waters are subject to concurrence by the Resource Agencies. Given that a portion of the project area is located within jurisdictional waters, MM-BIO-3 would be required so the proposed project does not adversely affect protected wetlands and waters, and if it does, to ensure that the appropriate level of compensatory mitigation is provided to offset such impacts. Therefore, with the incorporation of mitigation, impacts associated with federally or state protected wetlands would be **less than significant**.

Table 3-7. Temporary Impacts to Potential Waters of the United States and State

	Non-Wetland Waters (acres)	Wetland Waters (acres)	Total (acres)
<i>Potential Waters of the United States</i>			
Upper Debris Basin	1.20	0.0	1.20
Middle Debris Basin	2.91	0.0	2.91
Bee Canyon Drainage	0.20	0.0	0.20
Upper San Fernando Drain Line	0.0	0.46	0.46
Upper San Fernando Drain Line Feature 1	0.0	0.48	0.48
Yarnell Drainage	0.16	0.0	0.16
Yarnell Drainage Wetlands	0.16	3.04	3.20
Earthen Channel within LSFDB	0.0	0.74	0.74
Upper Northwest Drainage	0.14	0.0	0.14
Lower Northwest Drainage	0.13	0.0	0.13
Upper Northeast Drainage	0.13	0.0	0.13
Northeast Drainage	0.20	0.0	0.20
Upper Southeast Drainage	0.10	0.0	0.10
Lower Southeast Drainage	0.29	0.0	0.29
San Fernando Creek	0.30	0.32	0.62
<i>Subtotal</i>	5.92	5.01	10.93
<i>Potential Waters of the State</i>			
San Fernando Gate Drainage Ditch	0.20	0.0	0.20
Upper San Fernando Drain Line Feature 2	0.03	0.0	0.03
Upper Yarnell Drain Line	0.34	0.0	0.34
East Channel	3.26	0.0	3.26
East Channel Erosional Gully 1	0.11	0.0	0.11
East Side Erosional Gully 2	0.08	0.0	0.08
LAR Reservoir North Dike Storm Water Basin	0.33	0.0	0.33
LAR UV Plant Drain Line	0.25	0.0	0.25
<i>Subtotal</i>	4.60	0.0	4.60
Total	10.52	5.01	15.53

Notes: LSFDB = Lower San Fernando Detention Basin; LAR = Los Angeles Reservoir; UV = ultraviolet.

Table 3-8. Potential Impacts to Jurisdictional Streambed

Facility Name Vegetation Community/Land Cover	Temporary Impacts to Non-Riparian Waters	Temporary Impacts To Riparian Vegetation	Permanent Impacts To Riparian Vegetation		
			CDFW Type		Total Permanent Impact (acres)
			Herbaceous Riparian Habitat (acres)	Riparian (acres)	
Upper Debris Basin	0.78	0.75	—	—	—

Table 3-8. Potential Impacts to Jurisdictional Streambed

Facility Name Vegetation Community/Land Cover	Temporary Impacts to Non-Riparian Waters	Temporary Impacts To Riparian Vegetation	Permanent Impacts To Riparian Vegetation		
			CDFW Type		Total Permanent Impact (acres)
			Herbaceous Riparian Habitat (acres)	Riparian (acres)	
Mulefat thickets	—	0.07	—	—	—
Sandbar willow	—	0.68	—	—	—
Unvegetated drainage	0.78	—	—	—	—
Middle Debris Basin	2.16	0.94	—	—	—
Giant reed breaks	—	0.19	—	—	—
Mulefat thickets	—	0.39	—	—	—
Red willow-arroyo willow/mulefat	—	0.37	—	—	—
Unvegetated drainage	2.16	—	—	—	—
LSFDB/East Channel Earthen Extension	—	0.74	—	—	—
Red willow thickets	—	0.74	—	—	—
LSFDB/East Channel (Riprap)	—	0.35	—	—	—
Red willow thickets	—	0.35	—	—	—
LSFDB/Lower Southeast Drainage	0.32	0.44	—	—	—
Arroyo willow thickets	—	0.36	—	—	—
Disturbed habitat	0.19	—	—	—	—
Mulefat thickets	—	0.08	—	—	—
Unvegetated Drainage	0.11	—	—	—	—
Upland mustards	0.01	—	—	—	—
LSFDB/Northeast Drainage	0.22	0.98	—	—	—
Red willow thickets	—	0.98	—	—	—
Brittle bush scrub	0.20	—	—	—	—
Upland mustards	0.02	—	—	—	—
LSFDB/Upper Northeast Drainage	0.13	—	—	0.01	0.01
Brittle bush scrub	0.01	—	—	—	—
California sagebrush scrub	0.04	—	—	—	—
Fremont cottonwood forest	—	—	—	0.01	—
Unvegetated drainage	0.08	—	—	—	—
LSFDB/Upper Southeast Drainage	0.11	—	—	—	—
Upland mustards	0.11	—	—	—	—
LSFDB/Western Channel	—	0.23	—	—	—
Red willow thickets	—	0.23	—	—	—
Bee Drainage Channel	0.14	—	—	—	—
Concrete-lined channel	0.03	—	—	—	—

Table 3-8. Potential Impacts to Jurisdictional Streambed

Facility Name Vegetation Community/Land Cover	Temporary Impacts to Non-Riparian Waters	Temporary Impacts To Riparian Vegetation	Permanent Impacts To Riparian Vegetation		
			CDFW Type		Total Permanent Impact (acres)
			Herbaceous Riparian Habitat (acres)	Riparian (acres)	
Unvegetated drainage	0.11	—	—	—	—
San Fernando Gate Drain	0.33	—	—	—	—
Concrete-lined channel	0.17	—	—	—	—
Unvegetated drainage	0.16	—	—	—	—
Upper San Fernando Drain Line	0.14	—	1.61	0.35	1.96
Cattail marshes	—	—	1.37	—	—
Concrete-lined channel	0.03	—	—	—	—
Giant reed breaks	0.08	—	—	—	—
Red willow thickets	—	—	0.24	—	—
Red willow-arroyo willow/mulefat	—	—	—	0.35	—
Unvegetated drainage	0.03	—	—	—	—
Upper San Fernando Drain Line Feature 1	—	—	0.20	0.94	1.14
Cattail marshes	—	—	0.20	—	—
Red willow-arroyo willow/mulefat	—	—	—	0.94	—
Upper San Fernando Drain Line Feature 2	—	—	—	0.08	0.08
Arroyo willow thickets	—	—	—	0.08	—
LAR UV Plant Drainage Feature	0.08	—	—	0.15	0.15
Fremont cottonwood/sandbar willow	—	—	—	0.15	—
Unvegetated drainage	0.08	—	—	—	—
San Fernando Creek	0.14	—	—	1.03	1.03
Concrete-lined channel	0.14	—	—	—	—
Red willow thickets	—	—	—	0.25	—
Red willow-arroyo willow	—	—	—	0.78	—
Total Impacts	4.55	4.43	1.81	2.55	4.36

Notes: CDFW = California Department of Fish and Wildlife; LSFDB = Lower San Fernando Detention Basin; LAR = Los Angeles Reservoir; UV = ultraviolet.

Potential indirect impacts to jurisdictional waters could result from accidental release of chemicals and pollutants from maintenance vehicles, waste and debris being washed downstream, turbidity and siltation, and the adverse effects of invasive plant species. Indirect impacts to jurisdictional waters would be minimized through implementation of AMM-BIO-3, which provides for avoidance of placement of materials in seasonally dry portions of a stream; AMM-BIO-4, which identifies best management practices for erosion control and for minimizing turbidity and siltation; AMM-BIO-5, which provides for location of staging and storage areas

outside of streams; AMM-BIO-6, which includes best management practices for managing spills, leaks, and trash; and AMM-BIO-7, Exotic Species Removal and Control, which identifies methods to be implemented for removing and managing invasive species.

MM-BIO-2 In consultation with the U.S. Army Corps of Engineers, the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW), LADWP shall acquire the appropriate permits and approvals (i.e., Section 404 permit [U.S. Army Corps of Engineers], Section 401 permit [Regional Water Quality Control Board], Streambed Alteration Agreement [CDFW]) to address potential temporary and/or permanent impacts to jurisdictional waters if it is deemed required by any of these agencies. Compensatory mitigation for temporary and/or permanent impacts shall be implemented at a minimum ratio of 1:1 and as mutually agreed upon by the Resource Agencies and the Los Angeles Department of Water and Power (LADWP), and would include a combination of preservation, enhancement, and/or creation through purchase of credits at an approved in-lieu fee program or mitigation bank, or an agency-approved permittee responsible mitigation project. Either of these options would result in no net loss of jurisdictional aquatic resources.

With incorporation of MM-BIO-2, AMM-BIO-3, AMM-BIO-4, AMM-BIO-5, and AMM-BIO-6, potential impacts to wetlands and waters would be **less than significant**.

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

Less-Than-Significant Impact. Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping stones for wildlife dispersal. Due to developed nature of the project area, the VNC has very low potential to facilitate wildlife movement or function as a habitat linkage. The project area is surrounded on all sides by development, though undeveloped open space occurs to the north. As such, the project area does not function as a wildlife corridor and does not support any wildlife nursery sites. Therefore, impacts associated with wildlife movement or nursery sites would be **less than significant**.

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

No Impact. Ordinance 177404 of the Los Angeles Municipal Code regulates the relocation and replacement of protected trees. Protected trees include oak (*Quercus* spp.), Southern California black walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*) trees that measure 4

inches or more in cumulative diameter at 4.5 feet above the ground level at the base of the tree (City of Los Angeles 2006). There were no tree species defined as protected trees by the Municipal Code observed within the project area. There are no other local ordinances or codes relevant to biological resources; therefore, the project is consistent with local policies and ordinances and **no impacts** would occur.

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

No Impact. The proposed project does not overlap any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan; therefore, the proposed project would not be in conflict with any such plans and **no impacts** would occur.

Reference

City of Los Angeles. 2006. Los Angeles Municipal Code Ordinance 177404. Approved March 13, 2006. Accessed September 2018. http://cityplanning.lacity.org/Code_Studies/Other/ProtectedTreeOrd.pdf.

3.5 Cultural Resources

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

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

No Impact. No previously recorded or new cultural resources were identified within the project area of potential effect. Previously recorded cultural resources (regardless of eligibility/listing in the National Register of Historic Places/California Register of Historical Resources) were not found. The proposed project is to conduct annual vegetation and debris removal within active earthen-bottom and concrete-lined channels. Based

on these proposed activities and the lack of identified historic properties, no effects to historic properties were identified, and **no impacts** are likely to occur during the proposed maintenance activities.

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

Less-Than-Significant Impact with Mitigation Incorporated. On April 30, 2018, a search was completed of the California Historical Resources Information System at the South Central Coastal Information Center, located on the campus of California State University, Fullerton. This search included mapped prehistoric, historical, and built-environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the project area; the National Register of Historic Places; the California Register of Historical Resources; the California Historic Property Data File; and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility.

Previously Conducted Cultural Resource Studies

The South Central Coastal Information Center records indicate that 72 previous cultural resources technical investigations have been conducted within 1 mile (1,608 meters) of the project area between 1971 and 2012. Of these, 10 previous studies have been conducted overlapping a portion the project area, one previously conducted study intersects the project area, and three studies are adjacent to the project area. All 72 technical investigations are summarized in Table 3-9, Previous Technical Studies Within the 1-Mile Search Buffer.

Table 3-9. Previous Technical Studies Within the 1-Mile Search Buffer

Report Number	Author	Year	Report Title	Proximity to Project Area
LA-00014	Kelly, Roger E.	1973	Assessment of the Archaeological Resources and the Impact of Development of Highway 118 From Desoto Avenue to the San Diego Freeway in the San Fernando Valley	Outside
LA-00033	Anonymous	1974	Impact Assessment of Archaeological Resources by the Construction of Palmdale Maintenance Stations	Outside
LA-00051	Kelly, Roger E., and Gerald R. Gates	1974	Cultural Resources of Los Angeles Reservoir, City of Los Angeles	Overlap
LA-00097	Gates, Gerald R.	1975	Report on the Salvage Excavation of CA-Lan-493 and CA-LAN-645 Located in the Van Norman Reservoir Complex, City of Los Angeles	Overlap
LA-00368	Raab, Mark L.	1988	Report of Archaeological Reconnaissance Survey Of: the Proposed Metropolitan Water District of Southern California Joseph Jensen Filtration Plant Expansion	Adjacent

Table 3-9. Previous Technical Studies Within the 1-Mile Search Buffer

Report Number	Author	Year	Report Title	Proximity to Project Area
LA-00486	Unavailable	1977	Archaeological Survey Report on Eighty (80) Acres Located in the Granada Hills Area of the County of Los Angeles	Outside
LA-00487	Fontaine, Keith J. Lee	1977	Archaeological Field Test Report on Archaeological Site CA-LAN-786 Located in the Granada Hills Area of the County of Los Angeles	Outside
LA-00818	Gates, Gerald R.	1973	Archaeological Resources of the Van Norman Reservoir Area a Preliminary Report	Overlap
LA-01001	Schroth, Adella	1981	Archaeological Assessment of the Southeast Area Economic Development Project, City of Glendora, Los Angeles County, California	Outside
LA-01018	Singer, Clay A.	1980	Cultural Resource Survey and Impact Assessment for Tentative Tract No. 37743, Near the Community of San Fernando, Los Angeles County, California	Outside
LA-01044	McIntyre, Michael J.	1977	Assessment of the Impact Upon Cultural Resources by the Proposed Development of O'Melveny (bee Canyon) Park, Granada Hills	Outside
LA-01113	McIntyre, Michael J.	1976	Assessment of the Archaeological Impact by the Proposed Development of Tract No. 3d3287	Outside
LA-01151	Rechtman, Robert B., and Richard D. Aycock	1982	An Archaeological Resource Survey and Impact Report Assessment of a 9-Acre Parcel, Eastern Holy Cross Property, Los Angeles County, California	Outside
LA-01154	Colby, Susan M.	1982	An Archaeological and Resource Survey and Impact Assessment of Site D in the City of Los Angeles, California	Outside
LA-01432	Colby, Susan M.	1985	An Archaeological Resource Survey and Impact Assessment of Northern Parcels of Holy Cross Hospital Property, Mission Hills, Los Angeles County, California	Outside
LA-01464	Colby, Susan M.	1985	An Archaeological Resource Survey and Impact Assessment of a 10+ Acre Parcel at 10105 Mission Hills Road, Los Angeles County, California	Outside
LA-01510	White, Robert S.	1986	Archaeological Survey Report: The Sunset Farms Property, City of Los Angeles	Outside
LA-01730	Clelow, William C. Jr.	1978	Archaeological Report Status of LAN-816 in Sunshine Canyon	Outside
LA-01847	Salls, Roy A.	1989	Report of Archaeological Reconnaissance Survey Of:44622, Lots 8, 11, and 12 15900 Valley View Court, Sylmar, California Tract	Outside
LA-01981	Garfinkel, Alan P.	1972	The Andres Pico Adobe: A Research Proposal	Outside

Table 3-9. Previous Technical Studies Within the 1-Mile Search Buffer

Report Number	Author	Year	Report Title	Proximity to Project Area
LA-02006	Briuer, Frederick L.	1976	Assessment of the Archaeological Impact of the Proposed Zone Change of the 5-Acre Lot on Olden Street in Sylmar City of Los Angeles	Outside
LA-02083	Eberhart, Hal	1975	Draft Environmental Impact Report	Outside
LA-02095	Salls, Roy A.	1990	Report of Archaeological Reconnaissance Survey of Parcel C Parcel. Map No. L.a. 4587 Ga Project No. 8926 13258 Ralston Avenue, Sylmar, California 9134	Outside
LA-02231	Chartkoff, Joseph, and Kerry Chartkoff	1966	University of California Los Angeles - Archaeological Survey Field Project Number Ucas-081-b Highway Construction Survey Vii-la-5-p.m. 43.4–45.6	Outside
LA-02371	Walker, Edwin F.	1936	A Ceremonial Site at Porter Ranch, San Fernando	Outside
LA-02402	Foster, John M., and Robert J. Wlodarski	1983	A Burial From the Van Norman Reservoir	Overlap
LA-02488	Knight, Albert	1991	The Andres Pico Adobe	Outside
LA-02517	Wlodarski, Robert J.	1991	A Phase 1 Archaeological Study for Eight Areas Proposed for the New Los Angeles Police Training Academy, and Driver Training Facility, City of Los Angeles County, California	Overlap
LA-02526	Gamble, Lynn H.	1985	Letter Report: The Montevideo Country Club Project Planned for Topanga Canyon	Outside
LA-02540	Kaptain, Neal	1991	Cultural Resource Investigation Survey of Service Connection La-35 Joseph Jenson Filtration Plant Granada Hills, California	Outside
LA-02683	Engineering Science	1992	Draft Environmental Impact Report – Police Bond Program, Police Driver Training Facility	Overlap
LA-02892	Stone, David, and Robert Sheets	1993	Phase I Archaeological Survey Report Pacific Pipeline Project Santa Barbara Coastal Reroutes Ethnohistoric Village Placement Locations	Outside
LA-02950	Anonymous	1992	Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project	Outside
LA-03009	Knight, Albert	1994	Damages to and Losses of Cultural Resources in Los Angeles County, California During the Riots, Fire Storms and Earthquakes of 1992–1994	Outside
LA-03289	Davis, Gene	1990	Mobil M-70 Pipeline Replacement Project Cultural Resource Survey Report for Mobil Corporation	Outside
LA-03587	King, Chester	1994	Prehistoric Native American Cultural Sites in the Santa Monica Mountains	Overlap

Table 3-9. Previous Technical Studies Within the 1-Mile Search Buffer

Report Number	Author	Year	Report Title	Proximity to Project Area
LA-03670	Getchell, Barbie Stevenson, and John E. Atwood	1997	Cultural Resources Monitoring for the Stranwood Avenue to Sepulveda Boulevard Drain Project Located in the Community of Mission Hills, Los Angeles County, California	Outside
LA-04072	King, Chester	1995	Letter of August 20, 1995, to Colonel Rogers	Outside
LA-04088	Walker, Edwin Francis	1952	A Metate Site at San Fernando – (excerpt from) Five Prehistoric Archaeological Sites in Los Angeles County, California	Outside
LA-04104	Macko, Michael E.	1993	Cultural Resource Evaluation of the LADWP Power Plant 1--Olive Line 1 Transmission Line Maintenance Project Los Angeles County, California	Outside
LA-04107	York, Andrew L., and Gene Davis	1991	B1r Route Variation Supplement and Templin Hwy Supplement to Mobile M-70 Pipeline Replacement Project Cultural Resources Survey Report	Adjacent
LA-04403	Duke, Curt	1999	Cultural Resource Assessment for the AT&T Wireless Services Facility Number R109.1, Located at the Interstate 5 and Interstate 405 Interchange, City of San Fernando, County of Los Angeles, California	Outside
LA-04499	Slawson, Dana N.	1998	Historical Resource Investigation for Health Structures Tract 52539	Outside
LA-04582	Duke, Curt	1999	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 823-03, County of Los Angeles, California	Outside
LA-04766	Duke, Curt	1999	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 219-01, County of Los Angeles, California	Outside
LA-05174	Iverson, Gary	1999	Negative Archaeological Survey Report: 20180k	Outside
LA-05543	Duke, Curt	2001	Cultural Resource Assessment: Cingular Wireless Facility No. Vy 101-01 Los Angeles County, California	Outside
LA-06997	Foster, John M.	2002	Archaeological Investigation for Northeast Valley Animal Shelter (Stranwood) Task ID No. Nev002 City of Los Angeles, California	Outside
LA-07008	Unknown	2002	Los Angeles Unified School District Site Expansion of Kennedy High School Facilities Located at 11254 Gothic Avenue, Granada Hills in the City of Los Angeles	Outside
LA-07082	Milburn, Douglas H.	2003	Archaeological Investigation at CA-LAN-1209/h, Cooper Creek Site, Northern San Gabriel Mountains, Los Angeles County, California	Outside

Table 3-9. Previous Technical Studies Within the 1-Mile Search Buffer

Report Number	Author	Year	Report Title	Proximity to Project Area
LA-07165	Thal, Erika	2005	CA-6392a/Chips Telecommuunications12000 Blucher Avenue, Granada Hills, CA, Los Angeles County	Outside
LA-08255	Arrington, Cindy, and Nancy Sikes	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II	Outside
LA-08839	Bonner, Wayne H.	2007	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate Sv00871a (Global Signal Monopine), 12690 North Balboa Boulevard, Granada Hills, Los Angeles County, California	Outside
LA-09068	Bonner, Wayne H.	2003	Cultural Survey Results for Cingular Wireless Facility Candidate Vy-351-01 (Woodley/Balboa), 13000 North Balboa Blvd., Granada Hills, Los Angeles County, California	Outside
LA-09586	Bonner, Wayne H.	2008	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate SV00875A(XR) (Knolwood Country Club), Granada Hills, Los Angeles County, California	Outside
LA-10003	Foster, John M.	2004	An Extended Phase I Archaeological Program, Northeast Valley Animal Shelter Mission Hills, California	Outside
LA-10004	Foster, John M.	2005	Archaeological Monitoring Program, Northeast Valley Animal Shelter Mission Hills, California	Outside
LA-10010	Maki, Mary K.	2004	Archaeological Record Search Results for the Cascades Business Park Project, Sylmar, Los Angeles County, California	Outside
LA-10179	Smith, Phil and Gary Iverson	2000	Highway Project Description – 1Y0201	Adjacent
LA-10642	Tang, Bai "Tom"	2010	Preliminary Historical/Archaeological Resources Study, Antelope Valley line Positive Train Control (PTC) Project Southern California Regional Rail Authority, Lancaster to Glendale, Los Angeles County, California	Outside
LA-10961	Abdo-Hintzman, Kholod, M. Colleen Hamilton, and Keith Warren	2010	Archaeological Phase III Data Recovery at Mission San Fernando for the Brand Park Community Center. Mission Hills, San Fernando Valley, California	Outside
LA-11086	Wlodarski, Robert J.	2009	Aviation/Artesia - LAR090 1765 Artesia Boulevard, Manhattan Beach, CA 90266	Outside
LA-11186	Wallace, James R., and Sara Dietler	2011	Archaeological Monitoring Report and Assessment for the Van Norman Chlorination Stations Nos. 1 and 2, Los Angeles, California	Overlap

Table 3-9. Previous Technical Studies Within the 1-Mile Search Buffer

Report Number	Author	Year	Report Title	Proximity to Project Area
LA-11606	Maxon, Patrick	2011	Phase I Cultural Resources Assessment, Sylmar Ground Return Replacement Project, Los Angeles County, California	Intersecting
LA-11663	Watson, Tracy	2012	McDonald's Restaurant No. 834 Wireless Antenna Indoor Installation 11015 Sepulveda Boulevard Mission Hills, Los Angeles County, California	Outside
LA-11664	Loftus, Shannon	2011	Cultural Resource Records Search and Site Survey, AT&T Site LA0609 (44468) I-5 Fwy/I-405 Fwy Interchange 12000 North Blucher Avenue, Granada Hills, Los Angeles County, California 91344	Outside
LA-11818	Dietler, Sara, Linda Kry, and Heather Gibson	2012	Phase I Cultural Resources Assessment for the Van Norman Complex Water Quality Improvement Project City of Los Angeles, California	Overlapping
LA-12526	Ehringer, Candace, Katherine Ramirez, and Michael Vader	2013	Santa Clarita Valley Sanitation District Chloride TMDL Facilities Plan Project, Phase I Cultural Resources Assessment	Outside
LA-12635	Millington, Chris, Sara Dietler, Brandi Shawn, and Heather Gibson	2014	Cultural Resources Monitoring Report for the San Fernando Substation Grounding Rods and Lateral Installation Project (IO329985) Mission Hills, City of Los Angeles, Los Angeles County, California	Outside
LA-12766	Strudwick, Ivan	2013	Results of Cultural Resource Monitoring at the Andres Pico Adobe, 10940 Sepulveda Boulevard, City and County of Los Angeles, California	Outside
LA-12946	Holloway, Charles, and Hal Messinger	2009	Mitigated Negative Declaration, Los Angeles Aqueduct Filtration Plant Disinfection Contact Tank Project	Overlap
LA-13030	Bonner, Diane F., and Carrie D. Wills	2014	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CLV4082 (Filbert Tower), 16397 Filbert Street, Sylmar, Los Angeles County, California, CASPR No. 3551699410	Outside

Previously Recorded Cultural Resources

South Central Coastal Information Center records indicate that 35 resources have been recorded within 1 mile (1,608 meters) of the project area, including 13 historic resources, 12 prehistoric resources, eight multicomponent resources, and two sites of unknown age. Of the 35 resources, 16 have been recorded within the project area, including 14 prehistoric or multicomponent resources (one of which is an archaeological district that encompasses nine of the resources), and two historic resources. Aside from the sites intersecting the project area, most of the other sites are clustered almost 1 mile to the south and southwest of the VNC. All 35 resources are summarized in Table 3-10, and the 16 sites that intersect the project area are discussed in this section.

Table 3-10. Previously Recorded Cultural Resources Within the 1-Mile Search Buffer

Primary Number	Trinomial	Period	NRHP/CRHR Status	Description	Year/ Recorded By	Proximity to Project Area
P-19-000034	CA-LAN-000034	Prehistoric	Not evaluated	San Fernando Metate Site	1951 (Walker, Edwin, Southwest Museum); 1998 (Sutton, MQ, California State University, Bakersfield)	Outside
P-19-000169	CA-LAN-000169H	Multicomponent	Not evaluated	San Fernando Mission Archaeological Site	1950 (Pilling); 2013 (Aaron Elzinga and Chris Millington, SWCA); 2014 (Andrea Bean, John-Mark Cardwell, Chris Purtel, SWCA)	Outside
P-19-000255	CA-LAN-000255	Prehistoric	Not evaluated	Possible cemetery and habitation site	1968 (J. Beaton)	Outside
P-19-000408	CA-LAN-000408	Prehistoric	Not evaluated	Campsite	1970 (T. King); 1989 (MQ Sutton, Cal State Bakersfield)	Outside
P-19-000409	CA-LAN-000409	Prehistoric	Not evaluated	Campsite	1970 (T. King); 1989 (MQ Sutton, Cal State Bakersfield)	Outside
P-19-000411	CA-LAN-000411	Unknown	Not evaluated	Campsite	1970 (T. King)	Outside
P-19-000412	CA-LAN-000412	Unknown	Not evaluated	Campsite	1970 (T. King)	Outside
P-19-000475	CA-LAN-000475/H	Multicomponent	2S Determined Eligible; Listed in the CRHR)	Groundstone and lithic scatter. Original record stated that the site was at risk of destruction. Site has not been updated or relocated since 1972.	1972 (G. Gates)	Within
P-19-000490	CA-LAN-000490	Prehistoric	2S (Determined Eligible; Listed in the CRHR)	Lithic scatter. 1991 update stated that most surficial artifacts had been removed. Site has not been updated or relocated since 1991.	1972 (G. Gates); 1991 (R. Wlodarski and J. Budd, Cal State University Northridge)	Within

Table 3-10. Previously Recorded Cultural Resources Within the 1-Mile Search Buffer

Primary Number	Trinomial	Period	NRHP/CRHR Status	Description	Year/ Recorded By	Proximity to Project Area
P-19-000491	CA-LAN-000491/H	Multicomponent	2S (Determined Eligible; Listed in the CRHR)	Groundstone and lithic scatter. Original record stated that the site was at risk of destruction. Site has not been updated or relocated since 1991.	1972 (G. Gates)	Within
P-19-000492	CA-LAN-000492	Prehistoric	2S (Determined Eligible; Listed in the CRHR)	Groundstone and lithic scatter. Original record stated that the site was at risk of destruction. Site has not been updated or relocated since 1972.	1972 (GATES)	Within
P-19-000493	CA-LAN-000493/H	Multicomponent	2S (Determined Eligible; Listed in the CRHR)	Groundstone and lithic scatter; historic artifact scatter. Original record stated that the site was at risk of destruction. Site has not been updated or relocated since 1972.	1972 (G. Gates)	Within
P-19-000629	CA-LAN-000629	Prehistoric	Not evaluated	Burial. Originally recorded and excavated completely, additional testing showed it was isolated and no other artifacts were recovered. Attempt to relocate in 2011 was unsuccessful as the site was and is still mapped as being within the Los Angeles Reservoir.	1972 (G. Gates); 1974 (Kelly et al.); 2011 (Sara Dietler, Linda Kry, Tim Harris, AECOM)	Within
P-19-000642	CA-LAN-000642	Prehistoric	Not evaluated	Groundstone and lithic scatter. Original site record states it was basically destroyed at time of recordation and would be completely destroyed by Los Angeles Department of Water and Power. Site has not been updated or relocated since 1974.	1974 (Kelly, Gates, Bente)	Within

Table 3-10. Previously Recorded Cultural Resources Within the 1-Mile Search Buffer

Primary Number	Trinomial	Period	NRHP/CRHR Status	Description	Year/ Recorded By	Proximity to Project Area
P-19-000643	CA-LAN-000643	Prehistoric	2S (Determined Eligible; Listed in the CRHR)	Groundstone and lithic scatter. Most recent recordation stated it appeared as a surficial deposit. Site has not been updated or relocated since 1991.	1974 (Kelly et al.); 1991 (R. Wlodarski, J Budd)	Within
P-19-000644	CA-LAN-000644	Prehistoric	2S (Determined Eligible; Listed in the CRHR)	Groundstone and lithic scatter. Original site record states it was "pretty much already destroyed" at time of recordation. Site has not been updated or relocated since 1974.	1974 (Kelly et al.)	Within
P-19-000645	CA-LAN-000645	Prehistoric	Not evaluated	Groundstone and lithic scatter. Original site record states it was destroyed by construction of the Los Angeles Dam. Site is mapped as being within the Los Angeles Reservoir.	1974 (Kelly et al.)	Within
P-19-000646	CA-LAN-000646/H	Multicomponent	2S (Determined Eligible; Listed in the CRHR)	Groundstone and lithic scatter. Site has not been updated or relocated since 1974.	1974 (Kelly et al.)	Within
P-19-000960	CA-LAN-000960H	Historic	Not evaluated	San Fernando Mission Dam	1978 (Bob Edberg, NARC); 1978 (Bob Edberg, NARC)	Outside
P-19-002150	CA-LAN-002150H	Historic	6Y (Determined ineligible for NRHP through Section 106 Process)	Aqueduct	1993 (R. Sheets, A. Cole, Science Applications International Corp)	Outside

Table 3-10. Previously Recorded Cultural Resources Within the 1-Mile Search Buffer

Primary Number	Trinomial	Period	NRHP/CRHR Status	Description	Year/ Recorded By	Proximity to Project Area
P-19-002681	CA-LAN-002681/H	Multicomponent	Not evaluated	Historic and prehistoric artifacts scatter	1998 (Albert Knight, Pacific Pipeline Systems, Inc); 1998 (Albert Knight, Pacific Pipeline Systems, Inc); 2001 (Albert Knight, SAIC); 2001 (Albert Knight)	Outside
P-19-002760	CA-LAN-002760H	Historic	3S (Appears eligible for NRHP through survey evaluation)	Reservoir and Weir Box	1998 (D. Slawson, Greenwood & Associates)	Outside
P-19-003182	CA-LAN-003182H	Historic	3S (Appears eligible for NRHP through survey evaluation)	Mission period stone foundation and associated historic period refuse deposit.	2004 (John M. Foster, Greenwood & Associates)	Outside
P-19-004226	CA-LAN-004226	Prehistoric	Not evaluated	Groundstone and lithic scatter. Identified during construction for Van Norman Chlorination Tank No. 1. All artifacts out of situ and in disturbed context.	2009 (Frank Humphries, AECOM)	Within
P-19-004227	CA-LAN-004227/H	Multicomponent	Not evaluated	Groundstone and lithic scatter; historic artifact scatter. Identified during construction for Van Norman Chlorination Tank No. 2. All artifacts out of situ and in disturbed context. Likely remnants of previously destroyed sites. Chlorination Tanks now sit where site was recorded.	2009 (Frank Humphries, AECOM)	Within

Table 3-10. Previously Recorded Cultural Resources Within the 1-Mile Search Buffer

Primary Number	Trinomial	Period	NRHP/CRHR Status	Description	Year/ Recorded By	Proximity to Project Area
P-19-004228	CA-LAN-004228H	Historic	Not evaluated	Historic refuse scatter. Exposed artifacts were collected, extent of site unknown.	2009 (Frank Humphries, AECOM)	Within
P-19-167231	—	Historic	2S (Determined Eligible; Listed in the CRHR)	Mission San Fernando Rey de Espana Convento Building	1988 (D. Cameron, Archival Center, San Fernando Mission)	Outside
P-19-173040	—	Historic	3S (Appears eligible for NRHP through survey evaluation)	Mission Wells and Settling Basin	1967 (LA Cultural Heritage Commission); 2012 (Albert Knight)	Outside
P-19-175538	—	Multicomponent	2S (Determined Eligible; Listed in the CRHR)	Van Norman Reservoir Archaeological District—includes P-19-000475, -000490, -000491, -000492, -000493, -000642, -000643, -000645, and -000646.	1974 (G. Gates and Dr. A Gilman, Northridge Archaeological Center)	Within
P-19-186558	—	Historic	5S1 (Individual Property that is listed or designated locally)	Brand Park/Memory Garden	1980 (J. Arbuckle)	Outside
P-19-186560	—	Historic	5S1 (Individual Property that is listed or designated locally)	Terminus of Owens Rivers Aqueduct	1980 (J. Arbuckle)	Outside
P-19-186721	—	Historic	6Y (Determined ineligible for NRHP through Section 106 Process)	1640–1646 North Spring Street	2002 (D. Slawson, Greenwood & Associates)	Outside

Table 3-10. Previously Recorded Cultural Resources Within the 1-Mile Search Buffer

Primary Number	Trinomial	Period	NRHP/CRHR Status	Description	Year/ Recorded By	Proximity to Project Area
P-19-188007	—	Historic	6Y (Determined ineligible for NRHP through Section 106 Process)	Old San Fernando Road	2006 (J. McKenna, McKenna et al); 2011 (C. Ehringer, ESA)	Outside
P-19-190043	—	Historic	6Y (Determined ineligible for NRHP through Section 106 Process)	Bull Creek Extension Channel. Resource has already been determined ineligible and therefore no significant impact will result.	2011 (Sara Dietler, Linda Kry, Tim Harris, AECOM)	Within
P-19-190318	—	Historic	Not evaluated	Rail Spurr crossing San Fernando Road	2012 (C. Ehringer, ESA)	Outside

CRHR = California Register of Historical Resources; NRHP = National Register of Historic Places.

Site Revisits

Van Norman Archaeological District (P-19-175538)

The Van Norman Archaeological District was nominated to the National Register of Historic Places in 1974 and approved in 1975. The district includes the following sites: P-19-000475, -000490, -000491, -000492, -000493, -000642, -000643, and -000646. All of these sites are within the project area and will be briefly discussed separately below. Sites P-19-000642 and P-19-000645 were originally nominated for inclusion; however, they were deemed ineligible.

P-19-000475 (CA-LAN-475/H)

This site is a prehistoric lithic and groundstone scatter with an associated historic artifacts scatter that was originally recorded in 1972 by Gerald Gates. The site was excavated by an archaeological field class from California State University, Northridge for five semesters between 1972 and 1975, though it was indicated that less than 1% of the site was sampled. The site is located within the boundaries of the original Lower Van Norman Reservoir. No remnants of the site were observed during pedestrian survey. It is likely that the surficial component of the site has been completely destroyed; however, it is unknown if a subsurface component exists.

P-19-000490 (CA-LAN-490)

This site is a prehistoric lithic and groundstone scatter that was originally recorded in 1972, and updated in 1991 by Robert Wlodarski and J. Budd. During the original recordation, over 70 surface artifacts were collected, and the 1991 record indicates that very few artifacts remained at that time. The original record states that the site

may have been victim to looting, which likely added to its destruction. The 1991 record states that the site may have contained subsurface components; however, it was not tested. No remnants of the site were observed during pedestrian survey. It is likely that the surficial component of the site has been completely destroyed; however, it is unknown if a subsurface component exists.

P-19-000491 (CA-LAN-491)

This site is a prehistoric lithic and groundstone scatter with an associated historic artifacts scatter that was originally recorded in 1972 by Gerald Gates. At the time of recordation, the site had been partially destroyed and was at risk of being completely destroyed. No remnants of the site were observed during pedestrian survey. It is likely that the surficial component of the site has been completely destroyed; however, it is unknown if a subsurface component exists.

P-19-000492 (CA-LAN-492)

This site is a prehistoric lithic and groundstone scatter which was originally recorded in 1972 by Gerald Gates. At the time of recordation, the site had been partially destroyed and was at risk of being completely destroyed. No remnants of the site were observed during pedestrian survey. It is likely that the surficial component of the site has been completely destroyed; however, it is unknown if a subsurface component exists.

P-19-000493 (CA-LAN-493)

This site is a prehistoric lithic and groundstone scatter with an associated historic artifacts scatter that was originally recorded in 1972 by Gerald Gates. At the time of recordation, the site had been partially destroyed and was at risk of being completely destroyed. The nomination record for the Van Norman Archaeological District indicates that salvage excavations were conducted at this site in 1974 and 1975, due to the planned destruction of the site. No remnants of the site were observed during pedestrian survey. It is likely that the surficial component of the site has been completely destroyed; however, it is unknown if a subsurface component exists.

P-19-000643 (CA-LAN-643)

This site is a prehistoric lithic and groundstone scatter that was originally recorded in 1974 by Gerald Gates, and updated in 1991 by Robert Wlodarski and J. Budd. At the time of recordation, the site was not at risk for destruction. The updated site record indicates that in 1991, much of the site was covered by riprap. This record also states that the site appeared surficial, although it was not tested. The site has not been updated since 1991, and was not observed during pedestrian survey. It is likely that the surficial component of the site has been completely destroyed; however, it is unknown if a subsurface component exists.

P-19-000646 (CA-LAN-646)

This site is a prehistoric lithic and groundstone scatter that was originally recorded in 1974 by Gerald Gates and associates. At the time of recordation, there were no plans for construction within or near the site that

would have impacted it. The site is located in the southwestern corner of the project area, which has seen a relatively small amount of disturbances over the years; however, no components of the site were observed during the pedestrian survey. The site may have lost its surficial component due to erosion, construction and maintenance, or looting; however, it is unknown if a subsurface component exists.

P-19-000629 (CA-LAN-629)

This site is an isolated, prehistoric human burial associated with a large amount of artifacts that was originally recorded in 1972 by Gerald Gates, and updated in 2011 by Sara Dietler, Linda Kry, and Tim Harris. The burial was completely excavated in block in 1972, and additional testing was conducted at that time. Additional testing indicated that additional materials were not present. In 2011, a survey was completed by AECOM for the Van Norman Complex Water Quality Improvement Project, and attempts were made to relocate the site; however, no portions of the site were present. The entirety of the site is completely under water within the LAR. The site condition has not changed since 2011, and no aspect of the site was observed during pedestrian survey. The presence of the site beneath the water is unknown.

P-19-000642 (CA-LAN-642)

This site is a prehistoric lithic and groundstone scatter with an associated historic artifact scatter that was originally recorded in 1972 by Gerald Gates. At the time of recordation, the site had been essentially destroyed, and maintenance activities would likely destroy any remnants. No remnants of the site were observed during pedestrian survey. It is likely that surficial component of the site has been completely destroyed; however, it is unknown if a subsurface component exists.

P-19-000644 (CA-LAN-644)

This site is a prehistoric lithic and groundstone scatter that was originally recorded in 1974 by Gerald Gates. At the time of recordation, the site had been essentially destroyed, and any maintenance activities would likely destroy any remnants. The site is located in the same location as several VNC facilities between the Yarnell Debris Basin and the Upper San Fernando Drain Line. No remnants of the site were observed during pedestrian survey. It is likely that the site is either completely destroyed or now lacks a surficial component.

P-19-000645 (CA-LAN-645)

This site is a prehistoric lithic and groundstone scatter with an associated historic artifacts scatter that was originally recorded in 1972 by Gerald Gates. At the time of recordation, the site was determined to have been destroyed or would be destroyed by the Los Angeles Dam Project. The nomination record for the Van Norman Archaeological District indicates that salvage excavations were conducted at this site in 1974 and 1975, due to the planned destruction of the site. The site is mapped within the LAR, and no aspect of the site was observed during pedestrian survey. The presence of the site beneath the water is unknown.

P-19-004226 (CA-LAN-4226)

This site is a sparse prehistoric lithic and groundstone scatter that was originally recorded in 2009 by Frank Humphries. The site was identified during monitoring for the Van Norman Chlorination Tank No. 1 construction. All artifacts were collected, though no artifacts were identified in situ. The site record states that the artifacts may have been redeposited as the result of historic grading and fill episodes. The site is located in the area directly to the northwest of the LAR.

P-19-004227 (CA-LAN-4227)

This site is a prehistoric lithic and groundstone scatter with an associated historic artifact scatter that was originally recorded in 2009 by Frank Humphries. The site was identified during monitoring for the Van Norman Chlorination Tank No. 2 construction. All artifacts were collected, though no artifacts were identified in situ. The site record states that the artifacts may have been constituents of previously recorded sites that were spread throughout the area during grading and filling episodes. The site is located along the southern border of the project area in the same location as two VNC buildings.

P-19-004228 (CA-LAN-4228)

This site is a historic refuse scatter that was originally recorded in 2009 by Frank Humphries. The site was identified during monitoring for the Van Norman Chlorination Tank No. 2 construction. All artifacts were collected, though no artifacts were identified in situ. The site record states that the site may have been a result of historic construction and maintenance of the LAR, or a result of the habitation of historic homes that were once located at the site. The site is located along the southern border of the project area in the same location as two VNC buildings.

P-19-190043 (CA-LAN-190043)

This resource is the Bull Creek Extension Channel, which runs through the VNC, and was recorded and evaluated in 2011 by Sara Dietler, Linda Kry, and Tim Harris. The evaluation determined that the Bull Creek Extension Channel was not eligible for listing on the California Register of Historical Resources because it did not retain integrity due to changes made to it over time.

Map and Historic Aerial Photography Research

Historic maps and aerial photographs were consulted to understand development of the project area and surrounding properties. Topographic maps are available from 1900 to the present and aerial images are available from 1947 to the present (NETR 2018). Topographic maps show that the project area began to be used as a reservoir by at least 1924. The reservoir was expanded once in the 1930s and again in the 1940s when it was split into an upper and lower reservoir. The topographic map from 1975 shows that the lower reservoir was under construction at this time. By the late 1980s, the reservoir improvements were completed. The first historic aeriels from the project area show both the upper and lower reservoirs, though at this time the lower reservoir

was still an irregularly shaped lake, as the existing basin had not yet been constructed. No massive changes to the project area occurred until the early 1970s, when the lower reservoir came under construction. During construction, much of the land within the project area appears to have been graded. By 1977, the rectangular shaped lower reservoir, which still exists, had been completed. The upper reservoir was redeveloped between 1980 and 1994. After this time, there were few significant changes within the project area.

Native American Correspondence

The Native American Heritage Commission was contacted on May 3, 2018, and a review of the Sacred Lands File was requested. The Native American Heritage Commission replied via email on May 7, 2018, stating that the Sacred Lands File search was completed with negative results. Because the Sacred Lands File search does not include an exhaustive list of Native American cultural resources, the Native American Heritage Commission suggested contacting Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the project area. The Native American Heritage Commission provided a list of nine Native American groups and individuals who may have knowledge of cultural resources in the project area. Formal government-to-government consultation as specified by Assembly Bill (AB) 52 was conducted by LADWP and is discussed in Section 3.18, Tribal Cultural Resources.

Survey

A specialist who qualifies for paleontology and archaeology under the Secretary of Interior Standards conducted an intensive pedestrian survey of the project area on May 2 and May 3, 2018, using standard paleontological and archaeological procedures and techniques. All work areas were surveyed, including the Lower San Fernando Detention Basin, Upper Northeast Drainage, LAR UV Plant Drainage and V-Ditch, LAR North Dike Storm Water Basin and East Channel, Yarnell Debris Basin, Upper San Fernando Drain Line Feature 1 and Feature 2, San Fernando Gate Drainage Feature, Upper Debris Basin, Middle Debris Basin, Bee Drainage Channel, segment of Bull Creek Extension, and San Fernando Creek (see Figure 2). All field practices met the Secretary of Interior's standards and guidelines for a cultural resources and paleontological inventory. Pedestrian transects were walked on 20-meter intervals throughout the project area. Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials and to record locational information.

Where cultural materials were encountered, all data necessary to complete the appropriate State of California DPR 523 series forms were collected. Following California Office of Historic Preservation guidelines, any cultural material more than 45 years old was recorded as an archaeological site, built-environment resource, or isolate, as appropriate. All fieldwork was documented using field notes and iPad technology with close-scale field maps and aerial photographs. Location-specific photographs were taken using an Apple 3rd Generation iPad equipped with 8 mega-pixel resolution and georeferenced PDF maps of the project area. All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena, California office.

No significant archaeological resources were documented during the survey; however, insignificant resources were documented in the Upper Northeast Drainage (e.g., chunks of bricks, concrete, and asphalt mixed in the riprap) and Middle Debris Basin (e.g., bricks and fragmentary glass insulator deposited on the creek bottom). Much of the project area is covered with vegetation and portions have been covered with gravel. Ground visibility was generally poor (0% to 20%) and many of the channels were lined with concrete and/or riprap, completely overgrown with vegetation, or contained water, further diminishing the surveyable area. Soils in the area are light yellowish-brown sands with gravel. The project area is in the VNC, which is fenced in with a chain-link fence and is located within a rural, residential area. During the survey, no remnants of the 16 sites that were recorded within the project area were observed. These results likely speak to the disturbance that the site has experienced over the last 50 years.

The proposed project is expected to consist of annual vegetation and debris removal within active earthen-bottom and concrete-lined channels with the ability to transport archaeological resources from their original locations. None of the previously identified significant or potentially significant archaeological sites recorded within the project area could be relocated due to extensive past disturbances that have destroyed the sites. Despite these disturbances, there remains a possibility of discovering sensitive remains or artifacts during earthmoving activities associated with the proposed project, and thus, archaeological sensitivity is considered to be low to moderate. As such, MM-CUL-1 would be required to reduce impacts to cultural resources to **less than significant**.

MM-CUL-1 A qualified archaeologist shall attend the maintenance activity kick-off meeting to coordinate with the Los Angeles Department of Water and Power and the maintenance foreman to allow for brief inspection of initial ground disturbance within 50 feet of previously recorded archaeological site boundaries. The goal of this meeting will be to determine if more intensive archaeological monitoring is required.

MM-CUL-2 To reduce potential impacts to unanticipated cultural resources during project implementation, all maintenance personnel should undergo Worker Environmental Awareness Program (WEAP) training to ensure that any unanticipated archaeological discoveries are treated appropriately. The WEAP training will provide specific details on the kinds of archaeological materials that may be identified during project implementation.

MM-CUL-3 In the event that archaeological resources (sites, features, or artifacts) are exposed during maintenance and operation activities for the proposed project, all activities occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; California Public Resources Code Section 21082), the

archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.

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

Less-Than-Significant Impact. Since the project area has been developed with water conveyance and storage facilities, ground-disturbing activities associated with proposed maintenance activities are unlikely to uncover previously unknown archaeological resources. However, if human skeletal remains are uncovered during ground-disturbing activities, maintenance workers are required by law to stop work and contact the County Coroner. California Health and Safety Code Section 7050.5 requires that, if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the County Coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. Furthermore, if the coroner determines or has reason to believe that the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission within 24 hours (California Health and Safety Code, Section 7050.5c), and the California Native American Heritage Commission must notify the most likely descendant. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

Therefore, if Native American remains were uncovered during ground-disturbing activities associated with the proposed project, compliance with existing regulations would ensure that the appropriate authorities are notified and that discovered remains are treated with the appropriate respect and dignity. As such, impacts would be **less than significant**.

References

- McLeod, S.A., 2018. "Vertebrate Paleontology Records Check for paleontological resources for the proposed Van Norman Maintenance Project, Dudek Project # 10649.33, in Granada Hills, Los Angeles County, project area." Unpublished Records Search Results Letter from S. McLeod (The Natural History Museum of Los Angeles County) to M. Williams (Dudek).
- NETR (National Environmental Title Research, LLC). 2018. Historic Aerials and Topographic Maps. Accessed June, 2018. <http://www.historicaerials.com/>.

3.6 Energy

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-Than-Significant Impact. The service providers, supply sources, and estimated consumption for electricity, natural gas, and petroleum are discussed below.

Energy Overview

Electricity

LADWP is the utility provider for the City. LADWP provides electric services to 1.5 million customers located in the City and in the Owens Valley. In 2018, LADWP customers consumed approximately 24 billion kilowatt-hours of electricity (CEC 2018). LADWP receives electric power from a variety of sources. Approximately 29% of LADWP's power came from renewable energy sources in 2016, including biomass/waste, geothermal, small hydroelectric, solar, and wind sources (LADWP 2017). Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per-capita has remained stable for more than 30 years, while the national average has steadily increased (CEC 2015).

Natural Gas

SoCalGas serves the City (including the project area). SoCalGas serves 21.6 million customers in a 20,000-square-mile service area that includes more than 500 communities (SoCalGas 2018). In 2016 (the most recent year for which data is available), SoCalGas delivered 5,123 million therms of natural gas, with the majority going to residential uses. Demand for natural gas can vary depending on factors such as weather, price of electricity, the health of the economy, environmental regulations, energy-efficiency programs, and the availability of alternative renewable energy sources. Natural gas is available from a variety of in-state and out-of-state sources, and is provided throughout the state in response to market supply and demand (SoCalGas 2018).

Petroleum

Transportation accounts for the majority of California's total energy consumption (CEC 2018). According to the Energy Information Association, California used approximately 672 million barrels of petroleum in 2016 (EIA 2018). This equates to a daily use of approximately 1.8 million barrels of petroleum. There are 42 U.S. gallons in a barrel, so California consumes approximately 77 million gallons of petroleum per day, adding up to an annual consumption of 28 billion gallons of petroleum. However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total (EIA 2018). At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled.

Project Maintenance Energy Use

Electricity

Temporary electric power for as-necessary lighting and electronic equipment would be provided by LADWP. The amount of electricity used for the routine vegetation management and maintenance activities for the proposed project would be minimal, because typical demand would stem from electrically powered hand tools. The electricity used for the proposed project would be temporary and minimal; therefore, proposed project maintenance would not result in wasteful, inefficient, or unnecessary consumption of electricity. Impacts would be **less than significant**.

Natural Gas

Natural gas is not anticipated to be required for the proposed project. Fuels used for the proposed project would primarily consist of diesel and gasoline, which are discussed under the subsection "Petroleum." Any minor amounts of natural gas that may be consumed as a result of the proposed project would be temporary and negligible and would not have an adverse effect; therefore, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of natural gas. Impacts would be **less than significant**.

Petroleum

Petroleum would be consumed for maintenance activities. Fuel consumed by off-road equipment would be the primary energy resource expended over the course of the proposed project. Transportation of materials and workers would also result in petroleum consumption. Off-road equipment and haul trucks would use diesel fuel. Workers would likely travel to and from the project area in gasoline-powered vehicles. Maintenance of the project is expected to take place during 5 months of each year, beginning in September 2019, and would occur on an annual or as-needed basis in subsequent years. Maintenance activities would be rotated such that each

area would be subject to maintenance no more than once every 3 years. Because of the short-term nature of maintenance activities and relatively small scale of the project, the proposed project's petroleum consumption would be negligible when compared to California's daily total use of approximately 1.8 million barrels of petroleum. As such, impacts would be **less than significant**.

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

Less-Than-Significant Impact. The proposed project would follow applicable energy standards and regulations during the maintenance activities. In addition, the proposed project would be built and operated in accordance with all existing, applicable regulations at the time of maintenance activities. As such, impacts related to the proposed project's potential to conflict with plans for renewable energy and energy efficiency would be **less than significant**.

References

CEC (California Energy Commission). 2018. "Electricity Consumption by Entity." Accessed July 2018.
<http://www.ecdms.energy.ca.gov/elecbyutil.aspx>.

EIA (Energy Information Association) 2018. "California State Profile and Energy Estimates – Table F15: Total Petroleum Consumption Estimates, 2016." Accessed February 2019. http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

LADWP (Los Angeles Department of Water and Power) 2017. *Briefing Book 2017–2018*. August 2017. Accessed December 2018. <https://s3-us-west-2.amazonaws.com/ladwp-jtti/wp-content/uploads/sites/3/2017/09/08143247/Briefing-Book-Rolling-PDF.pdf>.

SoCalGas (Southern California Gas). 2018. "Company Profile." Accessed April 2018.
<https://www.socalgas.com/about-us/company-profile>.

3.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

INITIAL STUDY
VAN NORMAN COMPLEX ROUTINE OPERATION AND MAINTENANCE PROGRAM

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

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

Less-Than-Significant Impact. The Los Angeles area has a fault system that traverses the region, including the San Andreas Fault. The Safety Element of the City's General Plan shows that the project area is within a Fault Rupture Study Area, as well as largely within an Alquist-Priolo Special Study Zone Area (City of Los Angeles 1996).

Regardless of the extent and magnitude of seismic hazards present within the region, the proposed project would not increase public exposure to such risks because they would not involve habitable structures and would not result in increased geologic risks to the public or property outside of the project area. The proposed project would occur on or along existing system facilities and infrastructure, which are generally not accessible to the public. Infrastructure would be inspected and repaired, if necessary, in the event it experiences damage in an earthquake. The impacts of the proposed project with respect to public safety (i.e., loss, injury, or death) and/or property damage would be negligible; therefore, impact would be **less than significant**.

ii) *Strong seismic ground shaking?*

Less-Than-Significant Impact. As previously discussed, the project area lies within a Fault Rupture Study Area, as well as largely within an Alquist-Priolo Special Study Zone Area (City of Los Angeles 1996). Given the region's complex fault system, the project area could experience strong seismic ground shaking. The proposed project would occur on or along existing infrastructure, and no expansion or additional infrastructure is planned as part of it. Additionally, the proposed project does not propose any habitable structures or other growth-inducing development. Despite the apparent risk of earthquake-related hazards, the proposed project would not result in increased exposure of people or structures to substantial adverse effects of seismic ground shaking; therefore, impacts would be **less than significant**.

iii) *Seismic-related ground failure, including liquefaction?*

Less-Than-Significant Impact. The majority of the project area has been designated as susceptible to liquefaction (City of Los Angeles 1996). However, the proposed project would occur on or along existing facilities and no habitable structures are proposed. Infrastructure would be inspected and repaired, if necessary, in the event of liquefaction. The impacts of the proposed project with respect to

public safety (i.e., loss, injury, or death) and/or property damage would be negligible; therefore, impact would be **less than significant**.

iv) Landslides?

Less-Than-Significant Impact. Exhibit C of the Safety Element of the City's General Plan generally depicts the potential landslide hazard areas within the City (City of Los Angeles 1996). According to Exhibit C, the project area is not within a hillside area, which would be more susceptible to landslides. There are no landslide areas mapped within the project area. The City's Safety Element does show an area identified as a "Cluster of Small Shallow Surficial Landslides" adjacent to the western boundary of the VNC and north of the project area. Additionally, sites identified as "5 to 100 Acre Bedrock Landslide Sites" and "5 to 100 Acre Probably Bedrock Landslide Sites" are shown directly northwest of the project area (City of Los Angeles 1996). However, with no landslide sites associated with the project area, the likelihood of a landslide within the project area is considered low. Further, the proposed maintenance activities would occur on or along existing facilities and no habitable structures are proposed. Infrastructure would be inspected and repaired, if necessary, in the event of a landslide. The impacts of the proposed project with respect to public safety (i.e., loss, injury, or death) and/or property damage would be negligible; therefore, impact would be **less than significant**.

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

No Impact. The proposed project includes maintenance activities that would occur along the existing facilities within the project area. One of the issues that the proposed project seeks to address is sediment and sand buildup in existing facilities in the VNC, as well as vegetation management in or around these existing facilities. Overgrown vegetation and accumulated sediment would be removed as a result of the proposed project. Maintenance activities would be performed in an effort to ensure that facilities are functioning properly and thereby reducing the risk of soil erosion or the loss of topsoil. Typical construction activities associated with soil erosion or the loss of topsoil, such as grading or excavation, would not be performed as part of the proposed project. Thus, the proposed project would have **no impact** associated with soil erosion or the loss of topsoil.

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

Less-Than-Significant Impact. As previously discussed, the proposed project would be located within areas of the City that are susceptible to landslides, lateral spreading, and liquefaction (City of Los Angeles 1996). Subsidence can be induced by both natural and human phenomena and can result from withdrawal of subsurface water or sediment. The potential for failure from subsidence is highest in areas where the

groundwater table is high, where relatively soft and recent alluvial deposits exist, and where creek banks are relatively high. The proposed project would not include withdrawal of subsurface water. The proposed project would involve the removal of excess sediment and sand from channels or basins, and vegetation management. The proposed project would occur on or along existing facilities and no habitable structures are proposed. Infrastructure would be inspected and repaired, if necessary, in the event of landslide, lateral spreading, subsidence, or liquefaction. The impacts of the proposed project with respect to public safety (i.e., loss, injury, or death) and/or property damage would be negligible; therefore, impact would be **less than significant**.

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

Less-Than-Significant Impact. Table 18-1-B of the Uniform Building Code defines the expansive potential of a soil by its “expansion index,” which if greater than 20, typically requires special foundation design consideration under the Uniform Building Code (ICBO 1994). The expansive potential of soils is typically related to the type and amount of clay minerals in a soil, along with the moisture content of the soil and how often it changes (i.e., wet/dry cycles). Expansive soils can be widely dispersed, found in hillside areas as well as low-lying areas in alluvial basins.

This criterion does not apply to the proposed project because the existing infrastructure would simply be maintained and would not require or involve the construction of new or expanded facilities. The proposed project would not involve the construction of habitable structures and would not expose the public to substantial risks to life or property if they were damaged by expansive soils. For these reasons, the impact of the proposed project to life or property from expansive soils would be **less than significant**, regardless of the presence of expansive soils on a specific work area within the project area.

- e) ***Would the project 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?***

No Impact. Proposed maintenance activities would not involve any septic tanks or alternative wastewater disposal systems; therefore, there would be **no impact**.

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

Less-Than-Significant-Impact with Mitigation Incorporated. A paleontological records search request was sent to the Natural History Museum of Los Angeles (LACM) on May 1, 2018, and the results were received on May 15, 2018. According to the LACM and results from previous surficial geological mapping (see Appendix C, Cultural Report), the VNC is underlain by the following geological units, listed from youngest to oldest: Holocene (<12,000 years ago), younger Quaternary alluvium underlain by Pleistocene (approximately 2.8

million to 12,000 years ago), older Quaternary alluvium Pliocene (approximately 5.3 to 2.8 million years ago) to Pleistocene Saugus Formation, Pliocene Towsley Formation, and the late Miocene (approximately 11.6 to 5.3 million years ago) Monterey Formation.

The LACM reported two previously recorded vertebrate fossil localities within the VNC and several localities outside of the VNC, but near the project area. The two vertebrate fossil localities are from older Quaternary deposits or the Saugus Formation on the northwestern side of the present Van Norman Reservoir and northeastern Southern Debris Basin and yielded a fossil bison (*Bison* spp.) at 75 feet below the ground surface and a fossil mammoth (*Mammuthus* spp.) (Appendix C). Nearby, but east of the northernmost project area, just east of I-5 and south of I-210, McLeod (2018) reported on fossil mastodon (*Mammut* spp.) and horse (*Equus* spp.) from older Quaternary deposits. The LACM did not report any fossil localities from the Saugus Formation, Towsley Formation, or Monterey Formation within the project area; however, there are several fossil localities in the vicinity of the VNC. The nearest Saugus Formation locality, situated just east of the southern portion of the Yarnell Debris Basin, yielded a horse fossil specimen (Appendix C). The LACM reported a fossil locality from the Towsley Formation, approximately 1 mile north-northeast of the project area that produced a specimen of baleen whale. Although only one indeterminate mammal was reported by the LACM from the Monterey Formation near the project area, McLeod (2018) mentioned numerous LACM localities from the Monterey Formation south of the VNC on the northern flank of the Santa Monica Mountains; however, no further details regarding these localities were given.

No significant paleontological resources were document during an on-site survey on May 2 and May 3, 2018.

The proposed project is expected to consist of annual vegetation and debris removal within active earthen-bottom and concrete-lined channels with the ability to transport paleontological resources from their original locations. No significant paleontological or unique geological resources were identified within the project area during the pedestrian survey. Given the proposed maintenance activities, the paleontological sensitivity within the work areas is considered low, and no unique geological features are anticipated to be impacted by implementation of the proposed project. However, implementation of MM-GEO-1 would reduce potential impacts to paleontological resources to **less than significant**.

MM-GEO-1 In the event that paleontological resources (e.g., fossils) are unearthed during project earthmoving, the area of discovery shall be roped off with a 50-foot radius buffer. A qualified paleontologist shall be retained to assess the find and provide appropriate mitigation. Once documentation and collection of the find is completed, the qualified paleontologist shall remove the rope and allow ground disturbance to recommence in the area of the find. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program for the proposed project. The Paleontological Resources Impact Mitigation Program shall be consistent with the 2010 guidelines of the Society of Vertebrate Paleontology and shall outline where paleontological monitoring is required based on maintenance plans and/or geotechnical reports; procedures for adequate paleontological monitoring and discoveries treatment; and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management.

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3.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-Than-Significant Impact. Climate change refers to any significant change in measures of climate (e.g., temperature, precipitation, or wind patterns) lasting for an extended period of time (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere). The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional greenhouse gases (GHGs) to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5).⁹ The three GHGs evaluated herein are CO₂, CH₄, and N₂O because these gases would be emitted during the proposed project.

⁹ Climate-forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code Section 38505; impacts associated with other climate-forcing substances are not evaluated herein.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO₂ equivalent (CO₂e). Consistent with CalEEMod Version 2016.3.2, this GHG emissions analysis assumed the GWP for CH₄ is 25 (i.e., emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

As discussed in Section 3.3, Air Quality, the proposed project is located within the jurisdictional boundaries of the SCAQMD. In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008a). This document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO₂e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (SCAQMD 2008b). The 10,000 MT CO₂e per-year threshold, which was derived from GHG reduction targets established in Executive Order S-3-05, was based on the conclusion that the threshold was consistent with achieving an emissions capture rate of 90% of all new or modified stationary source projects.

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

- Tier 1.** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2.** Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3.** Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO₂e per-year threshold for industrial uses would be

recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO₂e per year), commercial projects (1,400 MT CO₂e per year), and mixed-use projects (3,000 MT CO₂e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO₂e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4. Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of Assembly Bill (AB) 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO₂e per-service population for project-level analyses and 6.6 MT CO₂e per-service population for plan-level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5. Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

To determine the proposed project's potential to generate GHG emissions that would have a significant impact on the environment, its GHG emissions were compared to the SCAQMD recommended mixed-use quantitative threshold of 3,000 MT CO₂e per year.

Project Maintenance Emissions

The proposed project would result in GHG emissions primarily associated with the use of off-road equipment, on-road trucks, and worker vehicles. As described in Section 3.3, the CalEEMod was used to calculate the annual GHG emissions. On-site sources of GHG emissions include off-road equipment; off-site sources include trucks and worker vehicles. Table 3-11 shows the estimated GHG emissions for the proposed project during the first year and subsequent years.

Table 3-11. Estimated Annual Greenhouse Gas Emissions

Year	CO ₂	CH ₄	N ₂ O	CO ₂ e
	<i>Metric Tons per Year</i>			
2019	29.91	0.01	0.00	30.12
2020 and thereafter	17.97	0.01	0.00	18.09
SCAQMD Threshold				3,000
Exceeds Threshold				No

Notes: CH₄ = methane; CO₂ = carbon dioxide; CO₂e = carbon dioxide equivalent; GHG = greenhouse gas; N₂O = nitrous oxide; SCAQMD = South Coast Air Quality Management District.

See Appendix A for complete results.

As shown in Table 3-11, the proposed project would result in approximately 30 MT CO₂e from the first year of operations and approximately 18 MT CO₂e per year thereafter. Estimated annual increased GHG emissions associated with development of the proposed project would not exceed the threshold of 3,000 MT CO₂e per year; therefore, GHG impacts for the proposed project would be **less than significant**.

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

Less-Than-Significant Impact. The City has developed action plans to reduce GHG emissions and thereby reduce their jurisdiction's contribution to global climate change concerns. As detailed below, none of these plans is a Qualified GHG Emissions Reduction Plan under CEQA per the requirements outlined in CEQA Section 15183.5(D); therefore, no CEQA document can tier from the City's plans. While there is currently no local guidance that would be specifically applicable to the CEQA analysis of the proposed project, and no mandatory GHG plans, policies, regulations, or finalized agency guidelines that would apply to implementation of the proposed project, a description of the relevant plans with GHG reduction strategies is provided in Appendix A for informational purposes.

The City adopted Green LA: An Action Plan to Lead the Nation in Fighting Global Warming in May 2007, which set forth the goal of reducing City GHGs by to 35% below 1990 levels by 2030 (City of Los Angeles 2007). The GHG reductions set out in the plan are based on actions in key sectors, including energy, water, transportation, waste, the Port of Los Angeles, airports, open space and greening, green economy, and adaptation strategies.

In March 2017, the City released its latest Sustainable City pLAn, which set the course for a cleaner environment and a stronger economy, with a commitment to equity as its foundation. The plan is made up of short-term (by 2017) and longer-term (by 2025 and 2035) targets in 14 categories that will advance the City's environment, economy, and equity (City of Los Angeles 2017). The plan sets GHG emissions reduction targets (set against a 1990 baseline) of 45% by 2025, 60% by 2035, and 80% by 2050. It also sets GHG efficiency improvement targets for the City's economy of 55% in 2025 and 75% in 2035 from 2009 baseline levels¹⁰ (City of Los Angeles 2017). The third annual Sustainable City pLAn Report (2017–2018), determined that the City's emissions were 51% below the 1990 baseline as of 2016, putting the City ahead of the 2025 pLAn reduction target of 45% (City of Los Angeles 2018).

In December 2017, LADWP approved the 2017 Power Strategic Long-Term Resource Plan (PSLTRP), which serves as a comprehensive 20-year roadmap that guides the LADWP Power System in its efforts to supply reliable electricity in an environmentally responsible and cost-effective manner. One of the goals set forth in

¹⁰ GHG efficiency is the amount of GHG emissions emitted per dollar of economic productivity, which is assumed to be 44.5 MT CO₂e per million dollars of metro area gross domestic product in 2009 (City of Los Angeles 2017).

the 2017 PSLTRP is to reduce GHG emissions while ensuring reliable electric service and maintaining cost competitive rates. LADWP seeks to accomplish this goal by examining multiple strategies to reduce GHG emissions, including early coal replacement, an accelerated renewable portfolio standard, local solar, energy storage, and transportation electrification (LADWP 2017). The 2017 PSLTRP includes a renewable portfolio standard goal of 50% by 2025 55% by 2030, 65% by 2036, doubling of energy efficiency from 2017 through 2027, repowering coastal in-basin generating units with new, highly efficient potential clean energy projects by 2029 to provide grid reliability and critical ramping capability, accelerating electric transportation to absorb GHG emissions from the transportation sector, and investing in the Power System Reliability Program to maintain a robust and reliable Power System” (LADWP 2017). The 2017 PSLTRP determined that a combination of these GHG strategies will reduce LADWP’s GHG emissions to nearly 78% below 1990 levels over the next 20 years and over 82% below 1990 levels overall when considering GHG emissions absorbed from the transportation sector (LADWP 2017).

The Green LA Plan, the Sustainable City pLAn, and the 2017 PSLTRP are not qualified GHG emission reduction plans under CEQA; however, the proposed project would not conflict with these plans.

The Climate Change Scoping Plan, approved by CARB on in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California’s GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, and it is not intended to be used for project-level evaluations.¹¹ Under the Scoping Plan, however, there are several state regulatory measures aimed at identifying and reducing GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, and high-GWP GHGs in consumer products) and changes to the vehicle fleet (e.g., hybrid, electric, and more fuel-efficient vehicles) and associated fuels, among others.

Regarding consistency with Senate Bill 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future-year analysis. However, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan: Building on the Framework that “California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32” (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, CARB (2014) states the following:

¹¹ The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that “[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan” (California Natural Resources Agency 2009).

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under Assembly Bill 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, Senate Bill 32, and Executive Order S-3-05. CARB confirmed this in its 2017 Climate Change Scoping Plan Update, which states the following (CARB 2017):

The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB [Senate Bill] 32, and AB 197.

The proposed project would not interfere with implementation of GHG reduction goals for 2030 or 2050 because it would not exceed the SCAQMD's recommended threshold of 3,000 MT CO₂e per year. In addition, the proposed project would not conflict with the state's trajectory toward future GHG reductions. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; therefore, impact would be **less than significant**.

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3.9 Hazards and Hazardous Materials

Would 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-Than-Significant Impact. The proposed project would primarily involve the use of common hazardous materials, including oil and grease, solvents, diesel fuel, and other chemicals in vehicles, trucks, and heavy equipment. The proposed project would not require extensive or ongoing use of acutely hazardous materials

or substances. The proposed maintenance activities would be of short duration, occurring between 1 day and 14 days at each work area approximately once a year, and would involve the limited transport, storage, use, and/or disposal of common machinery-related hazardous materials.

The use of hazardous materials within the project area could pose risks to maintenance workers or lead to soil and water contamination, if the hazardous materials are not properly stored, used, or disposed of. Due to the presence of water bodies, the potential for water contamination and the likelihood that accidentally contaminated soils would end up in the water could create a public health and safety hazard.

To prevent environmental hazards, the handling of hazardous materials used in equipment would be conducted in accordance with existing regulations, such as Title 22 of the California Code of Regulations. These regulations include the transport of hazardous materials, on-site storage and use of hazardous materials, and procedures to implement in the event of a spill. In addition, potential risks associated with the routine transport, use, or disposal of hazardous materials would be minimized through implementation of AMM-HYD-1, Erosion Control, and AMM-HYD-2, Minimization of Controllable Discharge of Pollutants, detailed in Section 3.10, Hydrology and Water Quality.

With incorporation of AMM-BIO-5, Equipment and Access, and AMM-BIO-6, Pollution, Litter, and Cleanup, potentially adverse impacts associated with the transport, handling, and use of hazardous materials would be reduced to **less-than-significant** levels.

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

Less-Than-Significant Impact. As discussed in Section 3.9(a), the proposed project would involve the use of common hazardous materials, including oil and grease, solvents, diesel fuel, and other chemicals in vehicles, trucks, and heavy equipment. While the transport, handling, storage, and use of these hazardous materials would be done in compliance with the applicable regulatory requirements, there is always the risk that hazardous materials could be accidentally released into the environment. As such, the proposed project would implement AMM-BIO-5 and AMM-BIO-6, which require the implementation of measures to minimize the likelihood of accident conditions occurring, and establish procedures in case accident conditions should occur. With implementation of AMM-BIO-5 and AMM-BIO-6, impacts associated with the hazards to the public or the environment through foreseeable upset and accident conditions involving the release of hazardous materials would be **less than significant**.

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

No Impact. There are no schools located within 0.25 miles of the VNC. The closest school to the project area is Knollwood Elementary School, located approximately 0.4 miles west of the VNC. Maintenance activities would utilize hazardous materials, but these would be handled in accordance with existing regulations. No hazards to the maintenance crew or to nearby residents, students, or employees would occur from hazardous materials use within the project area. Section 3.3, Air Quality, discusses toxic air contaminants and determined that the proposed project would not expose nearby sensitive receptors to substantial pollutant concentrations. Therefore, there would be **no impacts** and no mitigation would be required.

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

Less-Than-Significant Impact with Mitigation Incorporated. Available online databases that provide environmental information on facilities and sites in the State of California were reviewed. These databases include California Environmental Protection Agency (CalEPA), Department of Toxic Substances Control (DTSC) EnviroStor, RWQCB GeoTracker, National Pipeline Mapping System, and California Division of Oil, Gas, and Geothermal Resource online well finder. Two of the databases, EnviroStor and GeoTracker, list the VNC as a site where a previous hazardous material release occurred. Additionally, the California Division of Oil, Gas, and Geothermal Resource online well finder indicates that an oil well was plugged and abandoned within the VNC (but not on a work area) in 1921 (DOC 2018).

DTSC maintains the EnviroStor Database, which compiles hazardous material generators and sites that have been identified for clean up or that are permitted to handle hazardous materials by various regulatory agencies. The EnviroStor Database lists the Sylmar Converter Station, located in the northeastern portion of the VNC, as a contaminated site currently enrolled in the DTSC's voluntary cleanup program (DTSC n.d.). The Sylmar Converter Station was commissioned as an electricity converter station in 1969, and has been in operation since that time. During the 1994 Northridge earthquake, two on-site transformers were damaged and approximately 10,000 gallons of electrical insulating oil spilled. Despite that most of the oil remained within the limits of the Sylmar Converter Station, a minor quantity of the oil mixed with water discharged from a broken water main line. The oily waste flowed into the on-site storm drain system reaching drainage channels that lead to other areas within the VNC. Two of the proposed project work areas, the Yarnell Debris Basin and the Lower San Fernando Detention Basin, were determined to have been potentially affected by the spill. On June 30, 2000, LADWP entered into a Voluntary Cleanup Agreement to investigate the extent of environmental impacts associated to the oil spill and presence of hazardous waste or hazardous waste constituents at the affected areas. A June 2016 Supplemental Remedial Investigation determined that several contaminants of concern were present in soil samples taken from the Yarnell Debris Basin and the Lower San Fernando Detention Basin

(LADWP 2017). Total petroleum hydrocarbons, polychlorinated biphenyls, and all Title 22 metals except arsenic and thallium were detected in soil samples taken from the Yarnell Debris Basin. The same contaminants, with the exception of polychlorinated biphenyls, were detected in sediment samples from the Lower San Fernando Detention Basin. LADWP intends to investigate further and refine the understanding of conditions at the Yarnell Debris Basin and the Lower San Fernando Detention Basin once permitting is complete and work plan approval has been obtained from the DTSC and U.S. Environmental Protection Agency, and to provide additional information in support of human and ecological health risk assessments. The sampling is anticipated to take place in early 2020, and the reports would be generated prior to the end of 2020.

No other proposed work areas were affected by the spill. The RWQCB GeoTracker database indicates that a petroleum spill occurred within the VNC in 1999, but that the spill was remediated and the case was closed in 2015 (SWRCB n.d.). The GeoTracker search did not return any other locations in the vicinity of the VNC that are considered hazardous materials sites pursuant to Government Code Section 65962.5.

The proposed project would include mowing herbaceous vegetation at the Yarnell Debris Basin and removing overgrown vegetation and accumulated sediment at the Lower San Fernando Detention Basin. Due to the potential presence of hazardous contaminants at the aforementioned work areas, maintenance activities could potentially expose maintenance workers to hazardous media as sediments are disturbed. As such, MM-HAZ-1 shall be implemented to reduce levels of exposure to less than significant levels. MM-HAZ-1 would require LADWP to implement a Hazardous Site Safety Plan for the affected work areas.

MM-HAZ-1 The Los Angeles Department of Water and Power (LADWP) shall prepare and implement a Hazardous Site Safety Plan for the Yarnell Debris Basin and Lower San Fernando Detention Basin. The Hazardous Site Safety Plan shall include measures to minimize exposure to workers and for the safe excavation, handling, and disposal of hazardous media.

Worker exposure to hazardous substances shall be minimized through implementation of a Health and Safety Plan. The project-specific Health and Safety Plan shall be prepared in accordance with the Occupational Safety and Health Administration standards, included in the Hazardous Site Safety Plan, and implemented during excavation and maintenance-related activities. The Hazardous Site Safety Plan shall also include procedures for the safe management of hazardous media and shall include, at a minimum, the following:

- Identification of known areas with hazardous media of concern.
- Instructions for identification of suspect hazardous media.
- Procedures for temporary cessation of maintenance activity and evaluation of the level of environmental concern if previously unidentified suspect soils are encountered.
- Procedures for limiting access for properly trained personnel to the contaminated area.

- Procedures for characterizing and managing excavated soils.
- Procedures for proper disposal of hazardous media (disposal shall be handled by the LADWP Hazardous Substances Group).
- Procedures for notification and reporting, including internal management and agencies (e.g., local fire department, Certified Unified Program Agency, U.S. Environmental Protection Agency), as needed.

With implementation of MM-HAZ-1, impacts related to hazardous material sites would be **less than significant**.

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

No Impact. The VNC is located approximately 4 miles northwest of Whiteman Airpark and 4.4 miles north of Van Nuys Airport; it is not within the Los Angeles County Airport Influence Area (County of Los Angeles 2011; Los Angeles County Airport Land Use Commission 2004). The proposed project would not involve the construction of high-rise structures or involve activities that could pose a safety hazard to aircraft operations or airport activities, and it would not conflict with an airport land use plan. Therefore, there would be **no impacts** to public airports.

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

No Impact. Proposed maintenance activities would be staged within the VNC and would not interfere with any current emergency response plans or emergency evacuation plans for local, state, or federal agencies. Traffic generated by the proposed project would be temporary and would last between 1 day and 14 days, depending on the work area under maintenance. All proposed maintenance activities would occur on the VNC and would not require any (temporary) closures to public streets. Therefore, there would be **no impacts** related to emergency response/evacuation plans.

- g) *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Less-Than-Significant Impact. According to the Fire Hazard Severity Zones Maps, the project area is designated as being outside the Very High Fire Hazard Safety Zone (VHFHSZ), or Non-VHFHSZ, for both local responsibility and state responsibility area maps (CAL FIRE n.d.). Despite this fact, the potential for wildland fire is still considered high throughout the VNC due to the chaparral, brush, and trees located throughout that could be highly flammable during fire season.

The proposed project would not involve construction or operation of habitable structures in wildland areas or promote new development in wildland areas. The proposed project would have the potential to increase the risks associated with wildfires due in part to the presence of heavy equipment and the potential for leaks from that heavy equipment; the use of flammable liquids; and the presence of combustion engines. However, LADWP has procedures in place to minimize the risk of fire during project activities. These procedures include fire safety measures in compliance with Chapter 33 of the California Fire Code. Gasoline-powered or diesel-powered machinery used during maintenance are equipped with standard exhaust controls and muffling devices that also act as spark arrestors. Fire containment and extinguishing equipment are available and accessible during maintenance activities. The maintenance crew is trained in the use of the fire suppression equipment and is not permitted to idle vehicles on the job site when they are not in use. Where hot work is necessary, it is performed in compliance with the California Fire Code's Chapter 35, Welding and Other Hot Work, and the National Fire Protection Association's 51-B, Fire Prevention During Welding, Cutting and Other Hot Work. Additionally, vegetation mowing and fuel modification activities that would be conducted as part of the proposed maintenance activities would reduce the potential for brush fires within the project area. Therefore, impacts associated with wildfire hazards associated with the proposed project would be **less than significant**.

References

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- County of Los Angeles. 2011. "Figure 7-7 Land Use Plan." *Whiteman Airport Master Plan Final Report*. February 2011. Accessed October 2018. https://dpw.lacounty.gov/avi/airports/documents/Whiteman_MP.pdf
- DOC (California Department of Conservation). 2018. "Well Information: API # 03705835." Division of Oil, Gas, and Geothermal Resources - Well Search. Updated April 27, 2018. Accessed October 2018. <https://secure.conservation.ca.gov/WellSearch/Details?api=03705835>.
- DTSC (Department of Toxic Substances Control). n.d. "Sylmar Converter Station – LA DWP 19490239." Accessed October 2018. https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19490239.
- LADWP (Los Angeles Department of Water and Power). 2017. *Current Conditions Report Sylmar Converter Station (Operable Units 1, 2, and 3) and Sylmar Switching Station*. December 19, 2017. https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/3358403086/SCS%20CCR%20121917%20%20OU1%20%2C2%2C%20%26%203%20LAN17R53489%20Text%20Only.pdf
- Los Angeles County Airport Land Use Commission. 2004. *Los Angeles County Airport Land Use Plan*. Revised December 1, 2004. Accessed October 2018. http://planning.lacounty.gov/assets/upl/data/pd_alup.pdf.

SWRCB (State Water Resources Control Board). n.d. "Caltrans Highway Maintenance Station (T0603791230)."

Accessed October 2018. https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603791230.

3.10 Hydrology and Water Quality

Would 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-Than-Significant Impact. Water quality objectives, plans, and policies for surface waters are set forth in the Los Angeles Region Basin Plan (Basin Plan), as amended. Water quality objectives are based on the beneficial uses identified for the surface waters. The Basin Plan aims to address threats to water quality through various programs and policies, such as establishment of total maximum daily loads of pollutants. The project area is located in a highly urbanized setting served by a network of storm drains and water features. Watersheds that contribute to surface water features in the project area include Bee Canyon, Sunshine Canyon, Weldon Canyon, Grapevine Canyon, and other unnamed blue-line drainages. These watersheds feed into different channels and basins in the project area. These on-site features drain off site via Bull Creek and San Fernando Creek, which converge in the southwest portion of the project area (see Figure 1 and Figure 2). Bull Creek continues south and merges with the Los Angeles River in the southern portion of the San Fernando Valley, in the Sepulveda Basin Recreation Area.

Bull Creek is impaired under Clean Water Act Section 303(d) with ammonia and toxicity, and the Los Angeles River, downstream of the confluence with Bull Creek, is impaired with ammonia, benthic community effects, cadmium, copper, cyanide, indicator bacteria, lead, nutrients (algae), oil, toxicity, trash, and pH (SWRCB 2017). Stormwater runoff from the project area during proposed annual vegetation and soil removal operations could contribute limited amounts of pollutants to receiving waters, such as sediment, litter, and/or fuels and greases. In addition, annual vegetation management and soil excavations would result in temporary disturbance of soils. Sediment transport (e.g., high turbidity) has not been included as a water quality impairment under Clean Water Act Section 303(d).

The proposed project involves annual (or as-needed) removal of overgrown vegetation and typically up to 2 feet of sediments from several facilities located throughout the project area, including drainage channels, drain lines, drainage ditches, a detention basin, San Fernando Creek, and the Bull Creek Extension Channel. The Los Angeles RWQCB regulates urban runoff discharges under National Pollutant Discharge Elimination System (NPDES) permit regulations. NPDES permitting requirements cover runoff discharged from point sources (e.g., industrial outfall discharges) and non-point sources (e.g., stormwater runoff). The State Water Resources Control Board requires dischargers whose projects disturb 1 acre or more of soil to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; SWRCB 2009). However, the Construction General Permit specifically exempts routine maintenance activities conducted by utility service providers as long as the original line and grade, hydraulic capacity, or original purpose of the facility is maintained. The proposed project would thus be exempt from requiring coverage under the Construction General Permit, and preparation and implementation of a stormwater pollution prevention plan would not be required by law, provided that such activities remain within LADWP existing facilities and rights-of-way.

In the case of removing sediment or any other grading activities, LADWP would implement AMM-BIO-4, AMM-BIO-5, and AMM-BIO-6, detailed below.

Vegetation removal from water storage and distribution facilities would expose soils to erosion pending revegetation. Erosion of these soils could result in downstream sedimentation of Bull Creek and the Los Angeles River. Similarly, sediment removal activities, including excavation, temporary stockpiling, and off-site transport of sediments, could result in short-term erosion and sedimentation of downstream waterways. Erosion, sediment transport, and sedimentation are natural fluvial processes and are only considered a water quality issue where anthropogenic activities cause excessively high erosion and turbidity beyond natural background levels (i.e., to a degree that they cause the loss or impairment of beneficial uses). Because the VNC is located on sandy alluvial soils, storm runoff is generally very turbid. Therefore, turbidity would only be excessive in the event that total suspended solids concentrations associated with proposed maintenance activities were in excess of natural conditions within and downstream of the project area. Potential elevated total suspended solids concentrations associated with erosion-induced or resuspension of sedimentation of downstream Bull Creek and the Los Angeles River would be minimized through implementation of AMM-BIO-4, Turbidity and Siltation.

Non-stormwater discharges during annual soil removal activities, such as dewatering of excavations and trenches, are not anticipated due to the shallow nature of the excavations (i.e., typically 2 feet or less). Incidental leaks or spills of petroleum products from equipment, or inadvertent releases of maintenance materials, could result in short-term water quality degradation if runoff containing the materials entered receiving waters in sufficient quantities to exceed water quality objectives. Potential elevated chemical concentrations of downstream Bull Creek and the Los Angeles River would be minimized through implementation of AMM-BIO-5, Equipment and Access, and AMM-BIO-6, Pollutants, Litter, and Cleanup.

Potentially adverse water quality impacts associated with vegetation management and sediment removal activities would be reduced to **less-than-significant** levels with incorporation of AMM-BIO-4, Turbidity and Siltation; AMM-BIO-5, Equipment and Access; and AMM-BIO-6, Pollutants, Litter, and Cleanup.

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

Less-Than-Significant Impact. The proposed project would not require groundwater extraction from the project area. During the proposed project, minor amounts of water would be required for various uses, such as dust control. The water used for these purposes would come from treated water supplies or approved reclaimed water supplies. Because of the relatively small quantity of water required in the context of available supply, no depletion of groundwater or other supplies would occur from vegetation and sediment removal activities.

The proposed project involves annual, or as-needed, removal of overgrown vegetation and removal of (generally) up to 2 feet of sediments from drainage channels, drain lines, drainage ditches, a detention basin, San Fernando Creek, and the Bull Creek Extension Channel. Existing soft-bottom drainage features would continue to be underlain by permeable sediments after implementation of the proposed project. Proposed maintenance activities would not interfere with groundwater recharge, such that there would be a net deficit in aquifer volume or lowering of the local groundwater table. As a result, impacts would be **less than significant**.

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

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

Less-Than-Significant Impact. All proposed project activities would occur in existing water storage and conveyance facilities located throughout the project area. Annual, or as-needed, vegetation management and sediment removal would not alter the existing drainage patterns of these constructed facilities and modified drainages. As discussed in Section 3.10(a), potentially adverse erosion related impacts would be reduced to **less-than-significant** levels with incorporation of AMM-BIO-5, Equipment and Access.

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

Less-Than-Significant Impact. All proposed project activities would occur in existing water storage and conveyance facilities located throughout the project area, and, thus, proposed project activities would not alter existing drainage patterns in the project area. However, surface flow velocities would increase as a result of vegetation and sediment removal, because the vegetation currently acts as a flow velocity inhibitor, which allows more water to percolate into on-site soils due to decreased runoff velocities. However, increased runoff would be offset by the increased capacity of the drainage facilities following sediment removal, because greater capacity would accommodate the increased flow volumes (including flood flows). In addition, conditions following proposed maintenance activities would approximate original design conditions, including a general lack of vegetation and sediment accumulation within the work areas, resulting in overall beneficial impacts; therefore, impacts would be **less than significant**.

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

Less-Than-Significant Impact. As discussed in Section 3.10(c)(iii), conditions following proposed project activities would approximate original design conditions, including a general lack of vegetation and

sediment accumulation within the work areas, resulting in overall beneficial impacts. In addition, as discussed in Section 3.10(c)(iii), potentially adverse water quality impacts associated with ground-disturbing and non-ground-disturbing activities would be reduced to less than significant with incorporation of AMM-BIO-4, AMM-BIO-5, and AMM-BIO-6. The proposed project would not create or contribute runoff water in excess of the capacity of existing or planned stormwater drainage systems, and it would not contribute substantial additional sources of polluted runoff; therefore, impacts would be **less than significant**.

iv) Impede or redirect flood flows?

No Impact. The proposed project does not include structures that would impede or redirect flood flows; therefore, **no impacts** would occur.

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

Less-Than-Significant Impact. As discussed in Section 3.10(c)(iii), with regard to flooding, surface flow velocities would increase as a result of vegetation and sediment removal because the vegetation currently acts as a flow velocity inhibitor, which allows more water to percolate into on-site soils due to decreased runoff velocities. However, increased runoff would be offset by the increased capacity of the drainage facilities following sediment removal, because greater capacity would accommodate the increased flow volumes. In addition, conditions following proposed project activities would approximate original design conditions, including a general lack of vegetation and sediment accumulation within the facilities, resulting in overall beneficial impacts related to flooding. No potential sources of pollutants would be located in areas that would be receiving flood flows. Additionally, the project area is not located in proximity to the Pacific Ocean and, therefore, would not be subject to inundation by tsunamis. The on-site LAR would be susceptible to seiches in the event of a strong earthquake. Water could overflow the banks of the LAR as a result of extreme oscillation of water during an earthquake. Potential flooding impacts would be localized, depending on the location of the overflow. However, the proposed project would not exacerbate the potential for seiches to occur, and no potential sources of pollutants would be located in areas that would be receiving flood flows. For these reasons, impacts would be **less than significant**.

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

Less-Than-Significant Impact. As discussed in Section 3.10(a), potentially adverse water quality impacts associated with proposed ground-disturbing and non-ground-disturbing activities would be reduced to less than significant with incorporation of AMM-BIO-4, Turbidity and Siltation; AMM-BIO-5, Equipment and Access; and AMM-BIO-6, Pollutants, Litter, and Cleanup. The proposed project would not substantially degrade water quality and would not conflict or obstruct implementation of the Los Angeles Region Basin Plan. Additionally,

as discussed in Section 3.10(b), the proposed project would not result in the depletion of groundwater, nor would the project interfere with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table impacts. As such, impacts related to water quality and groundwater management would be **less than significant**.

References

City of Los Angeles. 1996. "Safety Element." *City of Los Angeles General Plan*. November 26, 1996. Accessed September 2018. <https://planning.lacity.org/cwd/gnlpln/safetyelt.pdf>.

SWRCB (State Water Resources Control Board). 2009. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*. Order No. 2009-0009-DWQ.

SWRCB. 2017. "2014 and 2016 California 303(d) List of Water Quality Limited Segments." *Final 2014 and 2016 Integrated Report (CWA Section 303(d) List / 305(b) Report)*. October 3, 2017. Accessed September 2018. https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category5_report.shtml.

3.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Would the project physically divide an established community?*

No Impact. The proposed project includes maintenance activities that would occur within existing facilities at the VNC and would not divide an established community. The proposed maintenance activities would not divide an established community and would thus result in **no impact**.

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

No Impact. The proposed maintenance activities would occur within the VNC. According to the City of Los Angeles Zone Information and Map Access System, the project area contains two separate land use

designations: Public Facilities and Open Space (Los Angeles Department of City Planning n.d.). The Granada Hills–Knollwood Community Plan also designates the project area as Public Facilities and Open Space (Los Angeles Department of City Planning 2015). The proposed maintenance activities would not result in a change in zoning or land use designations, and thus would not introduce any inconsistencies with these existing designations. The proposed project would not conflict with any applicable land use plans, policies or regulations; therefore, there would be **no impact**.

References

- Los Angeles Department of City Planning. n.d. "Zone Information and Map Access System." Accessed June 2018.
<http://zimas.lacity.org>.
- Los Angeles Department of City Planning. 2015. *Granada Hills–Knollwood Community Plan*. Accessed June 4, 2018.
<https://planning.lacity.org/complan/pdf/ghlcptxt.pdf>.

3.12 Mineral Resources

Would 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The State Mining and Reclamation Act of 1975 (SMARA; California Public Resources Code Section 2710 et seq.) requires that the California State Geologist implement a mineral land classification system to identify and protect mineral resources of regional or statewide significance in areas where urban expansion or other irreversible land uses may occur, thereby potentially restricting or preventing future mineral extraction on such lands.

As mandated by SMARA, aggregate mineral resources within the state are classified by the State Mining & Geology Board through application of the Mineral Resource Zone (MRZ) system. The MRZ system is used to

map all mineral commodities within identified jurisdictional boundaries, with priority given to areas where future mineral resource extraction may be prevented or restricted by land use compatibility issues, or where mineral resources may be mined during the 50-year period following their classification. The MRZ system classifies lands that contain mineral deposits and identifies the presence or absence of substantial sand and gravel deposits and crushed rock source areas (i.e., commodities used as, or in the production of, construction materials). The State Geologist classifies MRZs within a region based on the following factors (DOC 2000):

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- MRZ-3: Areas containing mineral deposits for which the significance cannot be determined from available data.
- MRZ-4: Areas where available information is inadequate for assignment of any other MRZ category.

According to the SMARA study area map for the San Fernando Valley and adjacent production-consumption regions, the project area is not within an MRZ-2 area, meaning there are no known significant mineral deposits (California Division of Mines and Geology 1979). According to the California Geological Survey's (2010) Geologic Map of California, the project area consists of Pleistocene and Pliocene sandstone, shale, and gravel deposits, mostly loosely consolidated; and unconsolidated and semi-consolidated alluvium, lake, playa and terrace deposits. The proposed project would not result in the loss of availability of a known mineral resource, given the project area's lack of identification as a known mineral resource site. Therefore, the proposed project would result in **no impact**.

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

No Impact. According to the Conservation Element of the City's General Plan, the primary mineral resources in the City are rock, gravel, and sand deposits (City of Los Angeles 2001). Significant potential deposit sites have been identified by the State Geologist, and are mapped in Exhibit A of the City's General Plan. Exhibit A shows that the project area is outside of any mineral resource zones, oil drilling districts, or state-designated oil fields. The proposed project would result in **no impact** to the availability of a locally important mineral resource recovery site.

References

California Division of Mines and Geology. 1979. "Generalized Aggregate Resource Classification Map: San Fernando Valley and Adjacent Production–Consumption Regions" [map]. 1:500,000. Special Report 143, Plate 2.1.

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DOC (Department of Conservation). 2000. Guidelines for Classification and Designation of Mineral Lands. Accessed August 2018. <http://www.conservation.ca.gov/smgb/guidelines/documents/classdesig.pdf>.

3.13 Noise

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less-Than-Significant Impact. The City regulates noise through several sections of its Municipal Code, as follows:

- Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited), which establishes time prohibitions on noise generated by construction activity.
- Section 112.04 (Powered Equipment Intended for Repetitive Use in Residential Areas and Other Machinery, Equipment, and Devices), which prohibits the use of loud machinery and/or equipment within 500 feet of residences and prohibits noise from machinery, equipment, or other devices that would result in an increase of more than 5 decibels (dB) above the ambient noise level at residences.
- Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools), which establishes maximum noise levels for powered equipment and powered hand tools (i.e., 75 A-weighted decibels [dBA] at a distance of 50 feet for construction, industrial, and agricultural equipment between the hours of 7:00 a.m. and 10:00 p.m.).

According to Section 41.40, no maintenance activities that might create loud noises in or near residential areas or buildings shall be conducted between the hours of 9:00 p.m. and 7:00 a.m. on weekdays, before 8:00 a.m. or after 6:00 p.m. on Saturday and national holidays, or at any time on Sunday.

Existing Noise Levels

The VNC and surrounding area are subject to traffic noise associated with adjacent roadways, including I-5, I-405, Sepulveda Boulevard, Woodley Avenue, and Rinaldi Street. Other noise sources include occasional distant aircraft noise, distant landscaping noise, and birds. Additionally, periodic noise from on-site maintenance activities (authorized under SAA 1600-2004-0268-R5) already occurs.

Noise measurements were conducted near the project area on June 7, 2018, to characterize the existing noise environment. The noise measurements were made using a Piccolo Integrating Sound Level Meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute standard for a Type 2 (General Use) sound level meter. The calibration of the sound level meter was verified before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Five short-term noise measurements (ST1 through ST5) were conducted, each lasting 15 minutes in duration. These noise measurement locations represent key potential sensitive receptors or sensitive land uses adjacent to the VNC. The noise measurement locations are shown on Figure 6, Noise Measurement Locations; the average noise levels at the short-term noise measurement locations are provided in Table 3-12, Noise Measurement Summary. As shown in Table 3-12, energy equivalent noise levels (L_{eqs}) range from approximately 59 to 71 dBA at locations adjacent to the project area. The primary noise sources consisted of traffic along the adjacent roads.

Table 3-12. Noise Measurement Summary

Receptors	Location/Address (Land Use Type)	Date	Time	L _{eq} (dBA)	L _{max} (dBA)
ST1	12734 Woodley Avenue (Residential)	June 7, 2018	9:33 a.m.–9:48 a.m.	63.9	82.1
ST2	12000 Woodley Avenue (Residential)	June 7, 2018	9:58 a.m.–10:13 a.m.	65	85.2
ST3	Granada Hills Little League Field (Recreational)	June 7, 2018	10:30 a.m.–10:45 a.m.	70.9	81.7
ST4	11566 Collette Avenue (Residential)	June 7, 2018	10:52 a.m.–11:07 a.m.	58.6	78.8
ST5	15625 Odyssey Drive (Residential)	June 7, 2018	11:22 a.m.–11:37 a.m.	64.2	86.8

Source: Appendix D.

dBA = A-weighted decibels; L_{eq} = energy equivalent noise level ; L_{max} = maximum sound level during the measurement interval; ST = short term.

Short-Term Noise

No Impact. No construction activities would occur as a result of or as a part of the proposed project. Therefore, no construction noise would occur, and there would be **no impact** from construction noise.

Long-Term Operational (Maintenance) Noise

LADWP seeks to perform routine vegetation management and maintenance activities at multiple work areas throughout the VNC to ensure that the critical infrastructure facilities are functioning properly. For a detailed description of the proposed project, please see Chapter 2, Project Description.

Based on information provided by LADWP, it is assumed that the first year of maintenance of the proposed project would commence in September 2019 and would last approximately 5 months, ending in January 2020. The subsequent recurring annual maintenance was assumed to begin in 2020 and occur annually thereafter between September and January. The project phasing schedule and duration, vehicle trip assumptions, and off-road equipment used for estimating project-generated emissions are shown in Table 3-2 (see Section 3.3, Air Quality).

As shown in Table 3-2, maintenance activities would require the use of standard heavy equipment such as loaders, dozers, backhoes, excavators, and cranes. The range of maximum noise levels for various types of equipment at a distance of 50 feet is depicted in Table 3-13, Heavy Equipment Maximum Noise Emission Levels. The noise values represent maximum noise generation, or full-power operation of the equipment. Simultaneous operation of more than one piece of equipment would increase the sound level of the equipment operating individually. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dBA at 50 feet from their operating locations. As one increases the distance between equipment, and/or the separation of areas with simultaneous maintenance activity, dispersion and distance attenuation reduce the effects of separate noise sources added together. In addition, typical operating cycles may involve 2 minutes of full-power operation, followed by 3 or 4 minutes at lower levels. The average noise level during project activities is generally lower, since maximum noise generation may only occur up to 50% of the time.

Table 3-13. Heavy Equipment Maximum Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Roller	74
Concrete vibrator	76
Pump	76
Saw	76
Backhoe	80
Air compressor	81
Generator	81
Compactor	82
Concrete pump	82
Crane, mobile	83
Concrete mixer	85
Dozer	85
Grader	85
Impact wrench	85
Loader	85
Pneumatic tool	85
Jackhammer	88
Truck	88
Paver	89

Source: DOT 2006.

dBA = A-weighted decibel

Noise in this analysis is usually expressed in terms of L_{eq} , which is the average sound level for any specific time period, on an energy basis. For example, the L_{eq} for 1 hour is the energy-averaged noise level during the hour. The average noise level is based on the acoustic energy content of the sound. L_{eq} can be thought of as the level of a continuous noise, which has the same energy content as the fluctuating noise level. L_{eq} is expressed in units of dBA. The L_{eq} would generally be lower than the maximum noise levels expressed in Table 3-13.

The nearest off-site sensitive receptors to the project area varies based on the location of the work area. The San Fernando Creek work area has the nearest sensitive receptors, which are located approximately 350 feet from the nearest proposed maintenance activities. More typically,¹² maintenance activities for San Fernando Creek would take place approximately 750 feet from adjacent sensitive receptors. For most of the other work areas, the nearest sensitive receptors are more than 1,000 feet away.

The Federal Highway Administration’s Roadway Construction Noise Model (RCNM) (FHWA 2018)¹³ was used to estimate maintenance activity noise levels at the nearest noise-sensitive land uses. Although the model was funded and promulgated by the Federal Highway Administration, the RCNM is often used for non-roadway projects because the same types of equipment used for roadway projects are also used for other project types. Input variables for the RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. No topographical or structural shielding was assumed in the modeling. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical demolition activity patterns (FHWA 2018). Those default duty-cycle values were used for this noise analysis.

Using the Federal Highway Administration’s RCNM construction noise model and maintenance activity information (types and number of construction equipment by facility), the estimated noise levels from proposed project activities (summarized in Table 3-14, Maintenance Activity Noise Modeling Summary Results) were calculated for both the relatively brief periods of time during which activities would take place at the nearest source–receiver distances, and during the longer periods of time when activities would take place both near and far from adjacent receivers. The RCNM inputs and outputs are provided in Appendix D, Noise Modeling Results.

Table 3-14. Maintenance Activity Noise Modeling Summary Results

Work Area	Nearest or Typical Maintenance Activity Distance	Leq (dBA)
Bee Drainage Channel	<i>Nearest Maintenance Work (575 feet)</i>	58.9
	<i>Typical Maintenance Work (750 feet)</i>	56.6
Segment of Bull Creek Extension	<i>Nearest Maintenance Work (1100 feet)</i>	54
	<i>Typical Maintenance Work (1200 feet)</i>	53.2
East Channel	<i>Nearest Maintenance Work (1100 feet)</i>	53.3

¹² Because proposed project activities would take place both near and far relative to any one noise-sensitive receiver, the concept of the “acoustic center” is used for providing typical noise levels. The acoustic center is the idealized point from which the energy sum of all activity noise, near and far, would be centered. The acoustic center is derived by taking the square root of the product of the nearest and the farthest equipment noise–receiver distances.

¹³ “Construction Noise” is used in the title, but where construction noise is referenced in this analysis, it applies to noise from the use of heavy equipment during maintenance activities.

Table 3-14. Maintenance Activity Noise Modeling Summary Results

Work Area	Nearest or Typical Maintenance Activity Distance	Leq (dBA)
	<i>Typical Maintenance Work (1600 feet)</i>	50
LAR North Dike Stormwater Basin	<i>Nearest Maintenance Work (2000 feet)</i>	48.1
	<i>Typical Maintenance Work (2100 feet)</i>	47.6
LAR UV Plant Drainage and V-Ditch	<i>Nearest Maintenance Work (1800 feet)</i>	51.9
	<i>Typical Maintenance Work (2300 feet)</i>	49.8
Lower San Fernando Detention Basin	<i>Nearest Maintenance Work (1500 feet)</i>	53.5
	<i>Typical Maintenance Work (2300 feet)</i>	49.8
Middle Debris Basin	<i>Nearest Maintenance Work (750 feet)</i>	56.6
	<i>Typical Maintenance Work (1500 feet)</i>	50.6
San Fernando Creek	<i>Nearest Maintenance Work (350 feet)</i>	62.7
	<i>Typical Maintenance Work (750 feet)</i>	56.6
San Fernando Gate Drain	<i>Nearest Maintenance Work (1300 feet)</i>	51.8
	<i>Typical Maintenance Work (1800 feet)</i>	49
Upper Debris Basin	<i>Nearest Maintenance Work (1800 feet)</i>	49
	<i>Typical Maintenance Work (1900 feet)</i>	48.5
Upper Northeast Drainage	<i>Nearest Maintenance Work (1100 feet)</i>	53.3
	<i>Typical Maintenance Work (1200 feet)</i>	53.2
Upper San Fernando Drain Line	<i>Nearest Maintenance Work (2100 feet)</i>	47.6
	<i>Typical Maintenance Work (2700 feet)</i>	45.5
Upper San Fernando Drain Line Feature 1	<i>Nearest Maintenance Work (2500 feet)</i>	49.1
	<i>Typical Maintenance Work (2750 feet)</i>	48.3
Upper San Fernando Drain Line Feature 2	<i>Nearest Maintenance Work (2500 feet)</i>	46.1
	<i>Typical Maintenance Work (2550 feet)</i>	46
Yarnell Debris Basin	<i>Nearest Maintenance Work (1800 feet)</i>	51.9
	<i>Typical Maintenance Work (2100 feet)</i>	50.6

Source: Appendix D

Notes: dBA = A-weighted decibels; LAR = Los Angeles Reservoir; Leq = energy equivalent noise level (time-averaged sound level); UV = ultraviolet.

As presented in Table 3-14, the highest noise levels are predicted to occur at residences near San Fernando Creek, where noise levels would be as high as approximately 63 dBA Leq when maintenance activities would take place within approximately 350 feet of residential land uses. More typically, maintenance activity noise near San Fernando Creek would be approximately 57 dBA Leq. The daytime ambient noise levels for residential locations at these locations as represented by the ST3 and ST4 measurements (see Table 3-12, Noise Measurement Summary), range from approximately 59 to 71 dBA Leq. At ST3, where the measured ambient noise level was approximately 71 dBA Leq, the noisiest phase of maintenance (i.e., approximately 63 dBA Leq as shown in Table 3-14) would be approximately 8 dB less. At ST4, where the measured ambient noise level was approximately 59

dBA L_{eq} (see Table 3-12), the noisiest phase of proposed project activities (i.e., approximately 63 dBA L_{eq} as shown in Table 3-14) would be approximately 4 dB higher than the ambient noise level. At ST4 the typical noise level of 57 dBA L_{eq} (see Table 3-14) would be approximately 2 dB lower than the ambient level of 59 dBA L_{eq} . Generally, as shown in Table 3-14, noise from the proposed maintenance activities would range from approximately 45 to 59 dBA L_{eq} , and would be less than typical ambient noise levels in the project area.

Although nearby off-site residences would be exposed to slightly elevated noise levels during certain project activities, the increased noise levels would typically be less than 3 dB (and therefore barely perceptible), and exposure would be short term and would cease upon completion of proposed project activities. Activities associated with the proposed project would take place within the allowable hours per Section 41.40 of the City of Los Angeles Municipal Code (i.e., Monday through Friday between 7:00 a.m. and 9:00 p.m., Saturday between 8:00 a.m. and 6:00 p.m., and would not occur at any time on Sunday or on national holidays). Maintenance activity noise would not violate the City's standards for maintenance; therefore, the noise impact would be **less than significant**.

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

Less-Than-Significant Impact. Maintenance activities that might expose persons to excessive groundborne vibration or groundborne noise could cause a potentially significant impact. Groundborne vibration information related to maintenance activities (which would use conventional equipment used for construction work) has been collected by the California Department of Transportation (Caltrans 2013). Information from the California Department of Transportation indicates that people begin to become annoyed by continuous vibrations with a peak particle velocity of approximately 0.1 inches per second. The heavier pieces of construction equipment, such as bulldozers, would have peak particle velocities of approximately 0.089 inches per second or less at a distance of 25 feet (DOT 2006). Ground-borne vibration is typically attenuated over short distances. At the distance from the nearest residences to where proposed project activities would be occurring in the project area (approximately 350 feet), and with the anticipated heavy equipment, the peak particle velocity vibration level would be approximately 0.002 inches per second. These vibration levels would be well below the vibration threshold of potential annoyance of 0.1 inches per second.

The primary impact with construction vibration is related to building damage, which typically occurs at vibration levels of 0.5 inches per second or greater for buildings of reinforced-concrete, steel, or timber construction. The heavier pieces of construction equipment that would be used would include backhoes, front-end loaders, and flatbed trucks. Pile driving, blasting, or other special construction techniques would not be used for the proposed project's activities. As discussed above, the anticipated vibration level associated with proposed maintenance activities would be approximately 0.002 inches per second, which is well below the threshold of 0.5 inches per second for building damage; therefore, potential vibration impacts would be **less than significant**.

- c) *Would the project be 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?*

Less-Than-Significant Impact. The project area is located approximately 4 miles northwest of Whiteman Airpark and 4.4 miles north of Van Nuys Airport; it is not within the Los Angeles County Airport Influence Area. The project area is located outside of the Airport Land Use Plan's 65 dBA community noise equivalent level noise contour (Los Angeles County Airport Land Use Commission 2004), and thus aircraft-related noise would not expose people in the project area to excessive noise levels. Furthermore, the proposed project would not include occupied facilities that would expose people to excessive noise levels related to aircraft use; therefore, impacts would be **less than significant**.

References

- Caltrans (California Department of Transportation). 2013. *Transportation and Construction Vibration Guidance Manual*. Sacramento, California: California Department of Transportation. September 2013. Accessed October 2018. http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.
- DOT (U.S. Department of Transportation). 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06. Accessed October 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf.
- FHWA (Federal Highway Administration). 2018. "Construction Noise Model Input/Output" [digital FHWA data]. FHWA Roadway Construction Noise Model (FHWA RCNM), Software Version 1.1. Accessed July 2018. https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm.
- Los Angeles County Airport Land Use Commission. 2004. *Los Angeles County Airport Land Use Plan*. Revised December 1, 2004. Accessed October 2018. http://planning.lacounty.gov/assets/upl/data/pd_alup.pdf.

3.14 Population and Housing

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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

No Impact. The proposed project involves routine vegetation management and maintenance activities at the VNC in order to ensure that the facilities are functioning properly. The proposed project activities would not involve the expansion of existing facilities or construction of new facilities. The capacity of existing facilities would remain as originally designed. As a result, the proposed project would not have any direct or indirect impacts on population growth in the area. Similarly, no homes or employment opportunities that would directly facilitate population growth are proposed. The workforce that would implement/perform proposed maintenance activities are existing LADWP workers. Thus, there would be no growth as a result of implementation of the proposed project. The proposed project would not directly or indirectly induce substantial population growth; therefore, there are **no impacts** associated with population growth resulting from the proposed project.

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

No Impact. As discussed in 3.13(a), the proposed project involves routine vegetation management and maintenance activities at facilities throughout the VNC. The proposed project activities would not require the displacement of existing housing or the construction of replacement housing elsewhere; therefore, the proposed project would result in **no impact** to existing housing.

3.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Fire Protection

Less-Than-Significant Impact. According to the Fire Hazard Severity Zones Maps, the project area is designated as being outside the VHFHSZ, or Non-VHFHSZ, for both local responsibility and state responsibility area maps (CAL FIRE n.d.). The proposed project includes vegetation management and sediment removal. The use of maintenance equipment around flammable vegetation could result in the need for fire suppression services. However, LADWP has procedures in place to minimize the risk of fire during maintenance activities. These procedures include fire safety measures in compliance with Chapter 33 of the California Fire Code. Gasoline-powered or diesel-powered machinery used during maintenance are equipped with standard exhaust controls and muffling devices that also act as spark arrestors. Fire containment and extinguishing equipment are available and accessible during maintenance activities. The maintenance crew is trained in the use of the fire suppression equipment and is not permitted to idle vehicles on the job site when they are not in use. Where hot work is necessary, it is performed in compliance with the California Fire Code's Chapter 35, Welding and Other Hot Work, and the National Fire Protection Association's 51-B, Fire Prevention During Welding, Cutting and Other Hot Work. Therefore, it is not anticipated that the proposed project would create a substantial fire hazard or require new or expanded facilities and thus would have a **less-than-significant** impact.

Police Protection

No Impact. The proposed project would not modify facilities in such a way as to present an attractive nuisance to the public that would require the need for additional police services. In addition, the VNC is not publicly accessible and proposed maintenance activities would not require additional police protection nor would they require the expansion of any police facilities. As a result, there would be **no impact** to police protection.

Schools

No Impact. The proposed project would not involve a housing component or expansion of existing facilities that could result in population growth and increased demands on schools within the region. The proposed project would be conducted using existing LADWP staff. As a result, there would be **no impact** to schools.

Parks

No Impact. The project area is in close proximity to parks and recreational areas; however, none of the project activities would result in adverse physical impacts to parks or recreational areas. The proposed project activities would not have substantial adverse physical impacts on the use of parks, and no new parks would need to be constructed or expanded as a result of the proposed project. Therefore, the project would result in **no impact** to parks.

Other Public Facilities

No Impact. The proposed project activities may occur near or in proximity to other public facilities; however, none of the activities would result in adverse physical impacts to public facilities. The proposed project would not involve a housing component or other components that would result in population growth or increased demands on public facilities within the region. The proposed project would not expand existing or construct new infrastructure that would result in population growth and increased demands on public facilities. Therefore, there would be **no impact** to other public facilities.

References

CAL FIRE (California Department of Forestry and Fire Protection). n.d. "Fire Hazard Severity Zones Maps."
Accessed June 2018. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.

3.16 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The proposed project includes maintenance activities and would not include any land uses typically associated with an increased use of existing park and recreational facilities. The proposed project would use existing LADWP staff for the maintenance activities. The proposed project does not include any growth-inducing components, such as new housing, and thus would not directly or indirectly result in an increase in the use of recreational facilities. Therefore, the project would not generate a need for new or expanded recreational facilities. Further, the proposed project does not include any recreational facilities or require the construction or expansion of recreational facilities. Therefore, the proposed project would result in **no impact** to parks and recreational facilities.

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

No Impact. As discussed in 3.15(a), the proposed project includes maintenance activities for existing infrastructure and does not include recreational facilities or require the construction or expansion of recreational facilities. The proposed project would not be growth-inducing, and thus would not require the construction or expansion of recreational facilities; therefore, the proposed project would result in **no impact**.

3.17 Transportation

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

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

Less-Than-Significant Impact. The proposed project would result in daily trips that would range from four to 28 passenger-car equivalent (PCE) trips at each work area (Appendix E, Trip Generation Memo). There would be no AM peak-hour trips since all workers and haul trucks would arrive at each facility before the AM peak hours, starting at 7:00 a.m. For the PM peak hour, trips from each work area would range between two and 14 PCE trips. The proposed project activities at each work area would not overlap because LADWP proposes to use the same in-house crew at each area. Therefore, the activities that would generate the highest volume of traffic would be at the Upper Debris Basin and Middle Debris Basin, separately. Maintenance activities at those area would generate an approximate total of 28 PCE daily trips: zero PCE AM peak-hour trips, and 14 PCE PM peak-hour trips at each the Upper Debris Basin and Middle Debris Basin. Per the City's Transportation Impact Study Guidelines, neither a Technical Memorandum nor Traffic Impact Study would be required for the proposed project since it would generate less than 25 to 42 AM or PM peak-hour vehicle trips (City of Los Angeles Department of Transportation 2016). Furthermore, traffic generated by the proposed project would be temporary and would last between 1 day and 14 days, depending on the work area under maintenance. All proposed project activities would occur on the VNC site and would not require any (temporary) closures to public streets. Due to the relatively low and temporary traffic volumes generated by the proposed project, it would not have a measurable impact on the adjacent street network, and therefore, would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system; therefore, impact would be **less than significant**.

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

No Impact. CEQA Guidelines Section 15064.3(b) focuses on newly adopted criteria (vehicle miles traveled) for determining the significance of transportation impacts. In compliance with newly adopted CEQA guidelines and City of Los Angeles CEQA Thresholds Guide Update, the City's Department of Transportation has recently updated its transportation assessment guidelines (City of Los Angeles Department of Transportation 2019). For land use projects, the City has developed a screening criterion of net increase of 250 or more daily vehicle trips to address this threshold and assess whether a project would cause substantial vehicle miles traveled. The proposed project would generate occasional maintenance-related trips that would contribute a maximum of 28 daily trips and would not cause a substantial increase in daily vehicle miles traveled. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **No impact** would occur.

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

No Impact. The proposed project would occur on the VNC site, which is not accessible to drivers traveling on surrounding public roadways. LADWP workers would access the project area using on-site roadways, and they would follow the rules already in place at the VNC site, including speed limits, signage, and other rules of the road. Therefore, the proposed project would not increase hazards due to a design feature or incompatible uses and there would be **no impact**.

d) *Would the project result in inadequate emergency access?*

No Impact. The VNC site is more than 1,300 acres and none of the project activities would overlap between work areas, thereby creating conflicts, blocked roadways, or impediments to emergency vehicles. Therefore, there would be **no impact** to emergency access as a result of the proposed project.

Reference

City of Los Angeles Department of Transportation. 2016. Transportation Impact Study Guidelines. City of Los Angeles Department of Transportation, Bureau of Planning and Development Services. Accessed October 2018. <http://ladot.lacity.org/sites/g/files/wph266/f/COLA-TISGuidelines-010517.pdf>.

City of Los Angeles Department of Transportation. 2019. *Transportation Assessment Guidelines*. City of Los Angeles Department of Transportation. Accessed October 2019. https://ladot.lacity.org/sites/g/files/wph266/f/TA_Guidelines_%2020190731.pdf.

3.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

i) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

Less-Than-Significant Impact. As discussed in 3.5(b), Cultural Resources, a California Historical Resources Information System records search was conducted for the project area at the South Central Coastal Information Center on April 30, 2018. No tribal cultural resources were identified as a result of the records search. In an SLF results letter dated May 7, 2018, the NAHC stated that the SLF search was completed with negative results. Additionally, no specific tribal cultural resources (TCRs) were identified by California Native American tribes as part of LADWP's AB 52 notification and consultation process (see Section 3.18[a][ii] for a description of this process). Therefore, the proposed project would not adversely affect TCRs that are listed or eligible for listing in the state or local register. As such, impacts would be **less than significant**.

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

Less-Than-Significant Impact with Mitigation Incorporated. There are no resources in the project area that have been determined by LADWP to be significant pursuant to the criteria set forth in Public Resources Code Section 5024.1. Further, no specific TCRs were identified in the project area by the NAHC through the SLF search or by LADWP as part of the AB 52 notification and consultation process. In July 2018, LADWP sent notification of the proposed project to all California Native American tribal representatives that have requested project notifications from LADWP pursuant to AB 52 and that are on file with the NAHC as being traditionally or culturally affiliated with the geographic area. Three responses were received via email and/or phone call by LADWP as part of the AB 52 consultation process and are summarized below.

- On September 4, 2018, an in-person consultation meeting was held with Robert Dorame of the Gabrielino Tongva Tribe. LADWP gave a brief overview of the project and summarized the results of the archaeological survey. Mr. Dorame identified a number of resources within the VNC he believed were significant, and provided guidance documents related to surveys and monitoring. LADWP explained that it is seeking long-term permits to be able to perform maintenance work, which will have minimal impacts on previously undisturbed areas. Mr. Dorame presented information about what his tribe would consider significant resources, and indicated that he would prefer monitoring during maintenance activities and LADWP agreed to provide mitigation (MM-TCR-1 through MM-TCR-4) to address the potential for unexpected discoveries during maintenance activities.
- On September 14, 2018, a conference call consultation meeting was held with Jairo Avila, the Tribal Historic Preservation Officer for the Fernandeno Tataviam Band of Mission Indians. LADWP gave a brief overview of the project and summarized the results of the archaeological survey. Mr. Avila requested a copy of the archaeological survey report and results of the record search. He also requested that he be contacted in the event that any artifacts are discovered during project activities.
- On August 1, 2018, LADWP received a written request for consultation from the Gabrieleno Band of Mission Indians-Kizh Nation. Subsequently, a conference call consultation meeting was scheduled for October 17, 2018; however, on the morning of October 17, 2018, LADWP received an email from the tribe indicating that they have elected to defer the proposed project.

LADWP has determined that no TCRs are present in the project area. However, the AB 52 consultation between LADWP and Mr. Dorame suggests there is still some potential for unknown subsurface TCRs to be impacted by the proposed project. In the event that unknown subsurface TCRs are uncovered during ground disturbance, and such resources are not identified and avoided or properly treated, a potentially significant impact could result. However, mitigation measures **MM-TCR-1** through **MM-TCR-4** would protect TCRs in the event that any were discovered during project maintenance activities. Upon implementation of **MM-TRC-1** through **MM-TRC-4**, impacts would be **less than significant with mitigation incorporated**.

- MM-TCR-1** To reduce potential impacts to unanticipated tribal cultural resources (TCRs) during project implementation, maintenance personnel shall undergo Worker Environmental Awareness Program (WEAP) training to ensure that any unanticipated TCR discoveries are treated appropriately. The WEAP training shall provide specific details on the kinds of Native American cultural resources that may be identified during ground-disturbing activities.
- MM-TCR-2** While no tribal cultural resources (TCRs) have been identified that may be affected by the project, the following approach for the inadvertent discovery of TCRs has been prepared to ensure there are no impacts to unanticipated resources. Should a potential TCR be encountered during maintenance activities, all work in the immediate vicinity of the discovery (within 50 feet) shall cease, Los Angeles Department of Water and Power (LADWP) shall be notified, and a qualified archaeologist meeting Secretary of Interior standards shall assess the find. LADWP will notify Native American tribes consulting under Assembly Bill 52. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in **MM-CUL-2**.
- MM-TCR-3** If the Los Angeles Department of Water and Power (LADWP) determines that the potential resource is a tribal cultural resources (TCR) (as defined by PRC, Section 21074), tribes consulting under Assembly Bill 52 shall be provided a reasonable period of time, typically 5 days from the date that a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the resource and tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations will be made based on the determination of LADWP that the approach is reasonable and feasible. The preferred mitigation is to avoid impacts to TCRs, but if that is not feasible, a mitigation and treatment plan shall be developed in consultation with the consulting tribes. Work on the other areas outside of the buffered area may continue during this assessment period. All activities shall be conducted in accordance with regulatory requirements.

MM-TCR-4 If significant Native American cultural resources are discovered during operations and maintenance and avoidance cannot be ensured, a qualified archaeologist shall be retained to develop a Cultural Resources Treatment Plan, the drafts of which shall be provided to the interested tribe(s) for review and comment. All in-field investigations, assessments, and/or data recovery enacted pursuant to the finalized Treatment Plan shall be monitored by a Native American monitor. The Los Angeles Department of Water and Power shall, in good faith, consult with the interested tribe(s) on the disposition and treatment of any artifacts or other cultural materials encountered during the project.

With adherence to the MM-TCR-1 through MM-TCR-4, the potential for impacts to TCRs would be **less than significant with mitigation incorporated**.

3.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

No Impact. The proposed project does not require the construction of new or expanded water or wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities. The purpose of the proposed project is to provide routine maintenance and vegetation management at existing water conveyance and storage facilities at the VNC to ensure that the facilities are functioning properly. These activities would not result in the construction of new water treatment facilities or expansion of existing facilities; therefore, the project would have **no impact**.

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

No Impact. The proposed project would not require additional water supplies and would not require new or expanded entitlements or resources. The proposed project would increase the reliability and longevity of existing infrastructure; there would be no expansion of existing infrastructure. The proposed project may require water for certain activities, including dust suppression and washing down paved areas. LADWP would have sufficient water supplies for such activities, and no new or expanded entitlements would be needed; therefore, the proposed project would have **no impact** on water supplies.

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

No Impact. The proposed project would not result in a greater demand for wastewater treatment or increase the generation of wastewater. The proposed project does not propose activities or land uses generally associated with the generation of wastewater. The proposed project would have **no impact** on wastewater treatment providers and wastewater systems.

- 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?*

Less-Than-Significant Impact. The proposed project is not anticipated to have a significant impact on solid waste disposal needs. The proposed project would not involve major demolition that could generate a significant amount of solid waste. The proposed project could generate small amounts of solid waste, structural debris, and green waste. All waste produced during implementation of proposed project activities would be removed following the activity and disposed of properly in accordance with federal, state, and local statutes and regulations.

As shown in Table 3-15, Solid Waste Facilities in Los Angeles County, solid waste facilities that are available for the proposed project's disposal needs have a remaining capacity of approximately 2,076.16 million tons and up to 100 years of remaining life expectancy, as of 2013 (County of Los Angeles 2015). The remaining capacity at the available landfills would adequately serve the proposed project. The amount of solid waste generated by proposed project would be much less than the available capacity of existing landfills. Thus, impacts would be **less than significant**.

Table 3-15. Solid Waste Facilities in Los Angeles County*

Solid Waste Facility	Estimated Remaining Capacity	Maximum Daily Capacity	Average Daily Load	Remaining Life
	<i>Million Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Years</i>
Antelope Valley	12.01	1800	1485	22
Calabasas	6.76	3500	680	15
Chiquita Canyon	2.94	6000	3299	3
Lancaster	13.2	3000	258	14
Mesquite**	600	20000	Not yet operational	100
Southeast Resource Recovery Facility	1370	2240	1504	Not indicated
Sunshine Canyon City/County	65.79	12100	7250	19
Whittier (Savage Canyon)	5.46	350	293	42

Source: County of Los Angeles 2015.

* Table only shows solid waste facilities without restrictions/available for use by the proposed project.

** Out of County, but available for Los Angeles County disposal needs.

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

Less-Than-Significant Impact. As discussed in Section 3.19(f), the proposed project would generate small amounts of solid waste, structural debris, and green waste. All waste produced during the proposed project would be removed and disposed of properly in accordance with federal, state, and local statutes and regulations; therefore, impacts would be **less than significant**.

References

County of Los Angeles. 2015. County of Los Angeles Countywide Integrated Waste Management Plan, 2013 Annual Report. May 27, 2015. Accessed October 2018. <https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=3490&hp=yes&type=PDF>.

Kleinfelder. 2012. *Van Norman Complex Stormwater Capture Master Plan, AX-698-1*. January 31, 2018.

3.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The California Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zones in Local Responsibility Areas map does not identify the project area as being located in an area susceptible to high fire hazard dangers (CAL FIRE n.d.). Therefore, **no impact** related to wildfire would occur.

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

No Impact. The California Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zones in Local Responsibility Areas map does not identify the project area as being located in an area susceptible to high fire hazard dangers (CAL FIRE n.d.). Therefore, **no impact** related to wildfire would occur.

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

No Impact. The California Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zones in Local Responsibility Areas map does not identify the project area as being located in an area susceptible to high fire hazard dangers (CAL FIRE n.d.). Therefore, **no impact** related to wildfire would occur.

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

No Impact. The California Department of Forestry and Fire Protection's Very High Fire Hazard Severity Zones in Local Responsibility Areas map does not identify the project area as being located in an area susceptible to high fire hazard dangers (CAL FIRE n.d.). Therefore, **no impact** related to wildfire would occur.

Reference

CAL FIRE (California Department of Forestry and Fire Protection). n.d. "Fire Hazard Severity Zones Maps."
Accessed June 2018. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

- a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

Less-Than-Significant Impact with Mitigation Incorporated. As discussed in this Initial Study, impacts to biological, cultural (archaeological and paleontological), and Native American cultural resources would be **less than significant** with the incorporation of mitigation.

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

Less-Than-Significant Impact with Mitigation Incorporated. The following analysis discusses the proposed project’s potential to make a cumulatively considerable contribution to an environmental impact, by resource. Where it has been determined based on the analysis in this Initial Study that no impact would occur in relation to specific resources (i.e., Agriculture and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, and Recreation), the proposed project would inherently not result in a cumulatively considerable impact relative to those resources and no further discussion is provided below. The proposed project would be located entirely within the VNC property, an industrial site in a largely built-out urban area. Table 3-16, Cumulative Projects Near the Proposed Project, includes the list of cumulative projects in the area.

Table 3-16. Cumulative Projects Near the Proposed Project

Status	Project	Project Description	Location
Completed	LA Aqueduct Filtration Plant – UV Treatment Plant	Water Treatment Facility	Within Project Area
Completed	Valley-Rinaldi Tower and Transmission Line Upgrade	Upgrade existing facility and replace 14 circuit miles of transmission line	Rinaldi Street

Table 3-16. Cumulative Projects Near the Proposed Project

Status	Project	Project Description	Location
Under Construction	LA Reservoir UV Treatment Plant	Water Treatment Facility	Within Project Area
Pre-Construction	Distribution Station 86 Battery Energy Storage System	Two separate Battery Energy Storage System containers at existing distribution station	12960 Balboa Boulevard, Los Angeles
Pre-construction	Bull Creek Stormwater Capture Project	Construction of dam to convey flows to Pacoima Spreading Grounds	Chatsworth Street, Granada Hills
Pre-construction	Van Norman Stormwater Capture	Installation of pipeline and stormwater capture improvements	Within Project Area
Under construction	Pacoima Spreading Grounds improvements	Improvements to increase water holding capacity of spreading grounds	Paxton Street and Arleta Avenue, Los Angeles
Pre-construction	Sylmar Village	246 condo units, 9,000-square foot retail, and 9,000-office building	12385 San Fernando Road, Sylmar
Pre-construction	Senior Housing/Mixed Use Project	150 senior housing units and 25,000-square foot medical office	12385 San Fernando Road, Sylmar
Pre-construction	Lakeside Park	Development of a 36-acre park with five baseball fields and four full-size soccer fields, a skate plaza, office space, and parking lots.	15300 W Lakeside Street, Sylmar
Pre-construction	Senior Residences and Amenities	1,250 units of senior residences and amenities	12415 San Fernando Road, Sylmar
Pre-construction	Maclay Street Apartments/Commercial and Retail	141 units and 10,115-square foot commercial space	13260 West Maclay Street, Mission Hills
Pre-construction	East San Fernando Valley Transit Corridor Project	major mass transit project	East San Fernando Valley Transit Corridor

Sources: LADWP n.d.; DOT and Metro 2016.

Aesthetics

Cumulative impacts related to aesthetics could result from projects that combine to change the visual character of the area. Because access to the project area is limited and the majority of the views into the project area are blocked by existing topography, the project area is largely isolated from the surrounding areas. Nonetheless, the proposed project would result in visual changes that are minor in magnitude and would be located within the context of existing facilities at the VNC. Activities that would occur as part of the proposed project would

result in only minor, incremental visual changes that would be characteristic of activities that already occur at the VNC. Therefore, the proposed project, combined with the cumulative projects provided in Table 3-16 would not result in a cumulatively considerable impact related to hazardous materials.

Air Quality

Cumulative localized impacts could potentially occur if a project were to occur concurrently with another off-site project. Schedules for potential future projects near the project area are currently unknown; therefore, potential impacts associated with two or more simultaneous projects would be considered speculative.¹⁴ However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM₁₀ and PM_{2.5} emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all sites in the SCAQMD.

Therefore, the proposed project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant.

Biological Resources

Cumulative impacts to biological resources would occur where the construction or operation of the cumulative projects would encroach into areas containing sensitive biological resources, affect the movement of wildlife species, or affect the functionality of a planned conservation area. The project area includes developed areas and infrastructure, some native and non-native upland vegetation, and riparian vegetation. The proposed project would have a less-than-significant impact upon biological resources with regulatory compliance, AMM-BIO-1 through AMM-BIO-7, and implementation of MM-BIO-1, MM-BIO-2, and MM-BIO-3 (as discussed in Section 3.4, Biological Resources). Therefore, development of the proposed project in combination with the related projects would not significantly impact wildlife corridors or habitat for any candidate, sensitive, or special-status species identified in local plans, policies, or regulations, or by CDFW or the USFWS. Thus, cumulative impacts to biological resources would be less than significant.

Cultural Resources

There are no impacts to historic resources from the proposed project because there are no historic resources within the project area. Impacts to archaeological resources and tribal cultural resources would be mitigated through the implementation of MM-CUL-1 and MM-CUL-2 (as discussed in Section 3.5, Cultural

¹⁴ The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145).

Resources). Potentially significant impacts related to the inadvertent unearthing of human remains would be avoided by compliance with California Health and Safety Code Section 7050.5, which requires that, if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the County Coroner has examined the remains.

Cumulative impacts on cultural resources evaluate whether impacts of the proposed project and other related cumulative projects, when taken as a whole, substantially diminish the number of historical or archeological resources within the same or similar context or property type. The proposed project could have potentially significant impacts to unknown archaeological resources, and mitigation would be required to reduce adverse impacts to less than significant. It is anticipated that related projects would also be subject to the same requirements of CEQA as the proposed project, and would mitigate for impacts to cultural resources, as necessary. These determinations would be made on a case-by-case basis, and the effects of cumulative development on cultural resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, the proposed project's impacts to cultural resources would not be considered cumulatively considerable since the impacts are site specific, have been assessed and would be mitigated at a project- and site-specific level, and other cumulative projects in the area would be required to do the same.

Energy

The proposed project would result in cumulatively considerable impacts if the project, in conjunction with other projects in the area, would exceed the capacity of existing utilities. Future projects would be subject to CEQA and be required to follow energy standards, regulations, and plans for renewable energy, and implement energy efficiency considerations, where appropriate. Furthermore, it was determined that the proposed project would not result in wasteful, inefficient, or unnecessary consumption of electricity, natural gas, or petroleum, and the proposed project would follow existing, applicable energy standards and regulations.

Therefore, the proposed project would not result in a cumulatively considerable consumption of energy, and impacts would be less than significant.

Geology and Soils

The geographic extent considered for potential cumulative impacts to people and structures related to geologic and seismic hazards is more localized and site-specific than for many other environmental impacts. Impacts related to earthquakes and adverse soil conditions would be less than significant as a result of the required compliance with applicable building codes and geologic hazard regulations. Geologic/soil issues relate to local, site-specific soil conditions; ground response to earthquakes; and the potential for adverse soil conditions to damage the proposed project's structural components. Additionally, all projects built within the vicinity would

be required to comply with the California Building Code and regulations established by the State Water Resources Control Board that ensure that impacts to geology and soils are minimized to less than significant. With regard to potential cumulative impacts to paleontological resources, the proposed project could have potentially significant impacts to unknown paleontological resources, and mitigation would be required to reduce adverse impacts to less than significant. It is anticipated that related projects would also be subject to the same requirements of CEQA as the proposed project, and would mitigate for impacts to paleontological resources, as necessary. For these reasons, the proposed project's impacts with respect to geology and soils would not be cumulatively considerable.

Greenhouse Gas Emissions

To determine the proposed project's potential to generate GHG emissions that are cumulatively considerable, the proposed project's GHG emissions were compared to the non-industrial land use type quantitative threshold of 3,000 MT CO₂e per year. This impact analysis, therefore, compares the annual maintenance GHG emissions to the proposed SCAQMD threshold of 3,000 MT CO₂e per year because the proposed project includes maintenance only, with no construction phase. Estimated annual project-generated maintenance emissions in 2018 (30.12 MT CO₂e) would be well below the recommended SCAQMD threshold of 3,000 MT CO₂e per year. Similarly, the annual maintenance emissions for 2020 and thereafter were estimated to be 18.09 MT CO₂e per year, also well below the threshold. As the estimated average annual maintenance emissions would not exceed the recommended SCAQMD threshold of 3,000 MT CO₂e, the proposed project would not result in cumulatively considerable GHG emissions.

Hazards and Hazardous Materials

Cumulative impacts related to hazards and hazardous materials could result from projects that combine to increase exposure to hazards and hazardous materials. The proposed project would have less-than-significant impacts related to hazardous materials with the incorporation of AMM-HAZ-1, AMM-HAZ-2 (as discussed in Section 3.9, Hazards and Hazardous Materials), and MM-HAZ-1. The proposed project would comply with all federal, state, and local regulations pertaining to the use, transport, and release of hazardous materials. The potential release of hazardous materials during proposed maintenance activities would be reduced in compliance with AMM-HAZ-1, AMM-HAZ-2, and MM-HAZ-1. Although cumulative projects have the potential to result in potentially significant impacts to hazards and hazardous materials, these projects would also be subject to federal, state, and local regulations that would reduce potential impacts to less than significant, including the application of mitigation measures, as necessary. Therefore, the proposed project, combined with the cumulative projects provided in Table 3-16 would not result in a cumulatively considerable impact related to hazardous materials.

Hydrology and Water Quality

The region of influence with respect to cumulative hydrology and water quality impacts is the Bull Creek watershed, and on a larger scale, the Los Angeles River watershed. With respect to hydrologic impacts, surface flow velocities would increase as a result of proposed project-related vegetation and sediment removal because the vegetation currently acts as a flow velocity inhibitor that allows more water to percolate into on-site soils. However, increased runoff would be offset by the increased capacity of the drainage facilities following sediment removal because greater capacity would accommodate the increased flow volumes and result in overall beneficial impacts. Other cumulative projects would potentially result in a reduction in pervious surfaces and an increase in unmitigated flow. However, each project would be evaluated with respect to CEQA, which requires an evaluation of potential increased runoff and incorporation of mitigation measures, where necessary, to reduce stormwater flow volumes and flow rates to conditions equal or less than existing conditions. As a result of compliance with CEQA and local ordinances pertaining to stormwater runoff, the proposed project would not contribute to cumulative drainage impacts, and hydrologic impacts would not be cumulatively considerable. Cumulative drainage related impacts would be **less than significant**, and no mitigation would be required.

With respect to cumulative water quality impacts, potential project-related, elevated total dissolved solids concentrations associated with erosion-induced sedimentation of downstream Bull Creek and the Los Angeles River would be minimized through implementation of AMM-BIO-4, Turbidity and Siltation (as discussed in Section 3.10, Hydrology and Water Quality). In addition, potential elevated chemical concentrations of downstream Bull Creek and the Los Angeles River would be minimized through implementation of AMM-BIO-5, Equipment and Access. Although the proposed project would be exempt from NPDES regulations, the State Water Resources Control Board would require dischargers whose cumulative projects disturb 1 acre or more of soil to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. In addition, each project would be evaluated with respect to CEQA, which requires an evaluation of potential water quality impacts and incorporation of mitigation measures, where necessary, to reduce water quality impacts to downstream waterways and associated beneficial uses. As a result of compliance with CEQA and local ordinances pertaining to stormwater quality, the proposed project would not contribute to cumulative water quality impacts, and water quality impacts would not be cumulatively considerable. Cumulative water quality related impacts would be less than significant, and no mitigation would be required.

Noise

In the category of noise, the proposed project would have the potential to significantly affect sensitive receptors in the project area. In the event that other projects involving the use of heavy equipment (such as construction projects) were to occur nearby, the noise from the proposed project could combine with noise from development projects in the area to produce a cumulative noise effect. However, noise levels from construction activities generally decrease at a rate of 6 dB per doubling of distance away from the activity, and the identified related projects in Table 3-16 are located far enough from the project area that noise experienced by sensitive

uses adjacent to the project area would not hear construction noise from these projects. As such, the cumulative effects of noise are geographically limited. Furthermore, the maintenance-related effects of the proposed project were determined to be a level of less than significant, and the effects of the related projects would be temporary. Both the proposed project and any cumulative construction projects would be subject to applicable noise standards (see Section 3.13, Noise, for a description of the standards applicable in the City). As such, the maintenance activity noise associated with the proposed project would not be expected to combine with noise produced by related projects in the area to create a cumulatively considerable effect. For these reasons, the cumulative impacts of the proposed project would be less than significant.

Public Services

With regard to public services, cumulative impacts would occur if a project were to occur concurrently with other projects, resulting in the need for expanded public services. The proposed project would not involve the expansion of existing facilities or construction of new facilities that would attract new persons to the area requiring new public services. The workforce that would implement/perform proposed maintenance activities are existing LADWP workers. The proposed maintenance activities include vegetation management and sediment removal. The use of maintenance equipment around flammable vegetation could result in the need for fire suppression services. However, LADWP has procedures in place to minimize the risk of fire during maintenance activities. All proposed maintenance activities would occur in accordance with LADWP's procedures, as well as the California Fire Code. The proposed project would have no impact on police services, schools, parks, and other public facilities. For these reasons, the proposed project would have a less-than-significant cumulative impact on public services.

Transportation and Circulation

The proposed maintenance activities would result in daily trips that would range from four to 28 passenger-car equivalent (PCE) trips at each work area. There would be no AM peak-hour trips since all workers and haul trucks would arrive at each work area before the AM peak hours, starting at 7:00 a.m. For the PM peak-hour, trips from each work area would range between two and 14 PCE trips. The proposed project activities at each work area would not overlap because LADWP proposes to use the same in-house crew at each work area. Therefore, the activities that would generate the highest volume of traffic would be at the Upper Debris Basin and Middle Debris Basin, separately. Proposed maintenance activities at those work areas would generate an approximate total of 28 PCE daily trips: zero PCE AM peak-hour trips, and 14 PCE PM peak-hour trips. Because so few peak-hour trips are generated by the proposed project, neither a Technical Memorandum or Traffic Impact Study would be required. Furthermore, traffic generated by the proposed project would be temporary and would last between 1 day and 14 days, depending on the work area under maintenance. All proposed project activities would occur on the VNC site and would not require any (temporary) closures to public streets or otherwise impact the public streets system. Due to the relatively low and temporary traffic

volumes generated by the proposed project, it would not have a measurable impact on the adjacent street network, and therefore, would not have a cumulatively considerable impact when considered in combination with other projects in the area.

Tribal Cultural Resources

It is anticipated that related projects would also be subject to the same requirements of CEQA as the proposed project and would mitigate for impacts to tribal cultural resources, as necessary. These determinations would be made on a case-by-case basis, and the effects of cumulative development on tribal cultural resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. In addition, LADWP conducted consultation with two tribes. Because the proposed project activities could uncover tribal cultural resources, mitigation is included that requires coordination with the tribes. Therefore, the proposed project's impacts to tribal cultural resources would not be considered cumulatively considerable since the impacts are site specific, have been assessed and would be mitigated at a project- and site-specific level, and other cumulative projects in the area would be required to do the same.

Utilities and Service Systems

The proposed project would result in cumulatively considerable impacts if the project, in conjunction with other projects in the area, would exceed the capacity of existing utilities and service systems. However, the proposed project would not have an impact with regard to wastewater or water supplies. The proposed project would generate minimal amounts of waste, and it was determined that local landfills have 100 years of remaining life expectancy, as of 2013, which could adequately serve the proposed project and the reasonably foreseeable projects in the area. Additionally, the proposed project would increase the capacity of the VNC to collect and process stormwater, which would decrease the need for new stormwater facilities within the local watershed. For these reasons, the proposed project would not have a cumulatively considerable impact when considered in combination with other projects in the area.

Wildfire

The proposed project is not located within an area susceptible to high fire hazard dangers, thus no cumulative impact related to wildfire would occur.

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

Less-Than-Significant-Impact with Mitigation Incorporated. Based on the analysis in this Initial Study, for all resource topics, the proposed project would have no impact, less-than-significant impacts, or less-than-significant impacts with incorporation of mitigation measures. Therefore, substantial adverse impacts on human

beings would not occur as a result of the proposed project, and the impact would be less than significant with mitigation incorporated.

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DOT (U.S. Department of Transportation) and Metro (Los Angeles County Metropolitan Transportation Agency). 2016. *Cumulative Impacts Report for the East San Fernando Valley Transit Corridor*. April 2016. Accessed October 2018. https://media.metro.net/projects_studies/east_sfv/images/deis-deir/Apps/Appendix_Z_Cumulative_Impacts_Report.pdf.

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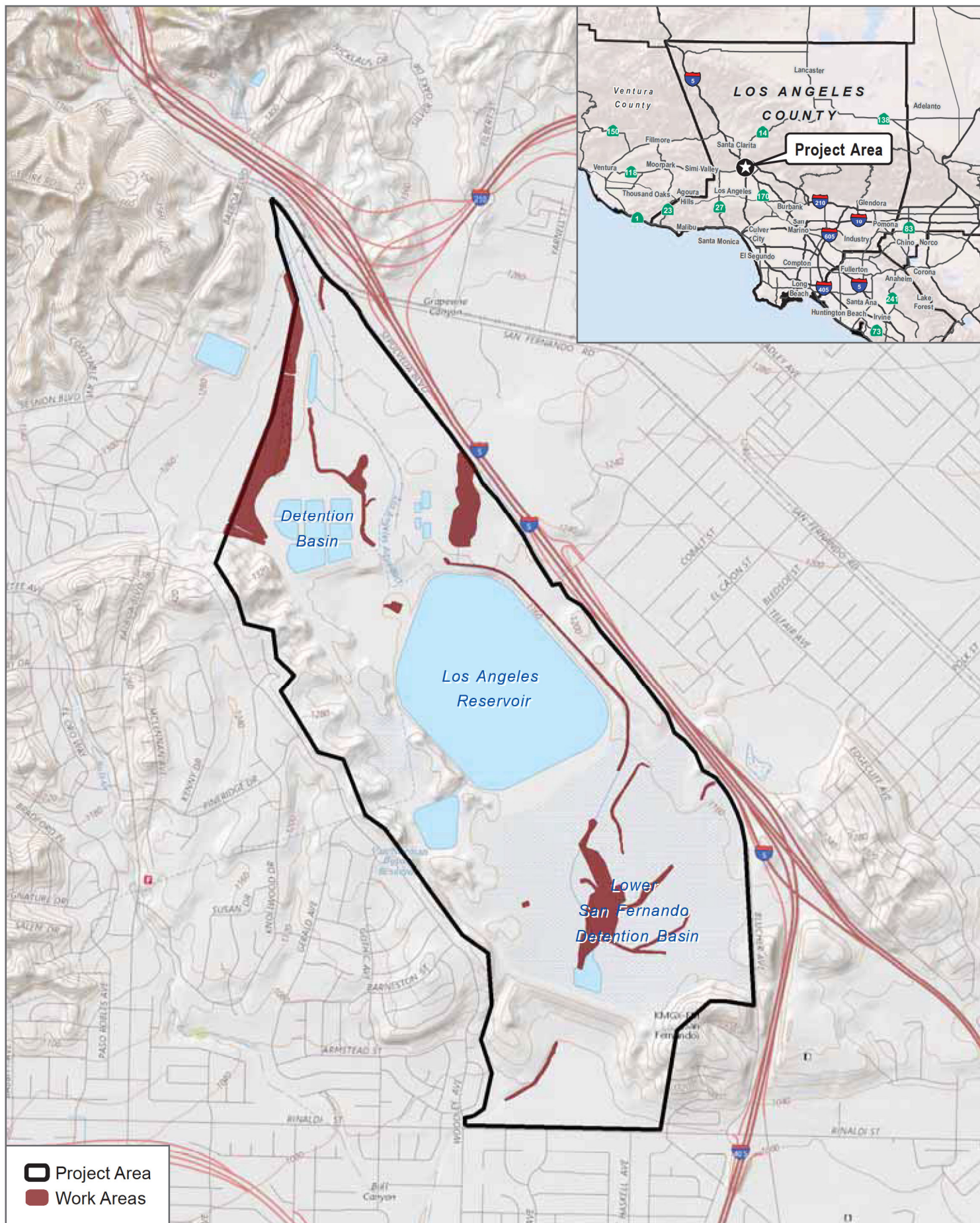
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SOURCE: USGS 7.5-Minute Series San Fernando Quadrangle



FIGURE 1

Regional Map

LADWP Van Norman Complex

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SOURCE: DigitalGlobe 201



FIGURE 2

Project Area

LADWP Van Norman Complex

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FIGURE 3A

Upper and Middle Debris Basins

LADWP Van Norman Complex

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FIGURE 3B
Bee Drainage Channel
LADWP Van Norman Complex

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FIGURE 3C
San Fernando Gate Drain
LADWP Van Norman Complex

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FIGURE 3D
Upper San Fernando Drain Line
LADWP Van Norman Complex

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FIGURE 3E
Upper San Fernando Drain Line Feature 1
LADWP Van Norman Complex

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FIGURE 3F

Upper San Fernando Drain Line Feature 2

LADWP Van Norman Complex

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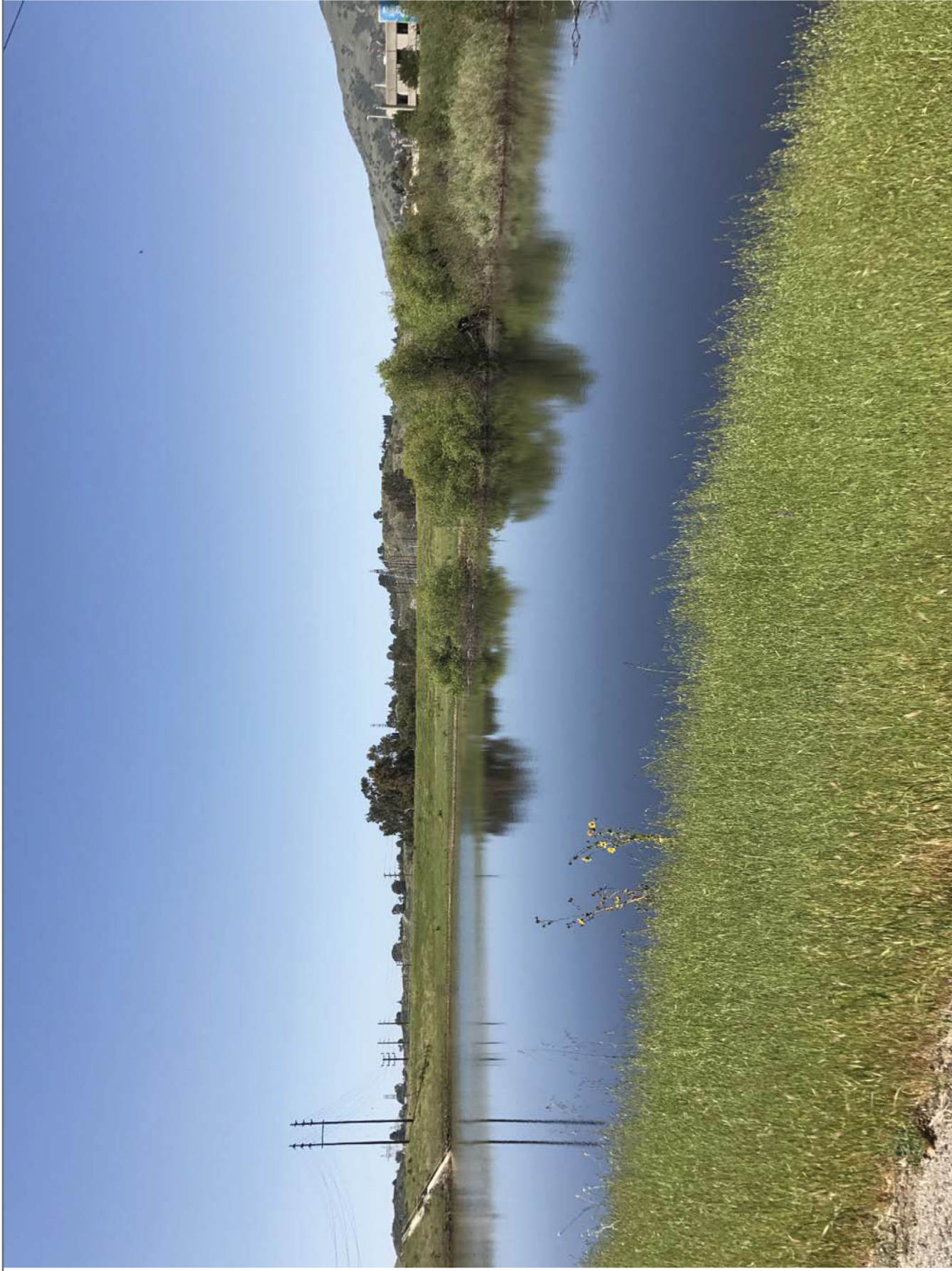


FIGURE 3G
Yamell Debris Basin
LADWP Van Norman Complex

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FIGURE 3H
LAR UV Plant Drainage and V-Ditch
LADWP Van Norman Complex

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FIGURE 3I
San Fernando Creek
LADWP Van Norman Complex

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FIGURE 3J

Lower San Fernando Detention Basin

LADWP Van Norman Complex

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FIGURE 3K

Bull Creek Extension Channel

LADWP Van Norman Complex

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FIGURE 3L
Upper Northeast Drainage
LADWP Van Norman Complex

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FIGURE 3M
LAR North Dike Stormwater Basin
LADWP Van Norman Complex

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FIGURE 3N
East Channel
LADWP Van Norman Complex

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SOURCE: DigitalGlobe 2016



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FIGURE 4

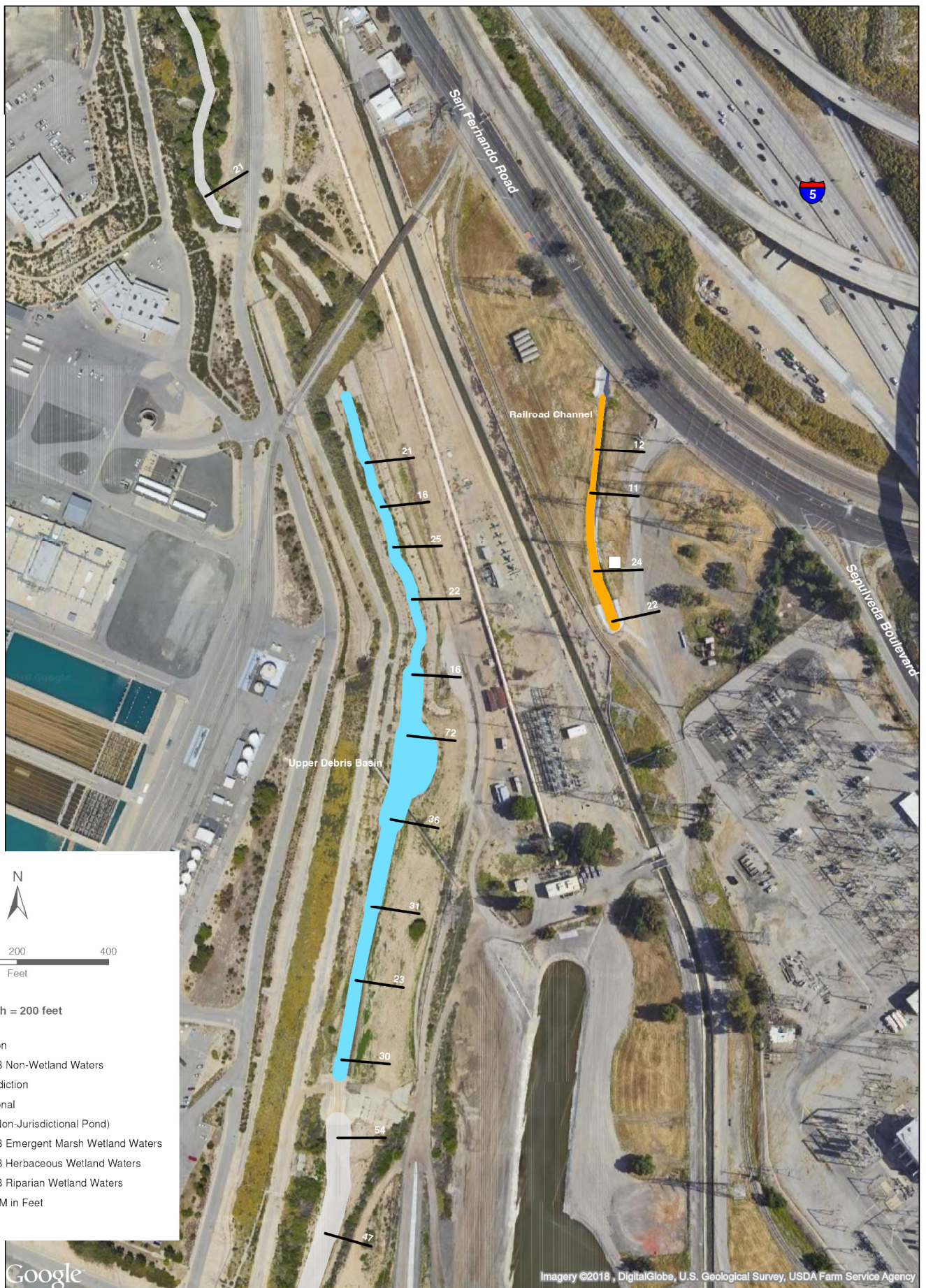
Biological Resources Study Area

LADWP Van Norman Complex

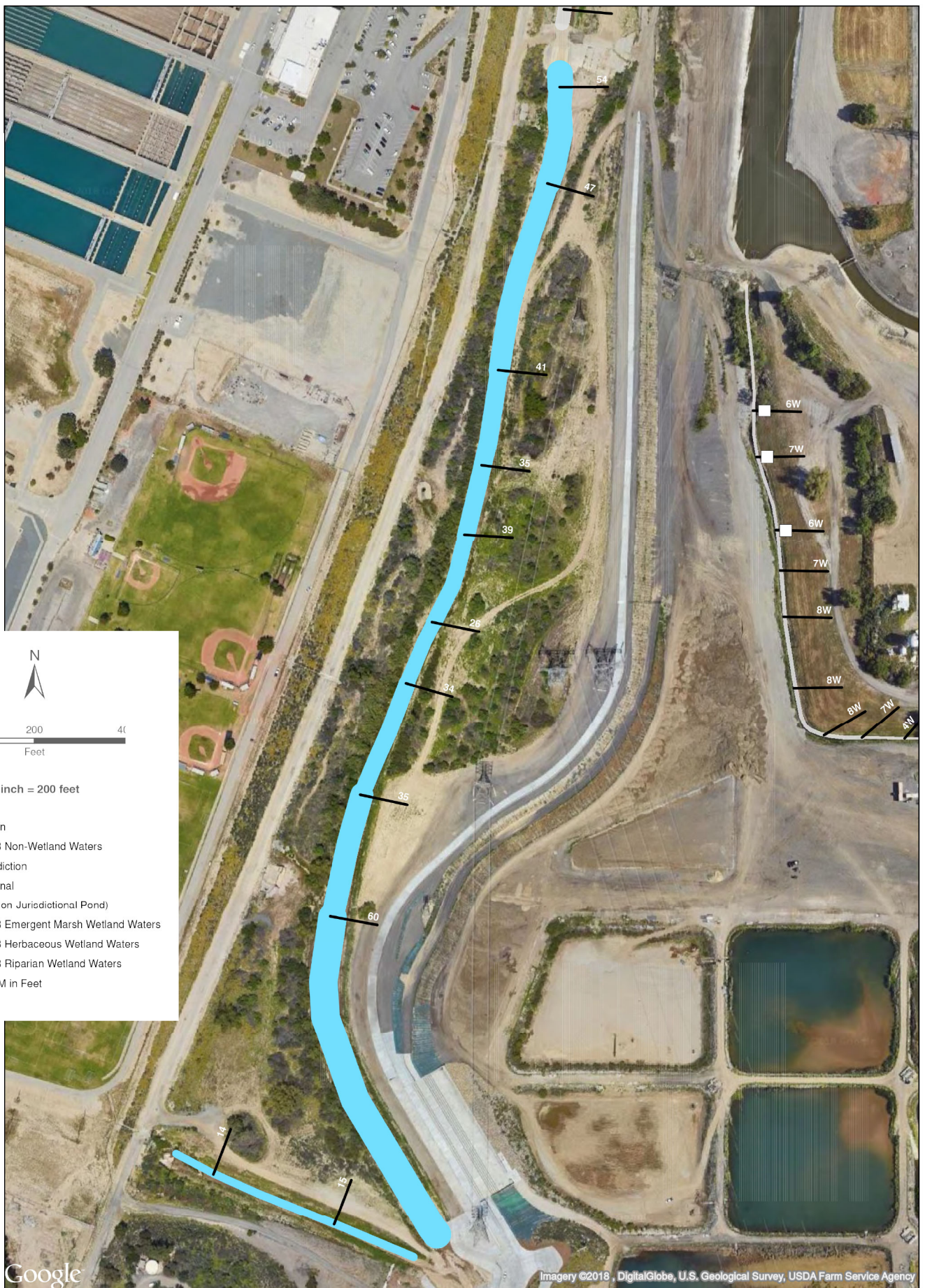
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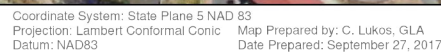


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Coordinate System: State Plane 5 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD83
 Map Prepared by: C. Lukos, GLA
 Date Prepared: September 27, 2017

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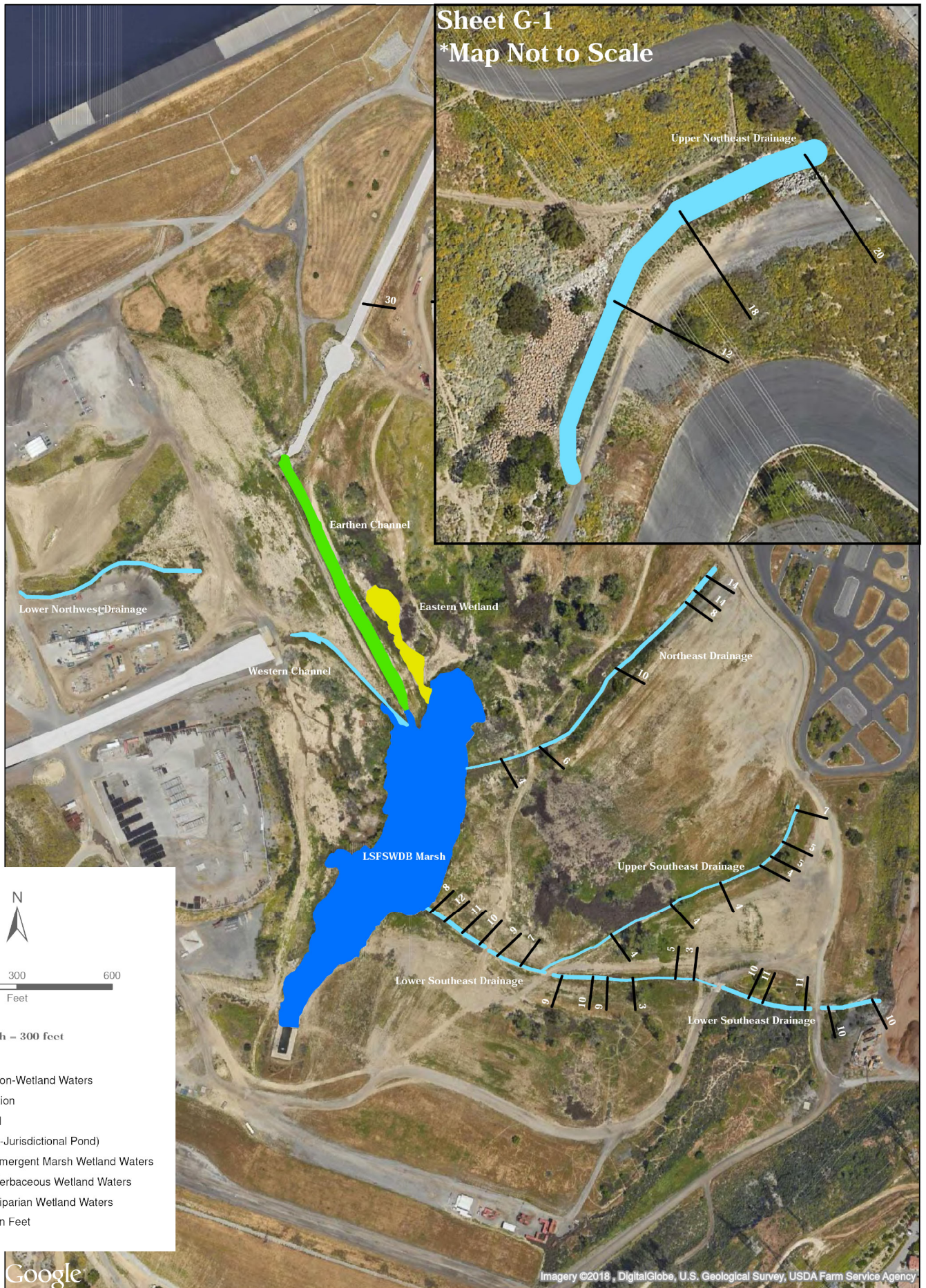


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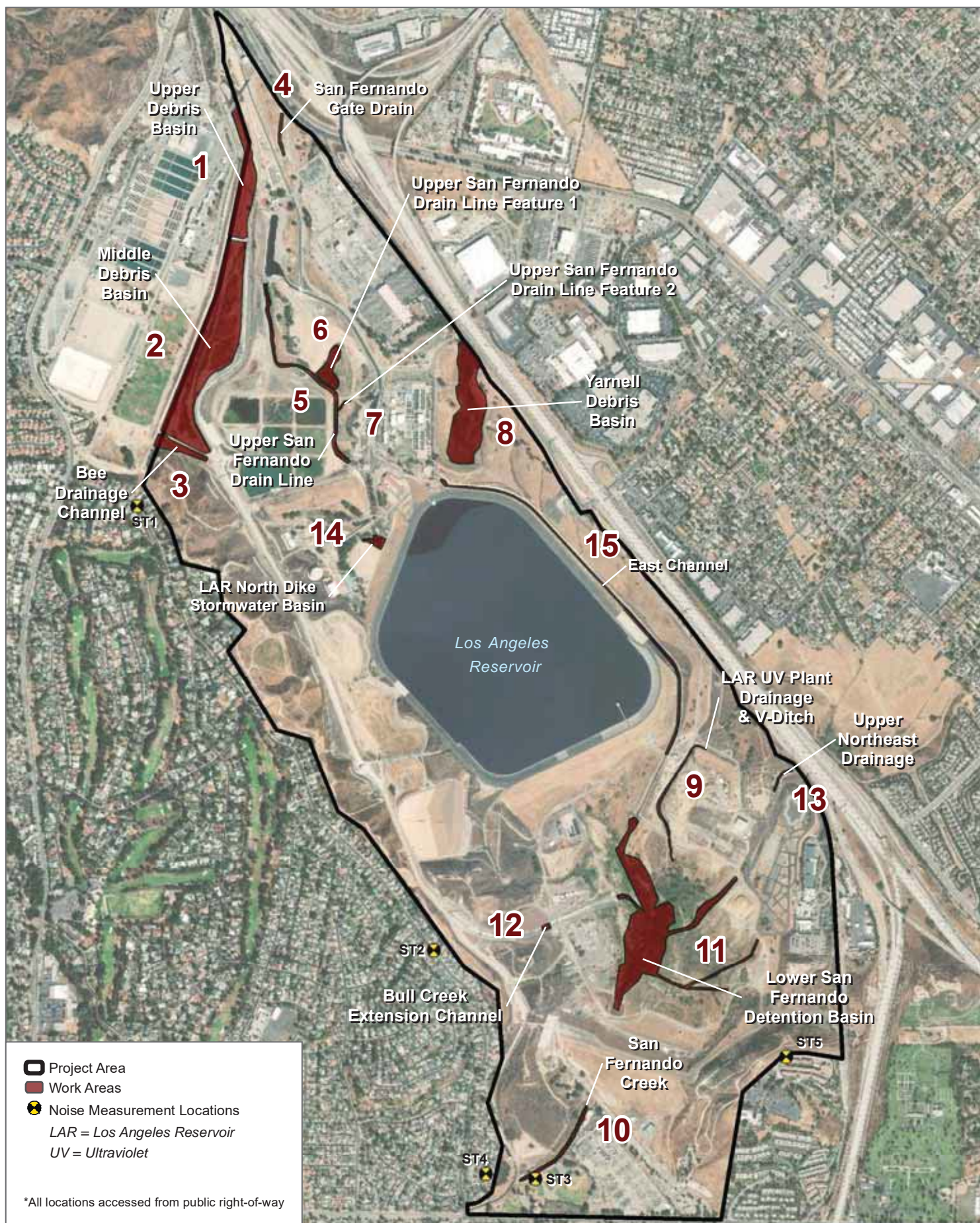
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SOURCE: DigitalGlobe 2016



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FIGURE 6
Noise Measurement Locations

LADWP Van Norman Complex

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