Mitigated Negative Declaration

San Fernando Valley Water Recycling Project



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

November 2012

CEQA Initial Study and Mitigated Negative Declaration San Fernando Valley Water Recycling Project

November 2012

General Manager Ronald O. Nichols

Senior Assistant General Manager Water Systems James B. McDaniel

Director of Environmental Affairs Mark J. Sedlacek

Manager of Environmental Affairs Charles C. Holloway

Prepared by Los Angeles Department of Water and Power 111 North Hope Street Los Angeles, CA 90012

Technical Assistance Provided by AECOM 515 S. Flower Street, 9th Floor Los Angeles, CA 90071

CITY OF LOS ANGELES OFFICE OF THE CITY CLERK ROOM 395, CITY HALL LOS ANGELES, CALIFORNIA 90012 CALIFORNIA ENVIRONMENTAL QUALITY ACT PROPOSED MITIGATED NEGATIVE DECLARATION

(Article I, City CEQA Guidelines)

LEAD CITY AGENCY:	COUNCIL DISTRICT
Los Angeles Department of Water and Power (LADWP) 111 North Hope Street, Room 1044 Los Angeles, CA 90012	2, 3, 5, 6, and 12
PROJECT TITLE: San Fernando Valley Water Recycling Project	CASE NO.

PROJECT LOCATION: The proposed project would be located within the Valley Service Area and supplied with recycled water from the Donald C. Tillman Water Reclamation Plant. Additionally, the proposed project would include a connection to the City of Burbank recycled water system, which receives recycled water from the Burbank Water Reclamation Plant. The proposed project would consist of six segments: North Hollywood Park, Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, VA Hospital, and Pierce College. The construction of these six segments would expand the supply of recycled water to customers located throughout the San Fernando Valley. These customers have committed to using recycled water for non-potable uses. All segments would connect to existing recycled water pipeline systems in the area using a 16-inch connection and 16-inch diameter distribution lines. The North Hollywood Park segment would connect to the existing City of Burbank recycled water pipeline; four segments would connect to the existing LADWP recycled water pipeline; the Pierce College segment would connect to the Reseda Park segment. In total, approximately 109,800 linear feet of new recycled water pipeline would be installed with implementation of the proposed project.

DESCRIPTION: The Los Angeles Department of Water and Power (LADWP) proposes to maximize the use of recycled water to replace potable water sources for irrigation and industrial uses by extending the recycled water pipeline network to the San Fernando Valley. The San Fernando Valley Water Recycling Project (WRP) (proposed project) is being undertaken in accordance with the 2010 Urban Water Management Plan.

in accordance with the 2010 Urban Water Management Plan.

NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY: n/a

SEE ATTACHED INITIAL STUDY

SEE INITIAL STUDY FOR MITIGATION MEASURES IMPOSED

THE INITIAL STUDY PREPARED FOR THIS DOCUMENT IS ATTACHED

NAME OF PERSON PREPARING THIS FORM:	TITLE:	PHONE:
Irene Paul	Environmental Project Manager	(213) 367-3509
ADDRESS:	SIGNATURE (Official)	DATE
111 N. Hope Street, Room 1044 Los Angeles, CA 90012	Charles C. Hallung Charles C. Holloway, Manager of Environmental Planning and Assessment	July 19, 2012

FINDING:

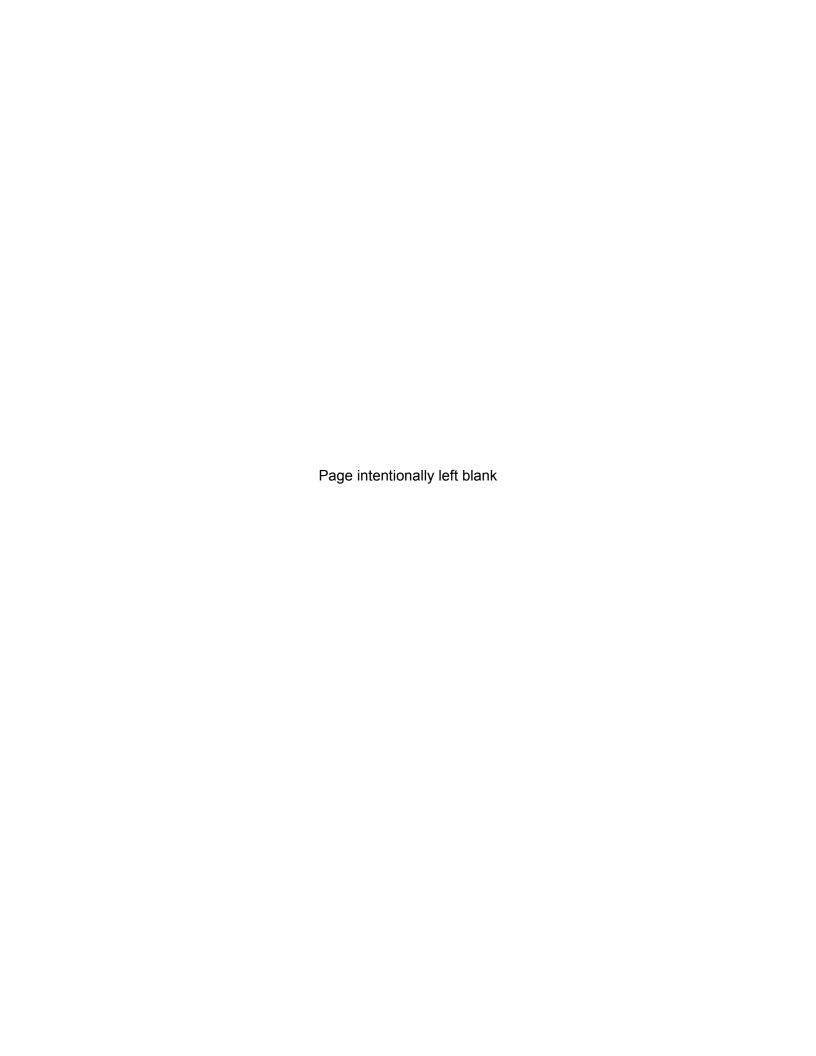


Table of Contents

Section 1	Projec	ct Description	1-1
	1.1	Overview of the Project	
	1.2	California Environmental Quality Act	1-1
	1.3	Project Location and Setting	1-1
	1.4	Project Background	1-12
	1.5	Project Objectives	
	1.6	Description of the Proposed Project	1-14
	1.7	Construction Schedule and Procedures	1-17
	1.8	Required Permits and Approvals	1-19
Section 2	Initial	Study Checklist	2-1
Section 3	Enviro	onmental Impact Assessment	3-1
	I.	Aesthetics	
	II.	Agriculture and Forestry Resources	3-2
	III.	Air Quality	
	IV.	Biological Resources	
	V.	Cultural Resources	3-11
	VI.	Geology and Soils	3-17
	VII.	Greenhouse Gas Emissions	
	VIII.	Hazards and Hazardous Materials	3-20
	IX.	Hydrology and Water Quality	3-23
	X.	Land Use and Planning	
	XI.	Mineral Resources	
	XII.	Noise	3-30
	XIII.	Population and Housing	3-37
	XIV.	Public Services	
	XV.	Recreation	
	XVI.	Transportation/Traffic	
	XVII.	Utilities and Service Systems	3-48
	XVIII.	Mandatory Findings of Significance	
Section 4	List of	Preparers	4-1
TECHNICA	L APPE	ENDICES	
Appendix A	Const	ruction Spreadsheet	
Appendix B		iality Report	
Appendix C		al Resources Assessment	
Appendix D	Traffic	Study	

List of Figures

Figure 1	Regional Location Map	1-3
Figure 2	Project Location Map	
Figure 3	North Hollywood Park Segment	1-6
Figure 4	Valley Plaza Park Segment	
Figure 5	Van Nuys Sherman Oaks Park Segment	
Figure 6	Reseda Park Segment	
Figure 7	VA Hospital Segment	
Figure 8	Pierce College Segment	
	List of Tables	
Table 1	Regional Construction Emissions	3-6
Table 2	Localized Construction Emissions	
Table 3	Annual Greenhouse Gas Emissions	3-20
Table 4	Existing Noise Levels	3-31
Table 5	Construction Equipment Noise Level Ranges	
Table 6	Vibration Velocities for Construction Equipment	3-35
Table 7	Level of Service Definitions	3-42
Table 8	Future With Project Study Conditions – Peak Hour	
	Levels of Service (2022)	3-43

Acronyms and Abbreviations

AFY Acre-feet per year

AQMP Air Quality Management Plan BMP Best Management Practice

Caltrans California Department of Transportation

CARB California Air Resources Board

CDFG California Department of Fish and Game CEQA California Environmental Quality Act

CH₄ Methane

CNDDB California Natural Diversity Database

CNPS California Native Plant Society

CO Carbon monoxide CO₂ Carbon dioxide

CO₂e Carbon dioxide equivalent

DBA A-weighted decibel

GHG Greenhouse gas emissions

I-405 Interstate 405

LAA Los Angeles Aqueduct

LADOT City of Los Angeles Department of Transportation LADWP Los Angeles Department of Water and Power

 $\begin{array}{lll} \text{LAFD} & \text{Los Angeles Fire Department} \\ \text{LAPD} & \text{Los Angeles Police Department} \\ \text{L}_{\text{ea}} & \text{Community noise equivalent level} \\ \end{array}$

LOS Level of service

Metro Los Angeles County Metropolitan Transportation Authority

µg/m³ Microgram per cubic meter
MND Mitigated Negative Declaration

MWD Metropolitan Water District of Southern California

N₂O Nitrous oxide NO_x Nitrogen oxide

 O_3 Ozone

PM_{2.5} Particulate matter less than 2.5 microns in diameter PM₁₀ Particulate matter 10 microns in diameter or less SCAG Southern California Association of Governments SCAQMD South Coast Air Quality Management District

SO_x Sulfur oxide

SR 134 State Route 134, Glendale Freeway
SR 170 State Route 170, Hollywood Freeway
SWPPP Stormwater Pollution Prevention Plan

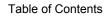
TAC Toxic air contaminant
TMP Traffic Management Plan

US 101 United States Route 101, Ventura Freeway

USFWS U.S. Fish and Wildlife Service
VA Veteran's Administration
V/C Volume-to-capacity

VOC Volatile organic compound WRP Water Recycling Project

November 2012 Page iii



Page intentionally left blank

SECTION 1 PROJECT DESCRIPTION

1.1 Overview of the Project

The Los Angeles Department of Water and Power (LADWP) proposes to maximize the use of recycled water to replace potable water sources for irrigation and industrial uses by extending the existing recycled water pipeline network within the San Fernando Valley area of the City of Los Angeles. The San Fernando Valley Water Recycling Project (WRP) (proposed project) is being undertaken in accordance with the 2010 Urban Water Management Plan. Construction of the proposed project would occur in six segments. This document will examine all six segments.

1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed water recycling project constitutes a project as defined by CEQA (California Public Resources Code Section 21000 et seq.). The CEQA Guidelines Section 15367 states that a "Lead Agency" is "the public agency which has the principal responsibility for carrying out or approving a project." Therefore, LADWP is the lead agency responsible for compliance with CEQA for the proposed project.

As lead agency for the proposed project, LADWP must complete an environmental review to determine if implementation of the proposed project would result in significant adverse environmental impacts. To fulfill the purpose of CEQA, an Initial Study has been prepared to assist in making that determination. Based on the nature and scope of the proposed project and the evaluation contained in the Initial Study environmental checklist (contained herein), LADWP, as the lead agency, has concluded that a Mitigated Negative Declaration (MND) is the proper level of environmental documentation for this project. The Initial Study shows that impacts caused by the proposed project are either less than significant or significant but mitigable with incorporation of appropriate mitigation measures as defined herein. This conclusion is supported by CEQA Guidelines Section 15070, which states that an MND can be prepared when "(a) the initial study shows that there is not substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or (b) the initial study identifies potentially significant effects, but (1) revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment."

1.3 Project Location and Setting

The proposed project would consist of six segments, which would be located within public street rights-of-way in urbanized and fully developed areas within the San Fernando Valley. The six segments would extend to North Hollywood Park, Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, the Veteran's Administration Hospital (VA Hospital), and Pierce College. All six segments abut residential, commercial, public facilities, and

recreational or open space uses. Additionally, the VA Hospital segment would run adjacent to industrial uses. Figure 1 shows the regional location of the proposed project, while Figure 2 shows an overview of the proposed alignments.

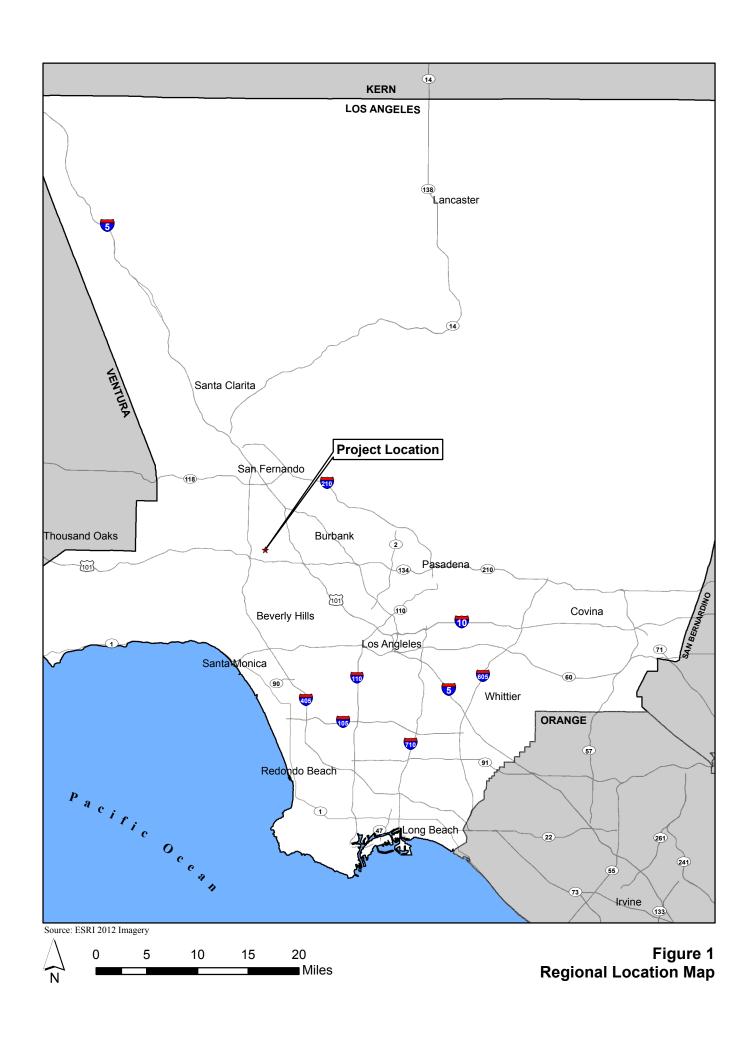
The North Hollywood Park segment would connect to an existing City of Burbank pipeline on the City of Los Angeles border at Verdugo Avenue and Clybourn Avenue. From the Burbank pipeline connection point, this segment would extend approximately 600 feet west on Verdugo Avenue to Camarillo Street, approximately 5,200 feet west on Camarillo Street to Vineland Avenue, approximately 2,600 feet north on Vineland Avenue to Magnolia Boulevard, and approximately 5,600 feet west on Magnolia Boulevard. It would terminate at North Hollywood High School, located at 5231 Colfax Avenue on the corner of Magnolia Boulevard and Colfax Avenue (see Figure 3).

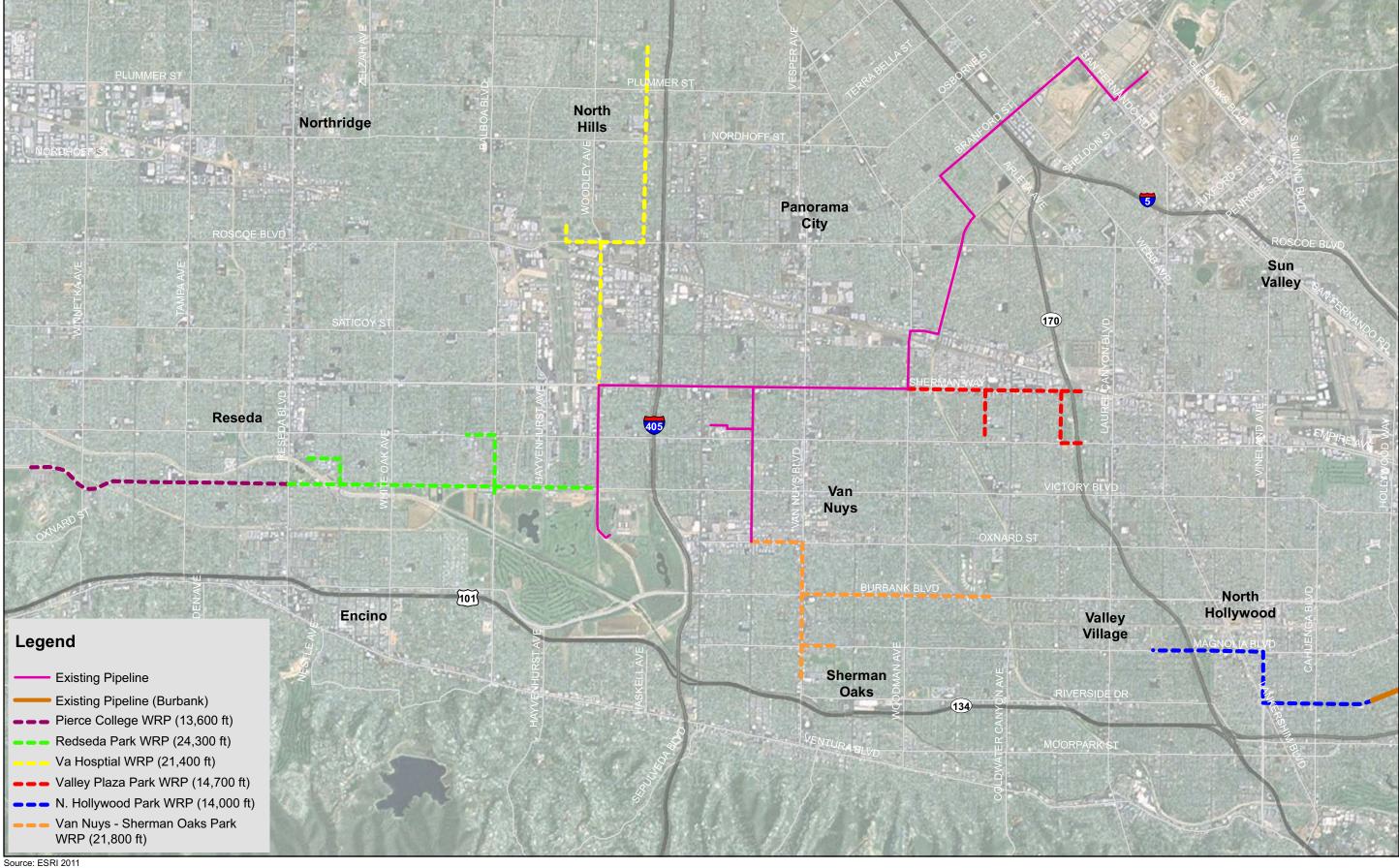
The following four segments would connect to and extend from the existing LADWP recycled water pipeline in the San Fernando Valley, as described below.

The Valley Plaza Park segment would connect to the existing LADWP pipeline at the intersection of Sherman Way and Woodman Avenue. This segment would extend approximately 8,800 feet east on Sherman Way from the connection point to California State Route 170 (SR 170, Hollywood Freeway). Two extensions would connect to this main segment. One extension would travel approximately 2,200 feet south on Ethel Avenue from Sherman Way and terminate at James Madison Middle School, located at 13000 Hart Street. The second extension would travel approximately 2,600 feet south on Whitsett Avenue from Sherman Way to Vanowen Street, and approximately 1,100 feet east on Vanowen Street terminating at Valley Plaza Park, located at 12240 Archwood Street (see Figure 4).

The Van Nuys Sherman Oaks Park segment would connect to the existing LADWP pipeline on Kester Avenue just south of the Los Angeles County Metropolitan Transportation Authority (Metro) Orange Line Busway. This segment would extend approximately 360 feet south on Kester Avenue from the connection point to Oxnard Street, approximately 2,600 feet east on Oxnard Street to Van Nuys Boulevard, and approximately 6,940 feet south on Van Nuys Boulevard terminating at Sherman Oaks Hospital, located at 4929 Van Nuys Boulevard. This segment would also include two east extensions. One of these extensions would travel approximately 10,000 feet east on Burbank Boulevard from Van Nuys Boulevard and terminate at Los Angeles Valley College, located at 5800 Fulton Avenue. The other extension would travel approximately 1,900 feet east on Magnolia Boulevard from Van Nuys Boulevard and terminate at Van Nuys Sherman Oaks Park, located at 14201 Huston Street (see Figure 5).

The Reseda Park segment would connect to the existing LADWP pipeline at the intersection of Victory Boulevard and Woodley Avenue. This segment would extend approximately 15,800 feet west on Victory Boulevard from the connection point terminating at the intersection of Victory Boulevard and Reseda Boulevard. Three extensions would connect to this main segment. One extension would travel approximately 1,000 feet south on Balboa Boulevard from Victory Boulevard and terminate at the Sepulveda Basin Sports Complex, located at 6200 North Louise Avenue. Another extension would travel approximately 2,650 feet north on Balboa Boulevard from Victory Boulevard to Vanowen Street, and approximately 1,350 feet west on Vanowen Street terminating at Mulholland Middle School, located at 17120 Vanowen Street.





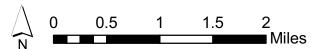
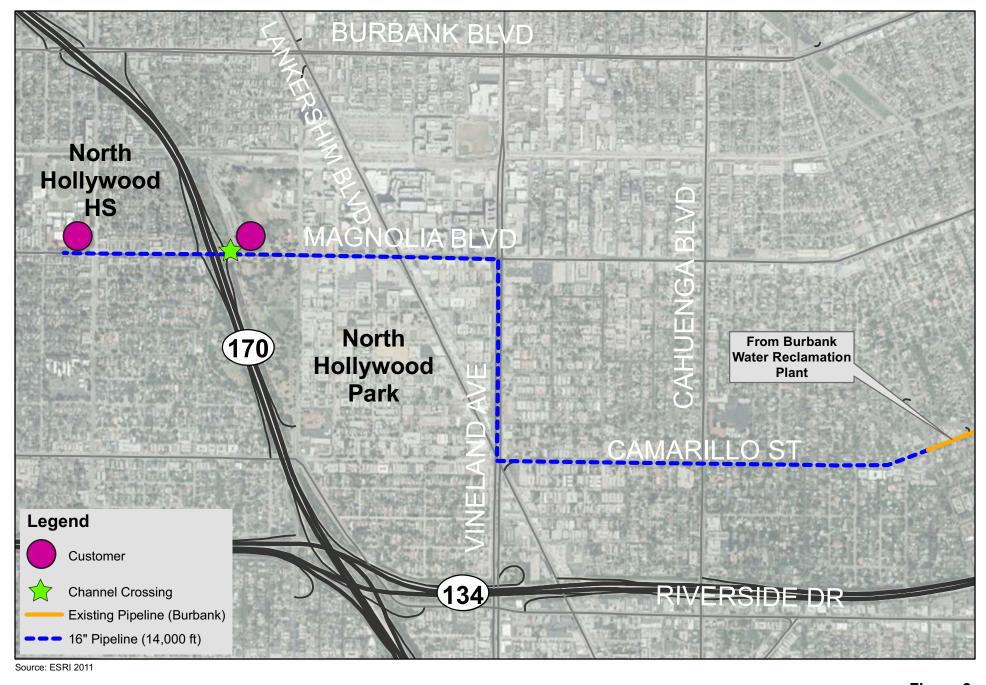


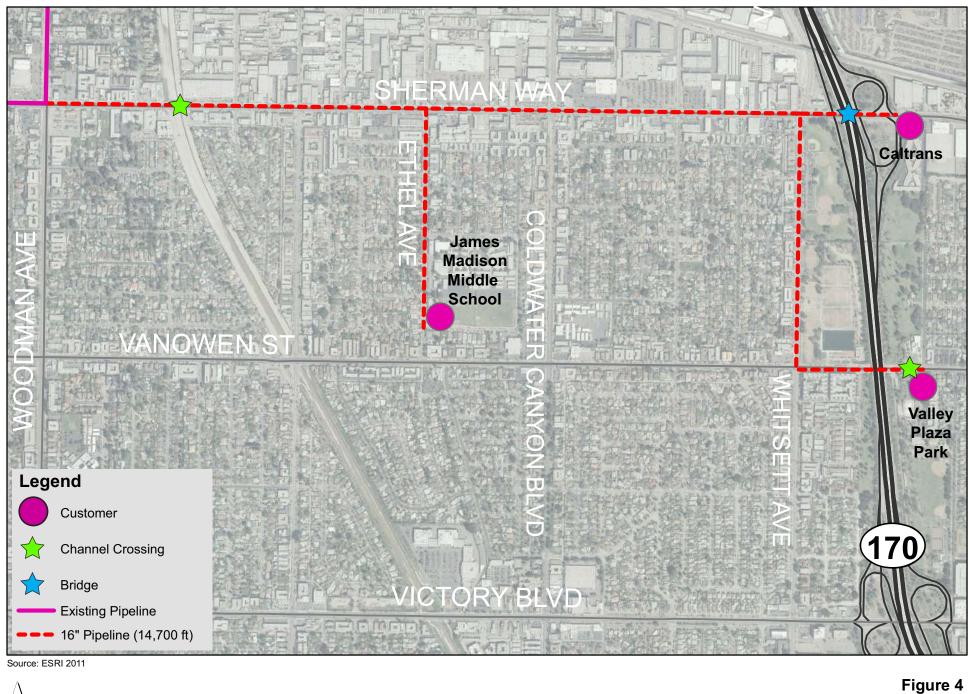
Figure 2 **Project Location Map**

Page intentionally left blank



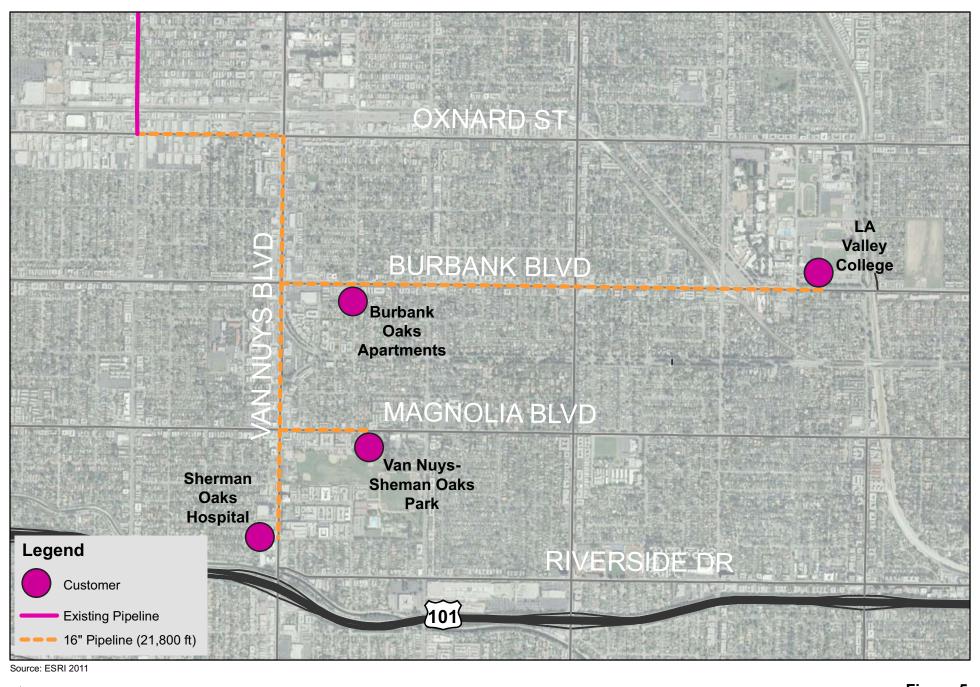
0 0.25 0.5 0.75 1 Miles

Figure 3
North Hollywood Park Segment



0 0.25 0.5 0.75 1 Miles

Figure 4
Valley Plaza Park Segment



0 0.25 0.5 0.75 1 Miles

Figure 5
Van Nuys-Sherman Oaks Park Segment

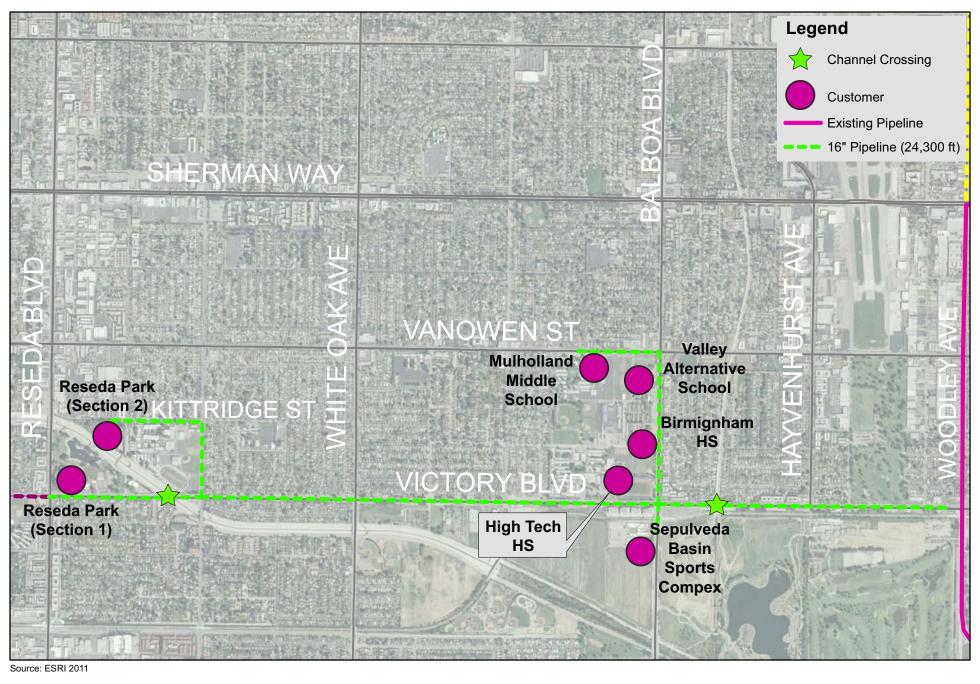
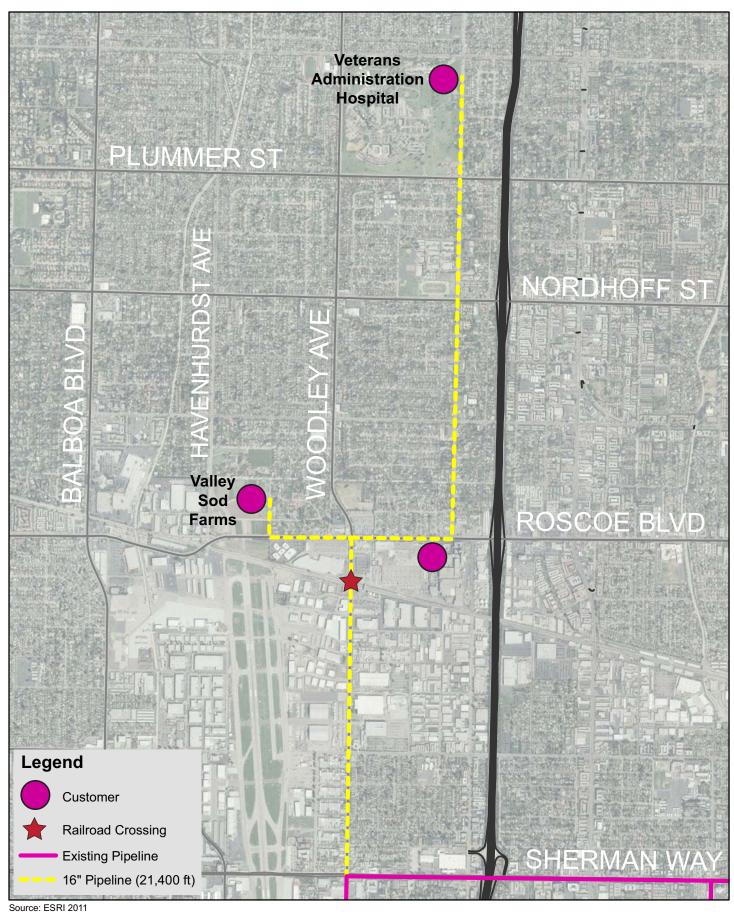




Figure 6 Reseda Park Segment



0 0.25 0.5 0.75 1 Miles

Figure 7
VA Hospital Segment

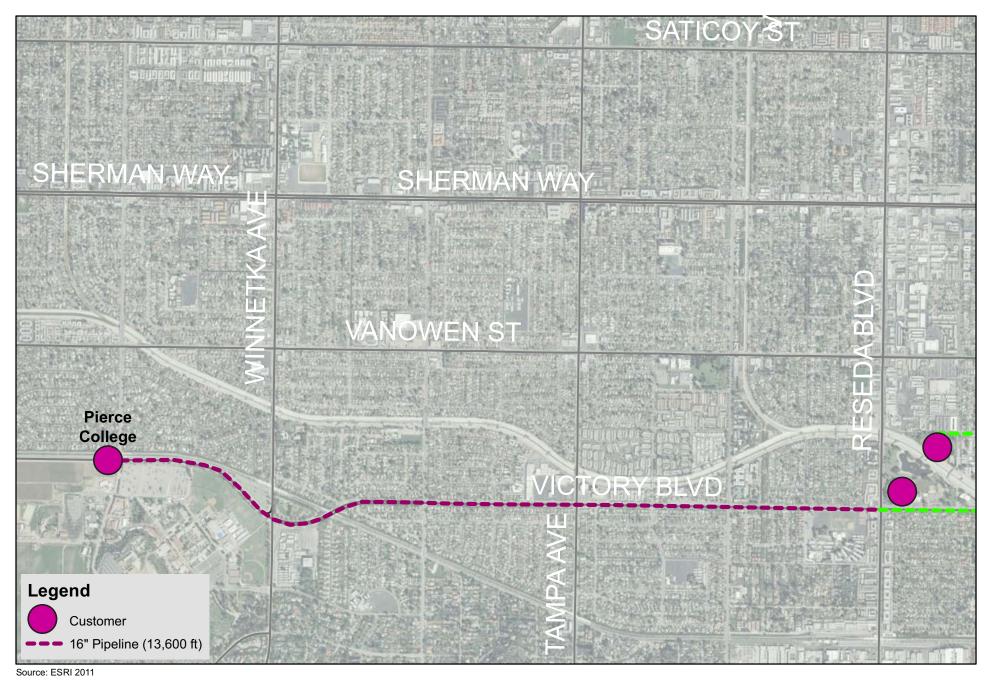




Figure 8
Pierce College Segment

A third extension would travel approximately 1,400 feet north on Lindley Avenue from Victory Boulevard to Kittridge Street, and approximately 2,100 feet west on Kittridge Street and terminate on the north side of Reseda Park just east of the intersection of Kittridge Street and Reseda Boulevard (see Figure 6).

The VA Hospital segment would connect to the existing LADWP pipeline at the intersection of Sherman Way and Woodley Avenue. This segment would extend approximately 7,300 feet north on Woodley Avenue from the connection point and terminate at the intersection of Woodley Avenue and Roscoe Boulevard. Two extensions would branch off of this main segment. One extension would travel approximately 1,800 feet west on Roscoe Boulevard from Woodley Avenue to Gothic Avenue, and approximately 600 feet north on Gothic Avenue terminating at Valley Sod Farms, located at 16405 Chase Street. Another extension would travel approximately 2,200 feet east on Roscoe Boulevard from Woodley Avenue to Haskell Avenue, then approximately 9,500 feet north on Haskell Avenue and terminate at the VA Hospital, located at 16111 Plummer Street (see Figure 7).

The Pierce College segment would connect to the westernmost termination point of the Reseda Park segment at the intersection of Reseda Boulevard and Victory Boulevard and travel approximately 13,600 feet west on Victory Boulevard, terminating at Pierce College, located at 6201 Winnetka Avenue (see Figure 8).

1.4 Project Background

The City relies on four sources to meet its water needs: (1) snow-melt runoff from the Eastern Sierra conveyed by the Los Angeles Aqueduct (an average of 35.4 percent of the total supply over the last 5 years); (2) local groundwater (11.4 percent); (3) purchases from the Metropolitan Water District of Southern California (MWD) conveyed from the Colorado River through the Colorado River Aqueduct and the State Water Project via the California Aqueduct (52.3 percent); and (4) recycled water for non-potable uses (1 percent). Population growth in the area has added to the City's water needs.

Although these water resources have served the City well for decades, several factors have converged that threaten the long-term reliability of these supplies. Climate conditions, such as consecutive years of below-normal snowfall and drought, and environmental commitments have severely impacted historical water supply sources.

• Eastern Sierra Watershed: The City's right to export water from the Eastern Sierra is based on approximately 188 water right licenses from various rivers, lakes and creeks in the Mono Basin and Owens Valley. The City's water rights are on file with the California State Water Resources Control Board. The City also owns the majority of land (approximately 315,000 acres) and associated riparian water rights in the Owens Valley. Los Angeles Aqueduct deliveries from the Eastern Sierra vary with snowpack conditions. In addition, over the last two decades, the City's water deliveries from the Los Angeles Aqueduct have dropped significantly due to reallocation of water for environmental mitigation and enhancement activities. Among these environmental commitments are the State Water Resources Control Board's Mono Lake Decision, which reduced LADWP's ability to export water from the Mono Basin from 90,000 acre-feet per year (AFY) to 16,000 AFY; implementation of the Owens Lake Dust Mitigation Program, to which the LADWP is currently delivering 80,000 AFY, but is expected to increase to 95,000 AFY; implementation of the 1997

Memorandum of Understanding (MOU) between LADWP and the MOU Ad Hoc Group, which commits LADWP to supply 1,600 AFY for mitigation identified in the 1991 Water from the Owens Valley to Supply the Second Los Angeles Aqueduct Environmental Impact Report and rewatering of the Lower Owens River where losses are approximately 17,000 AFY.

- Local Groundwater: The City owns groundwater rights in three Upper Los Angeles
 River Area groundwater basins the San Fernando, Sylmar, and Eagle Rock basins
 as well as the Central and West Coast Basins, as determined by separate
 judgments by the Superior Court of the State of California. However, groundwater
 contamination in the San Fernando Basin, where the majority of the City's
 groundwater supply is produced, has severely limited the City's ability to pump
 groundwater.
- Purchased Water: MWD's sources of water the Colorado River, State Water Project, local surface and groundwater storage, and stored/transferred water with Central Valley and Colorado River agencies are subject to great uncertainty due to climate variability and environmental issues. The current environmental crisis in the Sacramento-San Joaquin Bay-Delta led to a Federal Court decision that resulted in MWD receiving up to 30 percent less of its anticipated State Water Project deliveries. Between April 2009 and April 2011, MWD implemented an allocation plan that limited supplies to member agencies and imposed penalties for exceeding water usage targets.

In response to the challenges facing the City's water supply, LADWP has embarked upon an aggressive effort to create reliable and sustainable sources of water for the future of Los Angeles. A key component is to maximize the use of recycled water.

Recycled water is municipal wastewater that has gone through various treatment processes to meet specific water quality criteria with the intent of being used in a beneficial manner. It is conveyed to customers with facilities similar to the potable water system (i.e., pump stations, pipelines, and tanks), but the non-potable facilities are designated by a purple color and/or labeled as recycled water. As a result, non-potable reuse projects are commonly referred to as "purple pipe" projects.

LADWP's 2010 Urban Water Management Plan set a goal of 59,000 AFY of potable water supplies to be replaced by recycled water by 2035 to meet non-potable demands. The City has existing non-potable reuse projects with an average annual reuse of 8,000 AFY and has "Planned" non-potable reuse projects that are under construction or in planning/design with planned construction by fiscal year 2015 with an average reuse of 11,350 AFY. The total potable water offset capacity of existing and planned purple pipe projects is 19,350 AFY. The goal of new recycled water projects is to offset the remaining 39,650 AFY of potable water. The non-potable reuse projects that make up the part of this goal are referred to as "Potential."

1.5 Project Objectives

The objectives of the proposed project are to:

- Improve the reliability of the City of Los Angeles water supply through increased recycled water use
- Comply with LADWP's 2010 Urban Water Management Plan outlining the steps to sustain a reliable water supply to meet current and future demand
- Construct the necessary infrastructure to convey recycled water to the various industrial and irrigation customers in the San Fernando Valley portion of Los Angeles
- Provide recycled water to some of the City of Los Angeles' largest water customers and, where feasible, switch their potable water connection to recycled water for supplying their non-potable uses

1.6 Description of the Proposed Project

The LADWP recycled water projects are divided into four service areas: Harbor, Metro, Valley, and Westside. Each service area, with the exception of the Harbor service area, is supplied by one water treatment facility and a corresponding pipeline distribution system that is hydraulically independent from the others. A distribution system is made up of individual Water Recycling Projects that are connected to each other. There are five water treatment facilities that serve the four service areas: Terminal Island Treatment Plant, which serves the Harbor Service Area via its Advanced Water Treatment Facility; West Basin Municipal Water District Carson Regional Water Recycling Facility, which also serves the Harbor Service Area; Los Angeles-Glendale Water Reclamation Plant, which serves the Metro Service Area; Donald C. Tillman Water Reclamation Plant, which serves the Valley Service Area; and the West Basin Municipal Water District Edward C. Little Plant, which serves the Westside Service Area.

The proposed San Fernando Valley WRP would be located within the Valley Service Area and supplied with recycled water from the Donald C. Tillman Water Reclamation Plant. Additionally, the proposed project would include a connection to the City of Burbank recycled water system, which receives recycled water from the Burbank Water Reclamation Plant. The proposed project would consist of six segments: North Hollywood Park, Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, VA Hospital, and Pierce College. The construction of these six segments would expand the supply of recycled water to customers located throughout the San Fernando Valley. All segments would connect to existing recycled water pipeline systems in the area using a 16-inch connection and 16-inch diameter distribution lines. The North Hollywood Park segment would connect to the existing City of Burbank recycled water pipeline; the Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, and VA Hospital segments would connect to the existing LADWP recycled water pipeline; and the Pierce College segment would connect to the Reseda Park segment. In total, approximately 109,800 linear feet of new recycled water pipeline would be installed with implementation of the proposed project.

The North Hollywood Park segment would connect to the existing 16-inch City of Burbank pipeline via a 16-inch point connection on the City of Los Angeles border at Verdugo

Avenue and Clybourn Avenue. From the pipeline connection point, this segment would extend approximately 14,000 linear feet west on Verdugo Avenue to Camarillo Street, then continue west on Camarillo Street to Vineland Avenue, then north on Vineland Avenue to Magnolia Boulevard, and west on Magnolia Boulevard terminating at North Hollywood High School. This segment would be trenched across the San Fernando Wash on Magnolia Boulevard approximately 900 feet west of Tujunga Avenue. Along its route, the North Hollywood Park segment would serve the following known customers:

- North Hollywood Park, located on Magnolia Boulevard west of Tujunga Avenue
- North Hollywood High School, located at Magnolia Boulevard and Colfax Avenue

The Valley Plaza Park segment would connect to the existing 54-inch LADWP pipeline via a 16-inch connection point at the intersection of Sherman Way and Woodman Avenue. This segment would extend approximately 14,700 linear feet east on Sherman Way from the connection point to SR 170, with two segments extending south; one on Ethel Avenue from Sherman Way to James Madison Middle School; and one on Whitsett Avenue from Sherman Way to Vanowen Street, and east on Vanowen Street terminating at Valley Plaza Park. This segment would cross the San Fernando Wash in two places. The first channel crossing would occur on Sherman Way approximately 1,300 feet east of Woodman Avenue, and the second channel crossing would occur on Vanowen Street approximately 1,021 feet east of Whitsett Avenue. For the channel crossing on Sherman Way, the pipe would be hung from the side of the roadway or installed through an existing utility duct. For the channel crossing on Vanowen Street, trenching would be used. Additionally, this route would cross over the SR 170 freeway overpass bridge on Sherman Way, which would require installation through an existing utility duct. The Valley Plaza Park segment would serve the following known customers:

- James Madison Middle School, located on Ethel Avenue south of Hart Street
- California Department of Transportation (Caltrans) facility, located on Sherman Way east of SR 170
- Valley Plaza Park, located on Vanowen Street east of SR 170

The Van Nuys Sherman Oaks Park segment would begin on Kester Avenue just south of the Metro Orange Line Busway via an extension of the existing 16-inch LADWP pipeline. This segment would extend approximately 21,800 linear feet south on Kester Avenue from the connection point to Oxnard Street, then east on Oxnard Street to Van Nuys Boulevard, and south on Van Nuys Boulevard terminating at Sherman Oaks Hospital, with two extensions. One of these extensions would travel east on Burbank Boulevard from Van Nuys Boulevard and terminate at Los Angeles Valley College. The other extension would travel east on Magnolia Boulevard from Van Nuys Boulevard and terminate at Van Nuys Sherman Oaks Park. The Van Nuys Sherman Oaks Park segment would serve the following known customers:

- Sherman Oaks Hospital, located on Van Nuys Boulevard south of Addison Street
- Van Nuys Sherman Oaks Park, located on Magnolia Boulevard east of Van Nuys Boulevard
- Burbank Oaks apartment complex, located on Burbank Boulevard west of Tyrone Avenue
- Los Angeles Valley College, located on Burbank Boulevard east of Fulton Avenue

The Reseda Park segment would connect to the existing 54-inch LADWP pipeline via a 16inch connection point at the intersection of Victory Boulevard and Woodley Avenue. This segment would extend approximately 24,300 linear feet west on Victory Boulevard from the connection point terminating at the intersection of Victory Boulevard and Reseda Boulevard, with three extensions. One extension would travel south on Balboa Boulevard from Victory Boulevard and terminate at the Sepulveda Basin Sports Complex. Another extension would travel north on Balboa Boulevard from Victory Boulevard to Vanowen Street, then west on Vanowen Street terminating at Mulholland Middle School. A third extension would travel north on Lindley Avenue from Victory Boulevard to Kittridge Street, then west on Kittridge Street and terminate on the north side of Reseda Park, just east of the intersection of Kittridge Street and Reseda Boulevard. There would be two channel crossings on Victory Boulevard. The first channel crossing would occur over Bull Creek approximately 1,050 feet east of Balboa Boulevard, and the other crossing would occur over the Los Angeles River approximately 600 feet west of Lindley Avenue. For both channel crossings, the pipelines would be hung from the side or underneath the bridges. The Reseda Park segment would serve the following known customers:

- Sepulveda Basin Sports Complex, located on Balboa Boulevard south of Victory Boulevard
- Birmingham High School, located on Balboa Boulevard and Haynes Street
- Valley Alternative School, located on Balboa Boulevard and Vanowen Street
- Mulholland Middle School, located on Vanowen Street east of Aldea Avenue
- High Tech High School, located on Victory Boulevard east of Aldea Avenue
- South side of Reseda Park, located on Victory Boulevard at Reseda Boulevard
- North side of Reseda Park, located on Kittridge Street east of Reseda Boulevard

The VA Hospital segment would connect to the existing 54-inch LADWP pipeline via a 16-inch connection point at the intersection of Sherman Way and Woodley Avenue. This segment would extend approximately 21,400 linear feet north on Woodley Avenue from the connection point and terminate at the intersection of Woodley Avenue and Roscoe Boulevard, with two extensions. One extension would travel west on Roscoe Boulevard from Woodley Avenue to Gothic Avenue, then north on Gothic Avenue terminating at Valley Sod Farms. Another extension would travel east on Roscoe Boulevard from Woodley Avenue to Haskell Avenue, then north on Haskell Avenue and terminate at the VA Hospital. This segment would cross the Amtrak/Metrolink tracks located on Woodley Avenue approximately 1,000 feet south of Roscoe Boulevard. Trenchless construction would be required for this rail crossing. The VA Hospital segment would serve the following customers:

- Valley Sod Farms, located on Gothic Avenue east of Hayvenhurst Avenue
- Anheuser Busch facility, located on Roscoe Boulevard west of Interstate 405 (I-405, San Diego Freeway)
- VA Hospital, located on Haskell Avenue south of Lassen Street

The Pierce College segment would connect to the westernmost termination point of the Reseda Park segment via a 16-inch pipeline extension, and then travel approximately 13,600 linear feet west on Victory Boulevard, terminating at the intersection of Victory Boulevard and Mason Avenue. This segment would cross the Metro Orange Line Busway on Victory Boulevard approximately 1,000 feet east of Winnetka Avenue. It would only serve Pierce College at this time.

Installation of the recycled water pipeline would occur within public roads and using a cut and cover trenching technique. An approximately 3-foot wide by 5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not ongoing. Once the pipeline has been installed within a segment, the trench would be backfilled with imported slurry and returned to its original condition. Recycled water pipeline installation would necessitate restrictions of on-street parking and closure of up to two lanes of the roadway depending on the location of construction. In general, approximately 90 linear feet of pipeline would be installed per day.

Construction is anticipated to occur sequentially along the alignment of each segment to minimize long-term disruption within any one area. Construction would generally occur from east to west, beginning with the North Hollywood Park segment. Subsequent segments would be constructed in the following order: Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, VA Hospital, and Pierce College. Materials and equipment staging and construction worker parking would use City facilities and public parking lots located along or near the proposed alignments.

Railroad crossings would require tunneling instead of trenching via a procedure called "pipe jacking." Launching and receiving pits would be located on either end of the tunnel. Hydraulic jacks would drive pipes through the ground. Excavated soil and other material would be removed from the pits and disposed of at an appropriate regional landfill. The launching and receiving pits would be backfilled with imported slurry and the roadway would be returned to its original condition.

1.7 Construction Schedule and Procedures

Construction of the proposed project is anticipated to begin in summer 2017 and take approximately 5 years to complete, concluding in summer 2022.

Generally, in accordance with the City of Los Angeles Noise Ordinance (the Noise Ordinance), construction activity would occur Mondays through Fridays from 7:00 a.m. to approximately 3:30 p.m. The City of Los Angeles Mayor's Directive #2 prohibits construction on major roads during rush hour periods (6:00 a.m. to 9:00 a.m. and 3:30 p.m. to 7:00 p.m.). However, due to the nature of construction activities within public roadways, construction activity could occur during rush hour periods. Therefore, LADWP would request a variance to Directive #2. Additionally, construction activity may occur at night in non-residential areas in order to complete construction of the proposed project in a timely manner. Construction would also be coordinated with the City of Los Angeles Department of Transportation (LADOT) to minimize traffic disturbances.

A spreadsheet that reflects the level of construction activities by segment installed is included as Appendix A of this document.

An appropriate combination of monitoring and resource impact avoidance would be employed during all phases of the proposed project, including implementation of the following Best Management Practices (BMPs):

- The proposed project would implement Rule 403 dust control measures required by the South Coast Air Quality Management District (SCAQMD), which would include the following:
 - 1) Water shall be applied to exposed surfaces at least two times per day to prevent generation of dust plumes.
 - 2) The construction contractor shall utilize at least one of the following measures at each vehicle egress from the project site to a paved public road:
 - Install a pad consisting of washed gravel maintained in clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long;
 - b. Pave the surface extending at least 100 feet and at least 20 feet wide;
 - c. Utilize a wheel shaker/wheel spreading device consisting of raised dividers at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages; or
 - d. Install a wheel washing system to remove bulk material from tires and vehicle undercarriages.
 - 3) All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
 - 4) Construction activity on exposed or unpaved dirt surfaces shall be suspended when wind speed exceeds 25 miles per hour (such as instantaneous gusts).
 - 5) Ground cover in disturbed areas shall be replaced in a timely fashion when work is completed in the area.
 - 6) A community liaison shall be identified concerning on-site construction activity including resolution of issues related to PM_{10} generation.
 - 7) Non-toxic soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
 - 8) Traffic speeds on all unpaved roads shall be limited to 15 mph or less.
 - 9) Streets shall be swept at the end of the day if visible soil is carried onto adjacent public paved roads. If feasible, water sweepers with reclaimed water shall be used.
- The construction contractor would develop and implement an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) for construction activities. Erosion control and grading plans may include, but would not be limited to, the following:
 - Minimizing the extent of disturbed areas and duration of exposure;
 - Stabilizing and protecting disturbed areas;
 - Keeping runoff velocities low; and
 - Retaining sediment within the construction area.
 - Construction erosion control BMPs may include the following:
 - Temporary desilting basins;
 - Silt fences;
 - Gravel bag barriers;

- Temporary soil stabilization with mattresses and mulching;
- o Temporary drainage inlet protection; and
- Diversion dikes and interceptor swales.
- The proposed project would comply with the Regional Water Quality Control Board's National Pollution Discharge Elimination System Phase II Rule.
- The pipeline alignment would not be located within 15 feet of a residential or institutional building, or within 12 feet of a commercial building to minimize vibration induced building damage.
- Residences and businesses near the pipeline alignment would be notified prior to the start of construction (e.g., via flyers) of lane closures and parking restrictions in their vicinity. The notices would include a telephone number for comments or questions related to construction activities.
- The proposed project construction would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the Citywide Construction and Demolition Debris Recycling Ordinance.

1.8 Required Permits and Approvals

Numerous approvals and/or permits would be required to implement the proposed project. The environmental documentation for the project would be used to facilitate compliance with federal and state laws and the granting of permits by various state and local agencies having jurisdiction over one or more aspects of the project. These approvals and permits may include, but may not be limited, to the following:

City of Los Angeles Department of Water and Power

- Certification by the City of Los Angeles Board of Water and Power Commissioners that the MND was prepared in accordance with CEQA and other applicable codes and guidelines
- Approval by the City of Los Angeles Board of Water and Power Commissioners of the proposed project

City of Los Angeles Department of Public Works, Bureau of Engineering

- Excavation Permit
- Grading Permit

City of Los Angeles Department of Public Works, Bureau of Sanitation, Stormwater Management Division

 Discharge permit for construction dewatering and hydrostatic test water discharge in storm drains

City of Los Angeles Department of Transportation

Approval of Traffic Management Plan

Approval of temporary road closures

County of Los Angeles Department of Public Works, Bureau of Sanitation, Stormwater Management Division

Flood Permit

Los Angeles County Metropolitan Transportation Authority

Right of Entry Permit

State of California, Los Angeles Regional Water Quality Control Board

 National Pollution Discharge Elimination System Permit for construction dewatering and hydrostatic test water discharge

State of California Department of Industrial Relations, Division of Occupational Safety and Health, Mining and Tunneling Unit

Underground Classification Permit for tunneling and jacking locations

State of California Department of Transportation

• Encroachment Permit

U.S. Army Corps of Engineers

Easement and Construction Permit

SECTION 2 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2012) to determine if the proposed project may have a significant effect on the environment.

CEQA INITIAL STUDY FORM

Project Title:

San Fernando Valley Water Recycling Project

Lead Agency Name and Address:

Los Angeles Department of Water and Power Environmental Planning and Assessment 111 North Hope Street, Room 1044 Los Angeles, CA 90012

Contact Person and Phone Number:

Irene Paul Environmental Affairs Los Angeles Department of Water and Power (213) 367-3509

Project Sponsor's Name and Address:

Los Angeles Department of Water and Power Water Engineering and Technical Services 111 North Hope Street Los Angeles, CA 90012

Project Location:

The project area is located in the San Fernando Valley area of Los Angeles.

City Council District:

Districts 2, 3, 5, 6, and 12

Neighborhood Council District:

Encino Neighborhood Council, Greater Toluca Lake Neighborhood Council, Greater Valley Glen Neighborhood Council, Lake Balboa Neighborhood Council, Midtown North Hollywood Neighborhood Council, Neighborhood Council Valley Village, North Hills West Neighborhood Council, North Hollywood North East Neighborhood Council, North Hollywood West Neighborhood Council, Reseda Neighborhood Council, Sherman Oaks Neighborhood Council, Tarzana Neighborhood Council, Van Nuys Neighborhood Council, and Woodland Hills-Warner Center Neighborhood Council

General Plan Designation:

The proposed project would be located entirely within the existing road right-of-way. The properties adjacent to the proposed alignment include the following designations: Very Low Residential, Low Residential, Low Medium 1 Residential, Low Medium II

Residential, Medium Residential, Open Space, Public Facilities, Community Commercial, Neighborhood Office Commercial, Highway Oriented Commercial, General Commercial, Commercial Manufacturing, Limited Manufacturing, and Light Manufacturing.

Zoning:

The properties along the proposed alignment are zoned C1 (Limited Commercial), C2 (Regional Commercial), C4 (Community Commercial), CM (Commercial Manufacturing), M1 (Limited Manufacturing), M2 (Light Industrial), OS (Open Space), PF (Public Facilities), RA (Suburban), R1 (One Family Residential), RE (Residential Estate), RD (Restricted Density Multiple Dwelling), and R3 (Multiple Dwelling Residential).

Description of Project:

The proposed project would be located within the Valley Service Area and supplied with recycled water from the Donald C. Tillman Water Reclamation Plant. Additionally, the proposed project would include a connection to the City of Burbank recycled water system, which receives recycled water from the Burbank Water Reclamation Plant. The proposed project would consist of six segments: North Hollywood Park, Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, VA Hospital, and Pierce College. The construction of these six segments would expand the supply of recycled water to customers located throughout the San Fernando Valley. All segments would connect to existing recycled water pipeline systems in the area using a 16-inch connection and 16-inch diameter distribution lines. The North Hollywood Park segment would connect to the existing City of Burbank recycled water pipeline; the Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, and VA Hospital segments would connect to the existing LADWP recycled water pipeline; and the Pierce College segment would connect to the Reseda Park segment. In total, approximately 109,800 linear feet of new recycled water pipeline would be installed with implementation of the proposed project.

Construction is anticipated to occur sequentially along the alignment of each segment to minimize long-term disruption within any one area. Construction would generally occur from east to west, beginning with the North Hollywood Park segment. Subsequent segments would be constructed in the following order: Valley Plaza Park, Van Nuys Sherman Oaks Park, Reseda Park, VA Hospital, and Pierce College. Materials and equipment staging and construction worker parking would occur on City-owned property and public parking lots located along or near the proposed alignments. Installation of the recycled water pipeline would occur within public roads and using a cut and cover trenching technique. An approximately 3-foot wide by 5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not ongoing. Once the pipeline has been installed within a segment, the trench would be backfilled with imported slurry and the roadway returned to its original condition. Excess soil that cannot be reused as backfill material would be disposed of at an appropriate regional landfill. Recycled water pipeline installation would necessitate restrictions to on-street parking and closure of up to two lanes of the roadway depending on the location of construction. In general, approximately 90 linear feet of pipeline would be installed per day. Railroad crossings would require tunneling instead of trenching. Launching and receiving pits would be located on either end of the tunnel. Hydraulic jacks would drive pipes through the ground. Excess soil that cannot be reused as backfill material would be disposed of at an appropriate regional landfill.

Surrounding Land Uses and Setting:

The proposed project would be located entirely within public street rights-of-way in the San Fernando Valley. The proposed project area would generally be bound by Interstate 5 (I-5, Golden State Freeway) to the east, Ventura Freeway (State Route 134 [SR 134] and U.S. Route 101 [US 101]) to the south, Mason Avenue to the West and Lassen Street by I-405 to the north. The proposed project alignment encompasses portions of the communities of Canoga Park-Winnetka-Woodland Hills-West Hills, Reseda-West Van Nuys, Mission Hills-Panorama City-North Hills, Van Nuys-North Sherman Oaks, and North Hollywood-Valley Village. The proposed alignment abuts a variety of commercial, residential, open space, public facilities, light industrial, and limited manufacturing uses.

Responsible/Trustee Agencies:

- State of California, Los Angeles Regional Water Quality Control Board
- State of California, Department of Industrial Relations, Division of Occupational Safety and Health, Mining and Tunneling Unit
- State of California Department of Transportation
- U.S. Army Corps of Engineers
- Los Angeles Metropolitan Transportation Authority
- County of Los Angeles Department of Public Works, Flood Control District

Reviewing Agencies:

- City of Los Angeles Department of Transportation
- City of Los Angeles Department of Public Works, Bureau of Engineering
- City of Los Angeles Department of Public Works, Bureau of Sanitation, Stormwater Management Division

The	RONMENTAL FACTORS P environmental factors chec ving at least one impact that	ked	below would be potentially		
Envir	onmental Impacts discussion	n in S	Section 3.		
	Aesthetics Biological Resources Hazards & Hazardous Materials		Agriculture Resources Cultural Resources Hydrology/Water Quality		Air Quality Geology/Soils Land Use Planning
	Mineral Resources Public Services Utilities/Service Systems		Noise Recreation Mandatory Findings of Signifi	cance	Population/Housing Transportation/Traffic
DETE	ERMINATION				
On th	ne basis of this initial evaluati I find that the proposed projed NEGATIVE DECLARATION w	t CO	ULD NOT have a significant e prepared.	ffect on	the environment, and a
	will not be a significant effect	in this	roject could have a significant of s case because revisions in the A MITIGATED NEGATIVE DE	e projec	t have been made by or
	I find that the proposed pro environmental impact report is		MAY have a significant effec uired.	t on th	e environment, and an
	significant unless mitigated" adequately analyzed in an ea been addressed by mitigation	impa Irlier mea AL II	may have a "potentially sig ct on the environment, but a document pursuant to applical sures based on the earlier and IPACT REPORT is required, I.	t least ble lega alysis a	one effect 1) has been al standards, and 2) has s described on attached
	because all potentially significe pursuant to applicable standard	cant rds, a	project could have a signific effects (a) have been analyze and (b) have been avoided or n ion measures that are impos	ed adeq	uately in an earlier EIR d pursuant to that earlier
Signa	harly C. Halla	0		1201	22
	es C. Holloway ager of Environmental Asses	smei	nt and Planning		
	Angeles Department of Wate				

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
l.	AESTHETICS. Would the project:				
a.	Have a substantial adverse effect on a scenic vista?				X
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
C.	Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				X
II.	AGRICULTURE AND FORESTRY RESOURCES. In determining resources are significant environmental effects, lead agencies may Agricultural Land Evaluation and Site Assessment Model (1997) propartment of Conservation as an optional model to use in assess farmland. In determining whether impacts to forest resources, inclusing inficant environmental effects, lead agencies may refer to inform California Department of Forestry and Fire Protection regarding the land, including the Forest and Range Assessment Project and the project; and forest carbon measurement methodology provided in the California Air Resources Board. Would the project:	refer to repared l sing impa uding tim nation co e state's Forest L	the Califorms th	ornia lifornia priculture are the of fores sessmer	and t
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?				Х
b.	Conflict with existing zoning for agricultural use, or a Williamson act contract?				X
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))?				X
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e.	Involve other changes in the existing environment that, 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?				х

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	AIR QUALITY . Where available, the significance criteria established management or air pollution control district may be relied upon to redeterminations. Would the project:				ality
a.	Conflict with or obstruct implementation of the applicable air quality plan?			X	
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			Х	
C.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d.	Expose sensitive receptors to substantial pollutant concentrations?			X	
e.	Create objectionable odors affecting a substantial number of people?			X	
IV.	BIOLOGICAL RESOURCES. Would the project:				
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				x
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				х
C.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?				х
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				Х
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?				Х

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES. Would the project:	I			
Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?			Х	
Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?		х		
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		х		
Disturb any human remains, including those interred outside of formal cemeteries?			Х	
GEOLOGY AND SOILS. Would the project:				
Expose people or structures to 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.			х	
ii) Strong seismic ground shaking?			Χ	
iii) Seismic-related ground failure, including liquefaction?			Х	
iv) Landslides?				Χ
Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill?			Х	
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?			X	
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				Х
GREENHOUSE GAS EMISSIONS: Would the project:				
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impacts on the environment?			X	
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X
	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Disturb any human remains, including those interred outside of formal cemeteries? GEOLOGY AND SOILS. Would the project: Expose people or structures to 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. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides? Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill? 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? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? GREENHOUSE GAS EMISSIONS: Would the project: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impacts on the environment?	CULTURAL RESOURCES. Would the project: Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Disturb any human remains, including those interred outside of formal cemeteries? GEOLOGY AND SOILS. Would the project: Expose people or structures to 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. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides? Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill? 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? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? GREENHOUSE GAS EMISSIONS: Would the project: Cenerate greenhouse gas emissions, either directly or indirectly, that may have a significant impacts on the environment?	CULTURAL RESOURCES. Would the project: Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Disturb any human remains, including those interred outside of formal cemeteries? GEOLOGY AND SOILS. Would the project: Expose people or structures to 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. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides? Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill? 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? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? GREENHOUSE GAS EMISSIONS: Would the project: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impacts on the environment? Conflict with an applicable plan, policy or regulation adopted for	Cultural Resources. Would the project: Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Disturb any human remains, including those interred outside of formal cemeteries? GEOLOGY AND SOILS. Would the project: Expose people or structures to 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. ii) Strong seismic ground shaking? X iii) Seismic-related ground failure, including liquefaction? IV) Landslides? Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill? 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? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? GREENHOUSE GAS EMISSIONS: Would the project: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impacts on the environment? Conflict with

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII.	HAZARDS AND HAZARDOUS MATERIALS: Would the project:		1		
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?				X
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?			X	
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h.	Expose people or structures 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?				X
IX.	HYDROLOGY AND WATER QUALITY. Would the project:		T		ı
a.	Violate any water quality standards or waste discharge requirements?			X	
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			Х	
C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?			X	

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X	
e.	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?			X	
f.	Otherwise substantially degrade water quality?			Х	
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h.	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				X
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			Х	
j.	Inundation by seiche, tsunami, or mudflow?			Х	
X.	LAND USE AND PLANNING. Would the project:				
a.	Physically divide an established community?				X
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				x
C.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				Х
XI.	MINERAL RESOURCES. Would the project:				
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
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?				Х
XII.	NOISE. Would the project result in:				
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		х		
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?		Х		
C.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
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 expose people residing or working in the project area to excessive noise levels?				X
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				x
XIII.	POPULATION AND HOUSING. Would the project:				
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
C.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIV.	PUBLIC SERVICES.				
а.	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:				
	i) Fire protection?			X	
	ii) Police protection?			X	
	iii) Schools?				X
	iv) Parks?				X
V\/	v) Other public facilities? RECREATION.				X
XV.					
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?				X
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				Х

VVII	TDANSDORTATION/TDAEEIC Would the project:	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	TRANSPORTATION/TRAFFIC. Would the project: Conflict with an applicable plan, ordinance or policy establishing				
a.	measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		x		
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				х
C.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				х
e.	Result in inadequate emergency access?			Х	
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?		х		
XVII.	UTILITIES AND SERVICE SYSTEMS. Would the project:				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
C.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e.	Result in a determination by the wastewater treatment provider that 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?				х
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	

		Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
g.	Comply with federal, state, and local statutes and regulations related to solid waste?			X	
XVIII	. MANDATORY FINDINGS OF SIGNIFICANCE.				
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?		x		
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.		x		
C.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		х		

SECTION 3 ENVIRONMENTAL IMPACT ASSESSMENT

INTRODUCTION

The following discussion addresses impacts to various environmental resources per the Initial Study checklist questions contained in Appendix G of the CEQA Guidelines.

I. AESTHETICS

Would the project:

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

No Impact. The proposed project would not have an adverse effect on a scenic vista. Scenic views or vistas are panoramic public views of various natural features, including the ocean, striking or unusual natural terrain, or unique urban or historic features. Public access to these views may be from park lands, private and publicly owned sites, and public right-of-way. 1 The project site is located entirely within public street rights-of-way in urbanized and fully developed areas within the San Fernando Valley. The Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan, Reseda-West Van Nuys Community Plan, Van Nuys-North Sherman Oaks Community Plan, the Mission Hills-Panorama City-North Hills Community Plan, and the North Hollywood-Valley Village Community Plan do not identify any official scenic vistas within or adjacent to the project area. 2,3,4,5,6 Further, the proposed project involves trenching within public streets to install a recycled water pipeline in 90-foot segments. Each segment would be constructed within a single day and the roadway would be returned to its original condition such that there would be no visible change to the roadways. Therefore, the views from vantage points adjacent to the project site would remain similar to existing conditions. No impact to a scenic vista would occur.

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

No Impact. Implementation of the proposed project would not damage scenic resources within a state scenic highway. No sections of CA 134, I-405, I-5, or US 101 within the project vicinity are designated as eligible California Scenic

November 2012 Page 3-1

_

City of Los Angeles Department of City Planning, City of Los Angeles General Plan, Conservation Element, adopted September 26, 2001.

² City of Los Angeles Department of City Planning, Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan, updated August 17, 1999.

City of Los Angeles Department of City Planning, Reseda-West Van Nuys Community Plan, adopted November 17, 1999

City of Los Angeles Department of City Planning, Van Nuys-North Sherman Oaks Community Plan, adopted September 9, 1998.

City of Los Angeles Department of City Planning, Mission Hills-Panorama City-North Hills Community Plan, updated June 9, 1999.

⁶ City of Los Angeles Department of City Planning, North Hollywood-Valley Village Community Plan, updated May 14, 1996.

Highways.⁷ Further, none of these segments are Designated Scenic Highways in the Transportation Element of the City of Los Angeles General Plan. However, a portion of Lankershim Boulevard within the proposed alignment for the North Hollywood Park segment is a Designated Scenic Highway in the City of Los Angeles General Plan.⁸ Because the proposed project involves trenching within public streets to install a recycled water pipeline in 90-foot segments, each segment would be constructed within a single day and the roadway would be returned to its original condition. Therefore, this scenic roadway would not be altered as a result of the implementation of the proposed project. No impact would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. The proposed project involves trenching within public roadway rights-of-way to install a recycled water pipeline. As discussed in Section I(a) above, each segment would be constructed within in a single day and the segment returned to its original condition such that there would be no visible change to the roadway following the completion of construction. Therefore, there would be no change to the visual character or quality of the roadways, and no impact would occur.

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

No Impact. Implementation of the proposed project would not create a new source of light or glare that would adversely affect day or nighttime views. The proposed project would be constructed primarily during daylight within public roadway rights-of-way to install a recycled water pipeline via trenching. No permanent night lighting or reflective surfaces would be installed because operation would occur entirely below-grade. Therefore, no impact would occur.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:

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

No Impact. The project site is located in a fully urbanized portion of the San Fernando Valley and would be located entirely within public roadway rights-of-way. The proposed alignment is designated as Urban and Built-Up Land on the "Important Farmland in California" map prepared by the California Resources Agency pursuant to the Farmland Mapping and Monitoring Program. Thus, no part of the proposed alignment would be located on or near Prime Farmland, Unique

_

State of California Department of Transportation. State Scenic Highway Program. Website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm, accessed May 16, 2012.

⁸ City of Los Angeles Department of City Planning, City of Los Angeles General Plan, Transportation Element, adopted September 8, 1999.

Farmland, or Farmland of Statewide Importance. Therefore, the proposed project would not convert farmland to a non-agricultural use, and no impact to farmland would occur.

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

No Impact. As discussed in Section II(a) above, the proposed project would be located entirely within public roadway rights-of-way. Furthermore, the County of Los Angeles does not offer Williamson Act contracts. 10 Therefore, the proposed project would not conflict with existing zoning or a Williamson Act contract. No impact would occur.

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

No Impact. The proposed project would be located entirely within public roadway rights-of-way in a fully urbanized portion of the San Fernando Valley. No portion of the proposed alignment is zoned for or developed as forest land or timberland as defined in Public Resources Code Section 12220(g) and Government Code Section 4526, respectively. 11 Therefore, the proposed project would not conflict with existing zoning for or cause a rezoning of forest or timberland. No impact would occur.

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

No Impact. The proposed project would be located entirely within public roadway rights-of-way in a fully urbanized portion of the San Fernando Valley. No portion of the proposed alignment is zoned or developed for a forest land use, and the proposed alignment is not located within or adjacent to forest lands. 12 Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?

No Impact. The proposed project involves trenching within public roadway rightsof-way to install a recycled water pipeline. The project site and adjacent properties are designated as "Urban and Built-Up Land;" no portion of the project site or surrounding area is identified as Prime Farmland, Unique Farmland, or Farmland

State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping & Monitoring Program, Important Farmland in California, 2008 map. Website:

ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/statewide/2008/fmmp2008_08_11.pdf, accessed May 16, 2012. State of California Department of Conservation, Division of Land Resource Protection, Williamson Act Program – Basic Contract Provisions. Website: http://www.conservation.ca.gov/dlrp/lca/basic_contract_provisions, accessed May 16,

City of Los Angeles Zoning Information and Map Access System (ZIMAS). Website: http://zimas.lacity.org/, accessed May 16, 2012.

Ibid.

of Statewide Importance.¹³ Additionally, no forest lands exist on or adjacent to the project area. Therefore, the proposed project would not change the existing environment in a way that would result in the conversion of Farmland to non-agricultural use or forest land to non-forest use. No impact would occur.

III. AIR QUALITY

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan (e.g., the SCAQMD Plan or Congestion Management Plan)?

Less Than Significant Impact. The SCAQMD and the Southern California Association of Governments (SCAG) have responsibility for preparing an Air Quality Management Plan (AQMP), which implements federal Clean Air Act and California Clean Air Act requirements, and details goals, policies, and programs for improving air quality in the South Coast Air Basin. The 2007 AQMP was adopted by the SCAQMD Governing Board on June 1, 2007, and the California Air Resources Board (CARB) on September 27, 2007. The purpose of the 2007 Air Quality Management Plan for the South Coast Air Basin is to set forth a comprehensive program that will lead the region into compliance with federal air quality standards for 8-hour ozone (O_3) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$).

According to the SCAQMD, there are two key indicators of consistency with the AQMP: 1) whether the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP; and 2) whether the project will not exceed the assumptions in the AQMP based on the year of project buildout. 14 The first consistency criterion refers to violations of the California Ambient Air Quality Standards. One measure to determine whether the proposed project would cause or contribute to a violation of an air quality standard would be based on the estimated carbon monoxide (CO) concentrations at intersections that would be affected by the proposed project. The amount of vehicle trips during post-construction operations of the proposed project would be similar to the existing conditions as there is no operational component of the proposed project. Also, the 2007 AQMP and the 2007 South Coast Air Basin State Implementation Plan demonstrates attainment of the federal PM_{2.5} standard in the South Coast Air Basin by 2014, and attainment of the federal 8-hour O₃ standard by 2023. As a result of state and local control strategies, the South Coast Air Basin has not exceeded the federal CO standard since 2002. Therefore, the proposed project would comply with Consistency Criterion No. 1.

The second consistency criterion requires that the proposed project not exceed the assumptions in the AQMP. A project is consistent with the AQMP if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. The proposed project does not include a residential

SCAQMD, The CEQA Air Quality Handbook, 1993.

_

State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping & Monitoring Program. *Important Farmland in California*. 2008. Website:

ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/statewide/2008/fmmp2008_08_11.pdf, accessed May 16, 2012.

component, and therefore, would not increase population or housing in the area. In addition, the proposed project would not increase employment since upon completion of construction of the recycled water pipelines and facilities, the project area would return to existing conditions. As such, the proposed project is considered to be consistent with growth assumptions included in the AQMP, and it would comply with Consistency Criterion No. 2.

Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality management plan. The impact would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The proposed project would not violate an air quality standard or contribute substantially to an existing or projected air quality violation. The project site is located within the Los Angeles County portion of the South Coast Air Basin, which is designated a non-attainment area for O_3 , particulate matter smaller than or equal to 10 microns in diameter (PM₁₀), and PM_{2.5}. The SCAQMD maintains an extensive air quality monitoring network to measure criteria pollutant concentrations throughout the South Coast Air Basin.

Construction of the proposed project would contribute air quality emissions through the use of heavy-duty construction equipment, truck delivery and haul trips, and vehicle trips generated by construction workers traveling to and from the project site for all six segments of the proposed project. Fugitive dust emissions would primarily result from trenching activities. Nitrogen oxide (NO_X) emissions would primarily result from the use of construction equipment. The assessment of construction air quality impacts considers each of these potential sources.

It is mandatory for all construction projects in the South Coast Air Basin to comply with SCAQMD Rule 403 for Fugitive Dust. As discussed in Section 1.7 above, Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce regional $PM_{2.5}$ and PM_{10} emissions associated with construction activities by approximately 61 percent in accordance with SCAQMD guidance.

Table 1 shows the maximum daily emissions associated with construction (see Appendix B). As indicated in the table below, construction activities would not exceed the SCAQMD regional significance thresholds. Therefore, the impact related to regional construction emissions would be less than significant.

Table 1 Regional Construction Emissions

	Pounds Per Day					
Source	VOC	NO _X	СО	SO _x	PM _{2.5}	PM ₁₀
Construction Equipment	5	34	25	5	2	2
Worker Vehicles	0.14	0.22	2.45		<1	<1
Off-site Truck Trips	0.22	3.46	1.07		<1	<1
Fugitive Dust					<1	<1
Maximum Localized Total	5	37	28	5	2	2
Regional Significance Threshold	<i>7</i> 5	100	550	150	55	150
Exceed Threshold?	No	No	No	No	No	No

Source: Terry A. Hayes Associates, 2012.

The proposed project would not have an operational component. As such, operational activities following the completion of construction of the proposed project would be the same as current levels. Therefore, no impact to regional operational emissions would occur.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The proposed project would not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The proposed project and the whole of the Los Angeles metropolitan area are located within the South Coast Air Basin, which is characterized by relatively poor air quality. The South Coast Air Basin is currently classified as a federal and state non-attainment area for O_3 , PM_{10} , and $PM_{2.5}$ and a federal attainment/maintenance area for CO. It is classified as a state attainment area for CO, and it currently meets the federal and state standards for nitrogen dioxide, sulfur oxide (SO_x) , and lead.

As discussed in Section III(b) above, construction activities associated with implementation of the proposed project would not result in increases in air pollutant emissions, which, individually or cumulatively, would exceed established thresholds. The impact would be less than significant.

The proposed project would not have an operational component. As such, operational activities following completion of construction of the proposed project would be the same as current levels. Therefore, no impact to a cumulatively considerable net increase in emissions during operations would occur.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences,

schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Sensitive receptors located adjacent to the proposed pipeline alignment include the following land uses:

North Hollywood Park

- Single- and multi-family residences
- North Hollywood High School
- Oakwood Secondary School
- North Hollywood Library
- Toluca Lake Elementary School
- St. Paul's First Lutheran School
- East Valley High School

Valley Plaza Park

- Single- and multi-family residences
- James Madison Middle School
- Valley Plaza Park
- Valley Plaza Library
- Roy Romer Middle School

Van Nuys Sherman Oaks Park

- Single- and multi-family residences
- Sherman Oaks Hospital
- Sherman Oaks Center for Enriched Studies
- Van Nuys Sherman Oaks Park
- Los Angeles Valley College
- The Church of Jesus Christ of Latter-Day Saints
- Chandler Elementary School
- Van Nuys Middle School

Reseda Park

- Single- and multi-family residences
- Birmingham High School
- High Tech High School
- Valley Alternative School
- Mulholland Middle School
- Reseda Park
- Newcastle Elementary School

VA Hospital

- Single- and multi-family residences
- Monroe High School
- Centers of Learning
- VA Hospital
- Albert Einstein High School

Pierce College

- Single- and multi-family residences
- Pierce College
- Vanalden Elementary School

The above sensitive receptors represent the nearest residential land uses with the potential to be impacted by the proposed project. Additional sensitive receptors are located further from the project site in the surrounding community and would be less impacted by air emissions than the above sensitive receptors.

Construction activity would generate on-site pollutant emissions associated with equipment exhaust and fugitive dust. Table 2 shows the estimated localized emissions associated with construction. As shown, maximum daily volatile organic compounds (VOC), NO_x , CO, SO_x , $PM_{2.5}$, and PM_{10} emissions would not exceed the SCAQMD localized threshold of significance. Therefore, the impact to sensitive receptors would be less than significant.

Table 2 Localized Construction Emissions

	Pounds Per Day					
Source	VOC	NO _X	CO	SO _X	PM _{2.5}	PM ₁₀
Construction Equipment	5	34	25	5	2	2
Fugitive Dust					<1	<
Maximum Localized Total	5	34	25	5	2	2
Localized Significance Threshold	n/a	103	426	n/a	3	4
Exceed Threshold?	No	No	No	No	No	No

Source: Terry A. Hayes Associates, 2012.

Installation of the recycled water pipeline would require restrictions to on-street parking and could require the closure of up to two roadway lanes depending on the location of construction. Consequently, traffic flow would be affected whenever a mixed-flow traffic lane is closed for construction activities. Reduced speeds through construction zones would result in additional localized concentrations. Traffic congestion would lessen as some automobile travelers would reroute to parallel streets when lane closures would occur. The proposed project is not anticipated to substantially increase traffic congestion since road closures would be limited in duration. In addition, construction activities would be limited to 90 linear feet of the public roads per day to minimize long-term traffic disruption. Therefore, the impact related to localized traffic concentrations would be less than significant.

The greatest potential for toxic air contaminant (TAC) emissions during construction would be diesel particulate emissions associated with heavy-duty equipment operations. The SCAQMD has not published guidance for assessing the risk from construction projects. The California Air Pollution Control Officers Association has published *Health Risk Assessments for Proposed Land Use Projects*. Page 2 of the document states that, "this guidance does not include how risk assessments for construction projects should be addressed in CEQA. As this is intended to be a 'living document', the risks near construction projects are expected to be included at a later time as the toxic emissions from construction activities are better quantified. State risk assessment policy is likely to change to reflect current science, and therefore this document will need modification as this

occurs."¹⁵ Nonetheless, as regional and localized particulate matter emissions resulting from construction activities would not result in significant impacts, it is similarly anticipated that diesel particulate emissions would not result in a significant health impact. Therefore, construction of the proposed project would result in a less than significant impact to sensitive receptors related to construction TAC emissions.

The proposed project would not have an operational component. As such, operational activities would be the same as the current levels. Therefore, no air quality impact to sensitive receptors would occur during operations.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. Potential sources that may emit odors during construction activities include equipment exhaust. Odors from these sources would be localized and generally confined to the immediate area surrounding the segment under construction. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Therefore, the odor impact during construction would be less than significant.

The proposed project would require no post-construction operational activities. Therefore, no odor impact would occur during operations.

IV. BIOLOGICAL RESOURCES

Would the project:

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

No Impact. Sensitive plants include those listed as threatened or endangered, proposed for listing, or candidate for listing by the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Game (CDFG) or those listed by the California Native Plant Society (CNPS). Sensitive wildlife species are those species listed as threatened or endangered, proposed for listing, or candidate for listing by USFWS and/or CDFG, or considered special status by CDFG. Sensitive habitats are those that are regulated by USFWS, U.S. Army Corps of Engineers, and/or those considered sensitive by the CDFG.

The California Natural Diversity Database (CNDDB) RareFind 3 program and the CNPS *Inventory of Rare and Endangered Plants* were reviewed for information on known occurrences of sensitive species and communities within a 10-mile radius of the project site; it included the San Fernando, Oat Mountain, Simi Valley East, San Fernando, Mint Canyon, Agua Dulce, Newhall, Canoga Park, Calabasas, Sunland, Burbank, and Van Nuys U.S. Geological Survey 7.5-minute topographic

¹⁵ California Air Pollution Control Officers Association, Health Risk Assessments for Proposed Land Use Projects, 2009.

quadrangle maps.^{16,17} Based on the above literature review, 16 sensitive wildlife species, 28 sensitive plant species, and 9 sensitive plant communities were identified as having the potential to occur in the vicinity (i.e., within 10 miles) of the proposed pipeline alignment. In addition to the literature review, a field reconnaissance survey was conducted on May 9, 2012.

Because the proposed project would involve trenching entirely within public road rights-of-way in a fully urbanized portion of the San Fernando Valley, there would be no direct impacts to sensitive plants, wildlife, or vegetation communities. No vegetation removal would be required to install the proposed recycled water pipeline. Further, all construction staging would occur within the roadway or nearby developed areas, such that no vegetation removal would be required and there would be no indirect impacts to native vegetation, sensitive plants, sensitive wildlife species, or sensitive vegetation communities.

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

No Impact. As discussed in Section IV(a) above, construction activities would occur entirely within public roadway rights-of-way in a fully urbanized portion of the San Fernando Valley. No vegetation removal would occur, and there would be no impact to a riparian habitat or other sensitive natural community.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. As discussed in Section IV(a) above, construction activities would occur entirely within public roadway rights-of-way in a fully urbanized portion of the San Fernando Valley. There would be no impact to federally protected wetlands.

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/breeding sites?

No Impact. In an urban context, a wildlife migration corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two comparatively undisturbed habitat fragments, or between a habitat fragment and some vital resources, thereby encouraging population growth and diversity. A viable wildlife migration corridor consists of more than a path between fragmented habitats. A wildlife migration corridor must also include adequate vegetative cover and food sources for transient species, as well as resident populations of less mobile animals to survive. They must be extensive enough to

California Department of Fish and Game. 2012 (April). RareFind: California Department of Fish and Game Natural Diversity Database (Version 3.1.0). California Department of Fish and Game, Biogeographic Data Branch.

California Native Plant Society. 2012. Inventory of Rare and Endangered Plants (online edition, v7-11). California Native Plant Society. Sacramento, CA. Website: http://www.cnps.org/inventory, accessed May 2012.

allow for large animals to pass relatively undetected, be free of obstacles, and lack any other distraction that may hinder wildlife passage such as lights or noise.

As discussed in Section IV(a) above, construction activities would occur entirely within public roadway rights-of-way in a fully urbanized portion of the San Fernando Valley. Therefore, the proposed alignment does not constitute a wildlife corridor, nor does it abut one. No vegetation removal would occur and no water bodies would be affected. Therefore, there would be no impact to suitable nesting or migratory habitat. No impact would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

No Impact. The proposed project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Construction of the proposed project would not require removal of vegetation, including trees under the protection of the City of Los Angeles Tree Protection Ordinance. ¹⁸ No impact to protected trees would occur.

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?

No Impact. The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The proposed alignment is not located within any Significant Ecological Areas or designated Critical Habitat. No regional habitat conservation plans or Natural Community Conservation Plans have been adopted within the project area. ¹⁹ No impact would occur.

V. CULTURAL RESOURCES

Potential impacts to cultural resources associated with the proposed project were determined from the results presented in the Cultural Resources Assessment (see Appendix C).

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?

Less Than Significant Impact. The project area and a study area encompassing a 0.25-mile radius around the project area were examined for cultural resource investigations and previously recorded cultural resource sites. The archival research included a review of previously recorded archaeological site records and reports, historic site and property inventories, and historic maps including Sanborn Fire Insurance Maps.

November 2012 Page 3-11

_

¹⁸ City of Los Angeles Municipal Code, Section 17.02.

County of Los Angeles, Draft General Plan, Conservation & Open Space, Proposed Significant Ecological Areas Map, 2007.

The records search indicated that a total of 13 cultural resources have been previously recorded within a 0.25-mile radius of the project site; however, none of these resources occur within the proposed project alignment. Additionally, two California Historic Landmarks were identified as points of interest and are located within the project vicinity, but do not overlap with the proposed project alignment. Further, seven cultural monuments have been identified within a 0.25-mile radius of the project site, none of which overlap with the proposed project alignment (see Appendix C). No historical resources are located within the proposed project alignment. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource, and impacts would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?

Less Than Significant Impact with Mitigation Incorporated. The location of the proposed project alignment is in the vicinity of the Mission of San Fernando. In addition, the prehistoric villages of *Tohuunga* and *Muuhonga* have long been rumored or documented as being located near portions of the project area. The project site's location relative to the Los Angeles River would have provided access to important resources during all periods of prehistory. Subsequent land use has included modern and historic development. The proposed project segments themselves lie within a roadway alignment dating back to at least the 1920s. It is possible that archaeological resources could be buried beneath the ground surface of the project alignment, especially in areas where development has included only minimal ground disturbance where the roadway may have effectively capped buried prehistoric or historic resources.

The field survey of the project area did not result in the identification of any previously unknown archaeological resources. However, the proposed project alignment would intersect with two resources which are historic in age, the Tujunga Wash Channel and the former Southern Pacific Railroad right-of-way. As the proposed project would not result in direct impacts to these resources, they were not evaluated as part of the project; however, work in the vicinity of these resources may encounter previously unknown buried resources.

The proposed Reseda Park, Valley Plaza Park, and the North Hollywood Park segments of the proposed project each cross the Tujunga Wash Channel at one location (for a total of three crossings). The channel is associated with the construction of the Hansen Dam in 1940, which was crucial in alleviating the effects of floodwaters of the Tujunga Wash in the neighboring residential areas. Prior to the construction of the Tujunga Wash Channel, its floodplain was not centralized and, therefore, encompassed a greater area. The three proposed segments would also cross the former Tujunga Wash floodplain. As such, it is possible that, during ground-disturbing construction activities, cultural resources may be encountered as they may be buried beneath alluvium or re-deposited in unknown locations as a result of deposition or erosion in the wash.

The Southern Pacific Railroad right-of-way intersects with the proposed project alignment in three locations, two of which are currently in portions of the right-of-

way operating as Metro busways and have likely undergone extensive disturbance. However, the VA Hospital segment intersects with an intact portion of the right-of-way in the location of the Amtrak/Metrolink tracks located on Woodley Avenue, approximately 1,000 feet south of Roscoe Boulevard. Trenchless construction would be required for this rail crossing. The former Southern Pacific Railroad right-of-way has been surveyed for cultural resources, and although none have been previously recorded in this specific location, the right-of-way has a high potential for preserved historic and prehistoric archaeological sites.

Furthermore, historic development began in the project area nearly 100 years ago when the common method of rubbish disposal was burial. Historic period archaeological materials are items over 50 years in age, including but not limited to, glass bottles, ceramics, buried infrastructure, military and construction debris, metal, etc. During prehistoric times, the project area may have been occupied by the Gabrielino/Fernandeño Indians. As part of this investigation, a Native American contact program was conducted to inform interested parties of the proposed project and to address any concerns regarding Traditional Cultural Properties or other resources that might be affected by the proposed project. The program involved contacting Native American representatives provided by the Native American Heritage Commission to solicit comments and concerns regarding the proposed project. A letter was prepared and mailed to the Native American Heritage Commission on May 11, 2012. The letter requested that a Sacred Lands File search be conducted for the proposed project and that contact information be provided for Native American groups or individuals that may have concerns about cultural resources in the project area. The Native American Heritage Commission responded to the request in a letter dated May 15, 2012. The letter indicated that "Native American cultural resources were identified in the project area of potential affect...also, please note; the Native American Heritage Commission Sacred Lands Inventory is not exhaustive and does not preclude the discovery of cultural resources during any groundbreaking activity." The letter also included an attached list of Native American contacts. Letters were mailed on May 21, 2012, to each group or individual provided on the contact list. Maps depicting the project area and response forms were attached to each letter. Follow-up phone calls were made to each party on June 21, 2012. A total of two responses were received; these responses are included in Appendix C, Cultural Resources Assessment.

It is possible that buried or otherwise obscured archaeological resources may be present within the project area. As such, construction activities, including trenching, could affect previously undiscovered archaeological resources, including Native American cultural resources. The three segments with the potential to encounter archaeological resources during construction activities are the North Hollywood Park, Van Nuys Sherman Oaks Park, and VA Hospital segments. To address potential impacts of the proposed project on unknown archaeological resources, the implementation of mitigation measure CR-1 would be required to ensure that impacts would be less than significant.

Mitigation Measure

CR-1 An archaeological monitoring program shall be implemented within segments identified as having cultural resources sensitivity.

- a. Archaeological monitoring of ground-disturbing activities shall include:
 - Archaeological monitoring for the North Hollywood Park segment due to the presence of the Tujunga Wash, historic development, and evidence of prehistoric settlement 19-100281;
 - Archaeological monitoring for the Van Nuys Sherman Oaks Park segment due to the proximity of the San Fernando Mission, Los Angeles River, and Santa Monica Mountains; and
 - Archaeological monitoring for the VA Hospital segment pipe jacking entry and exit pits in the location of the former Southern Pacific Railroad crossing.
- b. The on-site archaeological monitor shall work under the direction of a qualified archaeological Principal Investigator. The on-site archaeological monitor shall conduct worker training prior to the initiation of ground-disturbing activity in order to inform workers of the types of resources that may be encountered, and apprise them of appropriate handling of such resources. If any prehistoric archaeological sites are encountered within the project area, consultation with interested Native American parties shall be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. The archaeological monitor shall have the authority to redirect construction equipment in the event potential archaeological resources are encountered.
- c. In the event archaeological resources are encountered, LADWP shall be notified immediately and work in the vicinity of the discovery shall be halted until appropriate treatment of the resource is determined by the qualified archaeological Principal Investigator in accordance with the provisions of CEQA Guidelines Section 15064.5 and Section 106 of the National Historic Preservation Act.
- d. Ground-disturbing activities include, but are not limited to, geotechnical boring, boring, trenching, grading, excavating, and the demolition of building foundations. The archaeological monitor shall observe ground-disturbing activities in the segments requiring monitoring, to depth.
- e. Once ground-disturbing activities begin, if the level of disturbance of fill encountered to depth is determined by the archaeological Principal Investigator to make the likelihood of archaeological findings improbable, the Principal Investigator in consultation with LADWP may recommend that archaeological monitoring be continued intermittently, as appropriate, or discontinued within the segment or portion thereof.
- f. In the event that archaeological resources are encountered during archaeological monitoring, the monitor may halt work in the immediate vicinity until the discovery is assessed by the project archaeologist and appropriate treatment is determined. Additional monitoring recommendations may be made at that time.

g. Upon completion of all ground-disturbing activities, an Archaeological Resources Monitoring Report shall be prepared documenting construction activities observed, including copies of all daily archaeological monitoring logs. If discoveries are made during ground-disturbing activities, the report shall also document the associated cultural materials and the methods of treatment as determined appropriate by the archaeologist. This report shall be placed on file at the South Central Coastal Information Center upon its completion.

c) 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 was conducted for the proposed project by Dr. Samuel McLeod, Vertebrate Paleontology Division of the Natural History Museum of Los Angeles County on June 26, 2012 (see Appendix C, Cultural Resources Assessment). The records search indicated that there is no known vertebrate fossil locality that lies within the proposed project alignment; however, nearby fossil localities are known to exist from the same sedimentary deposits that occur along the proposed project alignment.

The North Hollywood Park segment surface deposits consist of younger Quaternary Alluvium, derived primarily as fluvial deposits from the Central Branch of the Tujunga Wash and probably from the Los Angeles River that flows to the south. Vertebrate fossil localities are known to occur nearby in these types of deposits (see Appendix C).

The surface deposits within the vicinity of the Valley Plaza Park segment consist entirely of younger Quaternary Alluvium, derived primarily as fluvial deposits from the Tujunga Wash that crosses the western portion, or the Central Branch of the Tujunga Wash that crosses the eastern portion of this segment. No vertebrate fossil localities are known to occur within or adjacent to this segment (see Appendix C).

Surface deposits in the vicinity of the Van Nuys Sherman Oaks Park segment consist of younger Quaternary Alluvium, derived primarily as fluvial deposits from the Los Angeles River located adjacent to the southernmost portion of this segment, or from the Tujunga Wash located adjacent to the eastern portion of the segment. Two vertebrate fossil localities are known to occur west of the western portion of this segment (see Appendix C).

The VA Hospital segment surface deposits consist entirely of younger Quaternary Alluvium, derived as a mixture of alluvial fan deposits from the Santa Susana Mountains to the northwest, as well as fluvial deposits from Bull Creek, which flows to the west, and the Pacoima Wash, which flows to the east. Four vertebrate fossil localities are known to occur north of this segment (see Appendix C).

Surface deposits within the vicinity of the Reseda Park and Pierce College segments consist of soil and younger Quaternary Alluvium, derived predominantly as fluvial deposits from the Los Angeles River that flows adjacent to and bisects these segments. These deposits found throughout the San Fernando Valley

typically do not contain significant vertebrate fossils, at least in the uppermost layers, but older Quaternary deposits found at depth may contain significant fossil vertebrate remains. Two vertebrate fossil localities are known to occur south-southwest of these segments, and one locality is known to occur north of these segments (see Appendix C).

Near the western terminus of the Pierce College segment, there are some exposures of the marine late Miocene Upper Modelo Formation (also known as the Monterey Formation), which may occur at depth in this segment. Four vertebrate fossil localities from the Upper Modelo Formation are known to occur south-southwest of the western terminus of the Pierce College segment (see Appendix C).

Excavations that extend into surficial younger Quaternary Alluvium within the proposed project segments are unlikely to produce significant fossil vertebrate remains. However, deeper excavations that extend down into the older Quaternary deposits or the marine late Miocene Upper Modelo Formation, may encounter significant vertebrate fossils. As such, the implementation of mitigation measure CR-2 would be required for excavations extending below five feet. With implementation of the mitigation measure, impacts related to paleontological resources would be less than significant.

Mitigation Measure

CR-2 Any excavations below 5 feet, should they be necessary, shall be monitored to quickly and professionally recover any discovered fossil remains. In the event that paleontological resources are encountered, a qualified paleontologist shall be retained in order to recover and record any fossil remains discovered. Any discovered fossils shall be prepared, identified, and catalogued before curation in an accredited repository such as designated in consultation with LADWP.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. No formal cemeteries or other places of human internment are known to exist within the project site. No evidence of human remains was observed on the surface during site surveys within the proposed project alignment (see Appendix C). As discussed in Section V(b) above, a Sacred Lands File search and Native American contact program were conducted for the proposed project. Although not expected, human remains could be encountered during construction. In the event that any human remains or related resources are discovered, such resources would be treated in accordance with state and local regulations and guidelines for disclosure, recovery, relocation, and preservation, as appropriate, including CEQA Guidelines Section 15064.5(e). If human remains are discovered, they will require evaluation by the county coroner as to the nature of the remains. If the remains are determined to be of Native American origin, the Native American Heritage Commission shall be contacted and a Most Likely Descendent identified. Compliance with existing regulations would ensure that impacts related to the discovery of human remains would be less than significant.

VI. GEOLOGY AND SOILS

Would the project:

- a) Expose people or structures to 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 proposed project would not expose people or structures to new adverse effects associated with rupture of a known earthquake fault. There are numerous known earthquake faults in the vicinity of the project site and a portion of the project site is located within a City-designated fault rupture zone. Therefore, the proposed pipelines would be designed and constructed in accordance with the latest version of the City of Los Angeles Building Code and other applicable federal, state, and local codes relative to seismic criteria. Compliance with existing regulations would ensure a less than significant impact related to fault rupture.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The project site is located within the seismically active southern California region, and like all locations within the area, is subject to strong seismic ground shaking. However, as discussed in Section VI(a)(i) above, the proposed pipeline would be designed and constructed in accordance with the latest version of the City of Los Angeles Building Code and other applicable federal, state, and local codes relative to seismic criteria. Additionally, the proposed project involves extension of the recycled water pipeline network within portions of the San Fernando Valley and does not include any habitable structures. Therefore, the impact from strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Portions of the project site are located within a City-designated liquefiable area.²¹ However, the proposed project would be designed and constructed in compliance with the latest version of the City of Los Angeles Building Code and other applicable federal, state, and local codes relative to liquefaction criteria. Compliance with existing regulations would ensure a less than significant impact related to seismic-related ground failure, including liquefaction.

November 2012 Page 3-17

_

²⁰ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Alquist-Priolo Special Study Zones & Fault Rupture Study Areas* Map, September 1996.

City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Areas Susceptible to Liquefaction* Map, September 1996.

iv) Landslides?

No Impact. The project site is not located within a City-designated hillside area.²² Further, construction and excavation activities within public roadway rights-of-way would not be expected to increase the risk of landslides in the hillside areas. No impact related to landslides would occur.

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

Less Than Significant Impact. Construction activities would expose soils for a limited time, allowing for possible erosion. However, all excavation would comply with all applicable provisions of Chapter IX, Division 70 of the Los Angeles Municipal Code, which addresses grading, excavation, and fill. During construction, transport of sediments from the project site by storm water runoff and winds would be prevented through the use of appropriate BMPs. As discussed in Section 1.7 above, Rule 403 dust control measures would be implemented as required by the SCAQMD. Additionally, LADWP would develop and implement an erosion control plan and a SWPPP for construction activities, in compliance with the latest National Pollutant Discharge Elimination System requirements for storm water discharges. Implementation of the required construction BMPs would ensure that soil erosion impacts would be less than significant.

No large areas of exposed soils subject to erosion would be created or affected by operation of the proposed project. Therefore, there would be no long-term impact related to erosion and loss of topsoil.

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

Less Than Significant Impact. One of the major types of liquefaction induced ground failure is lateral spreading of mildly sloping ground. Lateral spreading involves primarily side-to-side movement of earth materials due to ground shaking, and is evidenced by near-vertical cracks to predominantly horizontal movement of the soil mass involved. As discussed in Sections VI(a)(iii) and VI(a)(iv) above, the project site is located in an area identified as being at risk for liquefaction, but is not located within a designated hillside area. However, all construction work would adhere to the latest version of the City of Los Angeles Building Code, and other applicable federal, state, and local codes relative to liquefaction criteria.

Subsidence is the lowering of surface elevation due to changes occurring underground, such as the extraction of large amounts of groundwater, oil, or gas. When groundwater is extracted from aquifers at a rate that exceeds the rate of replenishment, overdraft occurs, which can lead to subsidence. However, the proposed project does not anticipate the extraction of any groundwater, oil, or gas from the project site. Therefore, subsidence would not occur.

Collapsible soils consist of loose dry materials that collapse and compact under the addition of water or excessive loading. Collapsible soils are prevalent throughout the southwestern United States, specifically in areas of young alluvial fans. Soil

²² City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Landslide Inventory & Hillside Areas* Map, September 1996.

collapse occurs when the land surface is saturated at depths greater than those reached by typical rain events. However, the proposed project would be constructed in accordance with the latest version of the City of Los Angeles Building Code and other applicable federal, state, and local codes relative to seismic criteria. These building codes are designed to ensure safe construction. Compliance with existing regulations would ensure a less than significant impact.

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

Less Than Significant Impact. Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water and shrink (lessen in volume) as water is drawn away. If soils consist of expansive clays, foundation movement and/or damage can occur if wetting and drying of the clay does not occur uniformly across the entire area. The onsite geologic materials in the project area consist of alluvium. Due to the mix of earth materials underlying the project site, these soils are not expected to be high clay-bearing, and expansion potential is considered low. Additionally, the proposed project would be constructed in accordance with the latest version of the City of Los Angeles Building Code and other applicable federal, state, and local codes relative to seismic criteria. Furthermore, the proposed project does not include any habitable structures. Therefore, the proposed project would not create a substantial risk to life or property resulting from expansive soils, and the impact would be less than significant.

e) Have soils incapable of adequately supporting use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The proposed project involves extension of the recycled water pipeline network within the San Fernando Valley. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, no impact associated with the use of such systems would occur.

VII. GREENHOUSE GAS EMISSIONS

Would the project:

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

Less Than Significant Impact. Greenhouse gas (GHG) emissions refer to a group of emissions that are generally believed to affect global climate conditions. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), keep the average surface temperature of the Earth close to 60 degrees Fahrenheit. Of all the GHGs, CO₂ is the most abundant gas that contributes to climate change through fossil fuel combustion. The other GHGs are less abundant, but have higher global warming

²³ California Department of Conservation, Seismic Hazard Zone Report for the Los Angeles 7.5-Minute Quadrangle, Los Angeles County, California, 1998.

potential than CO₂. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO₂, denoted as CO₂e.

GHG emissions were estimated for equipment exhaust, truck trips, and worker commute trips. Installation of the six pipeline segments is scheduled to be completed in five years (2017 to 2022). The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions, and recommends emissions for construction to be amortized over 30 years. As shown in Table 3, maximum GHG emissions would be 131 tons per year. Estimated GHG emissions would be less than the 10,000 metric tons of CO₂e per year quantitative significance threshold. The impact would be less than significant.

Table 3 Annual Greenhouse Gas Emissions

Source	Carbon Dioxide Equivalent (Metric Tons per Year)
Amortized Construction Emissions	131
Significance Threshold	10,000
Exceed Threshold?	No

Source: Terry A. Hayes Associates, 2012.

The proposed project would have no operational component. As such, operational activities would be the same as the current levels. Therefore, no impact to GHG emissions would occur during operation of the proposed project.

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

No Impact. As shown in Table 3 above, the proposed project would not generate substantial sources of construction and operational emissions. The proposed project would not conflict with any state or local climate change policy or regulation adopted for the purpose of reducing emissions of GHGs. No impact would occur.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

Less Than Significant Impact. Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction activities would be temporary in nature and would involve the limited transport, storage, use, and disposal of hazardous materials. Such hazardous materials could include on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, the U.S. Environmental Protection Agency, the Occupational Safety & Health Administration, the Los Angeles County Fire Department, and the Los Angeles County Health Department. The transport, use, and disposal of construction-related hazardous materials would occur in

conformance with applicable federal, state, and local regulations governing such activities. Therefore, the short-term construction impact would be less than significant.

Long-term operation of the proposed project would not involve the transport, storage, use, or disposal of hazardous materials. Additionally, the proposed project would not generate industrial wastes or toxic substances during operation. Therefore, project operation would not pose a significant hazard to the public or the environment. No operational impact related to the use or transport of hazardous materials would occur.

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?

No Impact. The proposed project construction would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As discussed in Section VII(a) above, construction activities may involve limited transport, storage, use, or disposal of some hazardous materials, such as on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. These types of materials are not acutely hazardous, and compliance with existing federal, state, and local regulations would ensure that construction impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be less than significant. No impact would occur.

Long-term operation of the proposed project would not involve the transport, storage, use, or disposal of hazardous materials. Additionally, the proposed project would not generate industrial wastes or toxic substances during operation. Therefore, project operation would not pose a significant hazard to the public or the environment. No operational impact related to reasonably foreseeable upset or accident conditions would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. The following schools are located within 0.25-mile of the proposed pipeline segments: North Hollywood High School, Oakwood Secondary School, North Hollywood Library, Toluca Lake Elementary School, St. Paul's First Lutheran School, East Valley High School, James Madison Middle School, Roy Romer Middle School, Chandler Elementary School, Van Nuys Middle School, Birmingham High School, High Tech High School, Valley Alternative School, Mulholland Middle School, Newcastle Elementary School, Albert Einstein High School, and Vanalden Elementary School. As discussed in Section VIII(a) above, construction activities would involve limited transport, storage, use, and disposal of hazardous materials. However, as discussed, these materials are not acutely hazardous and the transport, use, and disposal of construction-related hazardous materials would occur in conformance with all applicable federal, state, and local regulations governing such activities. Therefore, impacts related to

hazardous materials within 0.25-mile of an existing or proposed school would be less than significant.

Long-term operation of the proposed project would not involve the transport, storage, use, or disposal of hazardous materials. Therefore, there would be no operational impact related to hazardous materials within 0.25-mile of an existing or proposed school.

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

Less Than Significant Impact. Some hazardous materials sites have been identified on or near the proposed segments. The Department of Toxic Substances Control's EnviroStor database lists sites of identified underground storage tanks on and near the proposed segments; the State Water Resources Control Board's GeoTracker site indicates open sites are located along the proposed segments, and numerous active sites are listed on the Cortese list on or near the proposed segments. The project area is not listed on the U.S. Environmental Protection Agency's National Priorities List. These lists are compiled pursuant to Section 65962.5 of the Government Code. As discussed in Section 1.6 above, construction activities along the proposed segments would not require deep excavations. As such, it is not anticipated that any underground storage tanks would be encountered or disturbed during construction activities. Therefore, implementation of the proposed project would not create a significant hazard to the public or the environment. The impact 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 for people residing or working in the project area?

No Impact. The closest airport to the project site is the Van Nuys Airport, located less than one mile west of the VA Hospital segment.²⁸ However, the proposed project would extend the recycled water pipeline network within the San Fernando Valley and would be located entirely within public roadway rights-of-way. The proposed project would not result in a safety hazard related to an airport for people residing or working in the project area. No impact would occur.

_

²⁴ California Department of Toxic Substances Control, EnviroStor *Database*. Website:

http://www.envirostor.dtsc.ca.gov/public/, accessed May 30, 2012.

California State Water Resources Control Board, *GeoTracker Database*, Search by Map Location. Website: http://geotracker.waterboards.ca.gov/, accessed May 30, 2012.

California Department of Toxic Substances Control, *DTSC's Hazardous Waste and Substances Site List – Site Cleanup* (*Cortese List*). Website: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed May 30, 2012.

United States Environmental Protection Agency, *National Priorities List*, Search by Location. Website: http://www.epa.gov/superfund/sites/query/queryhtm/nplmapsg.htm, accessed May 30, 2012.

Airnav.com, Airports search. Website: http://www.airnav.com/airports/, accessed May 30, 2012

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project site is not located within the vicinity of a private airstrip.²⁹ However, several heliports are located on rooftops of buildings adjacent to the proposed segments. Based on the approach and departure patterns of the helicopters, and the location, height, and nature of construction activities within public roadway rights-of-way, the proposed project would not result in a safety hazard related to helicopter operations for people residing or working in the project area. No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The proposed segments intersect with, are located adjacent to, or run along several disaster routes within the City, including I-405, US 101, SR 170, SR 134 and Sherman Way, Vineland Avenue, and Van Nuys Boulevard. As described in Section 1.6 above, construction of the proposed project would involve temporary lane closures, which could have an effect on designated disaster routes. However, full roadway closures are not anticipated and any open trenches would be covered with steel plates during non-work hours. Additionally, a Traffic Management Plan would be prepared in coordination with LADOT for the proposed project and would detail construction traffic control and detour methods. Implementation of the Traffic Management Plan during construction would ensure that impacts related to emergency response plans would be less than significant. Following installation of the proposed pipeline segments, all roadways would be returned to their existing conditions. Therefore, no long-term impacts would result from operation of the proposed project.

h) Expose people or structures 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?

No Impact. The project site is not located within a City-designated Wildfire Hazard Area or Fire Buffer Zone.³¹ Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.

IX. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. The proposed project would not violate a water quality standard or waste discharge requirement. Construction activities, such as excavation, would result in the disturbance of soil and temporarily increase the potential for soil erosion. Additionally, construction activities and equipment would

Los Angeles County Department of Public Works, Disaster Route Maps by City, *City of Los Angeles – Central Area Map*. Website: http://dpw.lacounty.gov/dsg/disasterRoutes/city.cfm, accessed May 30, 2012.

⁾ Ibid

City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Selected Wildfire Hazard Areas* Map, September 1996.

require the on-site use and storage of fuels, lubricants, and other hydrocarbon fluids. Storm events occurring during the construction phase would have the potential to carry disturbed sediments and spilled substances from construction activities off-site to nearby receiving waters.

However, prior to the start of construction, LADWP would be required to obtain a General Construction Activity Storm Water Permit, issued by the State Water Resources Control Board. One of the conditions of the General Permit is the development and the implementation of a SWPPP, which would identify structural and nonstructural Best Management Practices to be implemented during the construction phase. As discussed in Section 1.7, LADWP would also develop and implement an erosion control plan for the proposed project. BMPs developed for the SWPPP and the erosion control plan may include, but not be limited to, minimizing the extent of disturbed areas and duration of exposure, stabilizing and protecting disturbed areas, keeping runoff velocities low, and retaining sediment within the construction area, as well as the use of temporary desilting basins, silt fences, gravel bag barriers, temporary soil stabilization, temporary drainage inlet protection, and diversion dikes and interceptor swales. With implementation of BMPs, the proposed project would not violate any water quality standards or waste discharge requirements. Therefore, impacts on water quality from construction activities would be less than significant.

Upon completion of the proposed project, storm flows would be directed to the existing storm drain system, similar to existing conditions. There would be no exposed soil remaining at completion of construction activities; therefore, there would be no potential for soil erosion or contamination. In addition, LADWP designs and constructs recycled water pipelines in accordance with California Department of Health Services regulations and guidelines to provide adequate vertical and horizontal separation from potable water pipelines and potable supply wells.³² This would minimize the potential for possible travel of recycled water from a pipeline leak or rupture to reach or affect potable supply wells or the water distribution system. All recycled water would be treated to meet or exceed Title 22 of California Code of Regulations standards before entering the recycled water distribution system. If a break were to occur along a recycled water pipeline, impacts related to water quality standard violations at production wells are not anticipated because the separation distances between the recycled water distribution pipelines and production wells would comply with Title 22 requirements. Therefore, operation of the proposed project would not violate any water quality standards or water discharge requirements.

³² City of Los Angeles, Department of Public Works, Bureau of Sanitation and Department of Water and Power. 2005. Integrated Resources Plan Draft Environmental Impact Report. Website: http://www.lacity.irp.org/drafteir.htm, accessed June 18, 2012.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. There are two groundwater wells located within the proposed pipeline alignment. These groundwater wells are maintained by the County of Los Angeles Department of Public Works. Well number 3753 B is located on Van Nuys Boulevard between Ostego Street and Hesby Street at Van Nuys Sherman Oaks Park. Well number 3752 D is located on Van Nuys Boulevard just south of Oxnard Street. Additionally, there are several wells located adjacent to or in the vicinity of the proposed pipeline alignment. Groundwater levels along the proposed pipeline alignment range from 15 to 50 feet below ground surface. 33 As discussed in Section 1.6, excavation for trenches within which the pipe would be placed would occur to a depth of approximately 5 feet below ground surface. Therefore, it is not anticipated that groundwater would be encountered during construction, as deep excavations would not be necessary. Additionally, the proposed project does not involve any direct extraction of groundwater. Further, following installation of the proposed pipeline, the roadways would be returned to their existing conditions and there would be no change in the amount of impermeable surfaces. Therefore, the proposed project would neither decrease the amount of storm water entering the groundwater table through an increase in the amount of impermeable surfaces, nor deplete groundwater through extraction. The impact to groundwater supply and recharge would be less than significant

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. The proposed pipeline would be located within existing roadways, which have been previously disturbed. All drainage flows would be routed through existing storm water infrastructure along the proposed pipeline alignment. As discussed, following installation of the proposed pipelines, the roadways would be returned to their existing conditions. As such, storm water flows would generally follow the same course as existing flows. Construction activities would temporarily increase the potential for erosion due to excavation. However, compliance with the SWPPP and the erosion control plan developed for the proposed project would minimize impacts. Therefore, impacts related to erosion resulting from altered drainage patterns would be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Less Than Significant Impact. The project site consists entirely of existing roadways. All drainage flows would be routed through existing storm water infrastructure serving the project site and surrounding areas. Additionally, following

³³ Los Angeles County Department of Public Works, Ground Water Wells Website: http://gis.dpw.lacounty.gov/wells/viewer.asp, accessed March 15, 2012.

construction of the proposed project, all roadways would be returned to their original condition. As such, after construction, storm water flows would be similar to the current condition, and the proposed project does not have the potential to substantially increase the rate of surface runoff. As discussed in Section IX(a) above, BMPs would be implemented to control runoff from the project site during construction. Therefore, no flooding is expected to occur on- or off-site as a result of the proposed project. The impact would be less than significant.

e) 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 above, implementation of the proposed project would result in a similar amount of permeable surfaces as under existing conditions. Thus, no substantial increase in the amount of runoff from the project site is anticipated. Construction would require water, as necessary, to control fugitive dust. Fugitive dust emissions at the construction site would be controlled by water trucks equipped with spray nozzles. Construction water needs would generate minimal quantities of discharge water, which would drain into existing storm drains located along the proposed pipeline alignment. BMPs would be identified in the SWPPP developed for the proposed project pursuant to the National Pollutant Discharge Elimination System permit requirements to control runoff from the project sites during construction. Thus, the proposed project would not create or contribute runoff which would exceed drainage system capacity, nor would it provide substantial additional sources of polluted runoff. The impact would be less than significant.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. Other than the sources described for construction activities (i.e., potential soil erosion and fuels for construction equipment), the proposed project does not include other potential sources of contaminants that could potentially degrade water quality. Additionally, as discussed in Section IX(a) above, a SWPPP and an erosion control plan would be developed and implemented for the proposed project construction to prevent the degradation of water quality. Further, LADWP designs and constructs recycled water pipelines in accordance with California Department of Health Services regulations and guidelines to provide adequate vertical and horizontal separation from potable water pipelines and potable water supply wells. All recycled water would be treated to meet or exceed Title 22 standards before entering the recycled water distribution system. Compliance with existing regulations would ensure a less than significant impact related to water quality.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. A 100-year flood is a flood defined as having a 1.0 percent chance of occurring in any given year. Portions of the project site are located within areas designated as Special Flood Areas and Zone X on the Federal Emergency Management Agency flood insurance rate maps. The Special Flood Areas designation indicates areas determined to have a less than 0.1 percent annual

chance floodplain. The Zone X designation indicates areas determined to be outside the 0.2 percent annual chance floodplain.³⁴ Therefore, portions of the project site are known to experience flooding and are anticipated to flood in the future. However, the proposed project involves construction of a recycled water pipeline within public roadways. Following completion of construction, the roadways would be returned to their original condition and the proposed pipeline would be located completely below ground surface with pavement on top. Further, the proposed project does not include a residential component; therefore, it would not place housing within a 100-year flood hazard area. No impact would occur.

h) Place within a 100-year flood area structures to impede or redirect flood flows?

No Impact. As discussed above, portions of the project area are designated as Special Flood Areas, which means that portions of the project site are known to flood. Other portions of the project area are designed Zone X, which indicates areas determined to be outside the 100-year floodplain.³⁵ However, the proposed project involves construction of a recycled water pipeline within public roadways. Following completion of construction, the roadways would be returned to their original condition and the proposed pipeline would be located completely below ground surface with pavement on top. There would be no aboveground structures such that flood flows would be impeded or redirected. No impact to flooding would occur.

Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less Than Significant Impact. Portions of the project site would be located within City-designated inundation areas.³⁶ However, the proposed project involves construction of a recycled water pipeline within public roadways. Following completion of construction, the roadways would be returned to their original condition and the proposed pipeline would be located completely below ground surface with pavement on top. Additionally, no habitable structures are included as part of the proposed project. Therefore, implementation of the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam. The impact would be less than significant.

Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. Seiches are oscillations generated in enclosed bodies of water usually as a result of earthquake-related ground shaking. A seiche wave has the potential to overflow the sides of a containing basin to inundate adjacent or downstream areas. As discussed above, portions of the project area would be located within the designated inundation areas of multiple reservoirs

Federal Emergency Management Agency, Flood Insurance Rate Maps, Search by Street Address. Website: http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1, accessed June 18, 2012.

City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, Inundation and Tsunami Hazard Areas Map, September 1, 1996.

located within the San Fernando Valley. However, seiches primarily cause damage to properties that are located in close proximity to the body of water. The distance between the project site and these bodies of water would result in a decreased risk of a seiche resulting in damage to the proposed project. Additionally, no above ground structures would be constructed.

Tsunamis are large ocean waves caused by the sudden water displacement that results from an underwater earthquake, landslide, or volcanic eruption. Tsunamis affect low-lying areas along the coastline. The Santa Monica Mountains separate the project site from the Pacific Ocean. The project site is not located within a designated Tsunami Hazard Area.³⁷

As discussed in Section VI(a)(iv) above, no portion of the project site is located within a City-designated hillside area. The project site would not be subject to a landslide.

Therefore, construction of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow. The impact would be less than significant.

X. LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. The proposed project would not physically divide an established community. The proposed pipeline alignment would be located entirely within existing roadways. Following installation of the proposed pipeline, the roadways would be returned to their existing condition. No streets or sidewalks would be permanently closed as a result of the proposed project, and no separation of uses or disruption of access between land use types would occur. As such, the proposed project would not physically divide an established community, and no impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed pipeline alignment would be located entirely within existing roadways. The proposed project would serve existing uses along the alignment and would not conflict with the zoning or land use designations of such uses. Therefore, implementation of the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

.

³⁷ Ibid.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed pipeline alignment would be located entirely within an urbanized area within existing public roadways. There are no adopted habitat conservation plans that apply to the project area, nor is the proposed pipeline alignment located in or near any natural community conservation plan areas (refer to Section IV[f] above). Therefore, the proposed project would not conflict with any such plan. No impact would occur.

XI. MINERAL RESOURCES

Would the project:

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

No Impact. The proposed pipeline alignment does not pass through City-designated Mineral Resource Zone Areas, which are areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. However, according to the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, several wells are known to exist in the vicinity of the proposed pipeline alignment. However, no wells are located within the alignment itself. Should any future mineral resource be discovered on or near the project site, implementation of the proposed project would not preclude the mineral's extraction. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. No impact would occur.

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?

No Impact. The project site is not delineated as a locally-important mineral resource recovery site on any City plans.⁴¹ Further, as discussed in Section XI(a) above, no active oil wells exist on the project site. Therefore, implementation of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site, and no impact would occur.

City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Areas Containing Significant Mineral Deposits* Map, September 1996.

State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, DOGGR Online Mapping System. Website: http://maps.conservation.ca.gov/doms/doms-app.html, accessed June 19, 2012.

⁴⁰ Ibid.

City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, Oil Field & Oil Drilling Areas Map, September 1, 1996.

November 2012 Page 3-29

XII. NOISE

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of applicable standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project would expose persons to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or other applicable standards. The City of Los Angeles regulates noise through several sections of its municipal code. These include Section 41.40, which establishes time prohibitions on noise due to construction activity, Section 112.04, which prohibits the use of loud machinery and/or equipment within 500 feet of residences, and Section 112.05, which establishes maximum noise levels for powered equipment and powered hand tools. According to Section 41.40, no construction activity that might create loud noises in or near residential areas or buildings shall be conducted before 7:00 a.m. or after 9:00 p.m. on weekdays, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday or City holidays.

Existing Noise Levels

The proposed project would pass through a variety of land uses sensitive to increased noise levels, which include residences, schools, and passive recreation areas. Sensitive receptors located within 500 feet of the proposed pipeline alignment include:

North Hollywood Park

- Single- and multi-family residences
- North Hollywood High School
- Oakwood Secondary School
- North Hollywood Library
- Toluca Lake Elementary School
- St. Paul's First Lutheran School

Valley Plaza Park

- Single- and multi-family residences
- James Madison Middle School
- Valley Plaza Park
- Valley Plaza Library
- Bellingham Primary Center

Van Nuys Sherman Oaks Park

- Single- and multi-family residences
- Sherman Oaks Hospital
- Sherman Oaks Center for Enriched Studies
- Van Nuys Sherman Oaks Park
- Los Angeles Valley College
- The Church of Jesus Christ of Latter-Day Saints

Chandler Elementary School

Reseda Park

- Single- and multi-family residences
- Birmingham High School
- Valley Alternative School
- Mulholland Middle School
- High Tech High School
- Reseda Park

VA Hospital

- Veteran's Administration Hospital
- Single- and multi-family residences
- Monroe High School
- Valley Presbyterian Church
- Centers of Learning
- Motel 6

Pierce College

- Single- and multi-family residences
- Pierce College

The existing noise environment is characterized by vehicular traffic on local roadways and noises typical of a dense urban area (e.g., sirens, horns, helicopters, etc). Noise monitoring locations were selected to be representative of the ambient environment in the project area. Ambient noise monitoring was performed using a SoundPro DL Sound Level Meter between 11:10 a.m. and 4:10 p.m. on June 6, 2012. As shown in Table 4 below, existing noise levels range from 51.5 to 78.3 Aweighted decibels (dBA) L_{eq} along the proposed alignment.

Table 4 Existing Noise Levels

Noise Monitoring Location	Noise Level (dBA, L _{eq})
North Hollywood Library	64.6
James Madison Middle School	63.0
Valley Plaza Library	61.9
Sherman Oaks Hospital	72.0
Los Angeles Valley College	60.2
High Tech Charter High School	71.8
Sherman Oaks Center for Enriched Studies	62.3
Pierce College	51.5
Single-Family Residences – 8300 Gloria Avenue	78.3
VA Hospital	59.3

Source: Terry A. Hayes Associates, 2012.

Construction

The City of Los Angeles Mayor's Directive #2 prohibits construction on major roads during rush hour periods (6:00 a.m. to 9:00 a.m. and 3:30 p.m. to 7:00 p.m.). However, as discussed in Section 1.7, LADWP would request a variance to

the Directive. Thus, the proposed project construction activities are generally anticipated to occur on weekdays from 7:00 a.m. to approximately 3:30 p.m., although work may occasionally continue beyond this time or at night in non-residential areas to complete a component of work that cannot be interrupted. Construction work may also occur on Saturday but it would not commence before 8:00 a.m., and it would cease by 6:00 p.m. No construction work would occur on Sundays or City holidays.

According to Section 112.05 of the Los Angeles Municipal Code, powered equipment and hand tools may not produce a maximum noise level exceeding 75 dBA at a distance of 50 feet. However, this noise limitation does not apply where compliance is technically infeasible, including with the use of such equipment as mufflers or other noise reduction devices during the operation of equipment. Table 5 shows the noise level ranges for the types of equipment that would be used during construction of the proposed project. All equipment and tools would comply with the established noise limits.

Table 5 Construction Equipment Noise Level Ranges

Construction Equipment	Noise Level at 50 feet (dBA, L _{eq})
Backhoe	73-95
Paver	85-88
Concrete Mixers	75-88
Crane (derrick)	86-89
Generators	71-83
Air Compressors	75-87

Source: CEQA, L.A. CEQA Thresholds Guide Your Response for Preparing CEQA Analyses in Los Angeles, 2006.

Installation of the proposed pipeline would occur within public roadways and would typically use a cut and cover trenching technique. The proposed project would install approximately 90 linear feet of pipeline per day to minimize long-term disruption within an area. However, noise from construction activities would still affect the areas immediately adjacent to each of the construction sites, specifically areas that are less than 500 feet from a construction site. As shown in Table 5 above, the loudest construction equipment would generate noise levels up to 95 dBA, which would exceed the 75 dBA at 50 feet noise limitation listed in Section 112.05 of the Los Angeles Municipal Code. Implementation of mitigation measures N-1 through N-11 would reduce construction noise levels. With implementation of mitigation, typical trenching activity would result in a less than significant noise impact.

Tunneling instead of trenching would be required to cross the railroad tracks on Woodley Avenue south of Roscoe Boulevard and the San Fernando Wash on Magnolia Boulevard located 900 feet west of Tujunga Avenue. A trenchless technique known as "microtunneling" would be used with a launching pit at one end of the tunnel and equipment located on the other end of the tunnel. Hydraulic jacks would drive the water pipes through the ground. The railroad tracks that cross Woodley Avenue are in an industrial area and approximately 1,000 feet from the

nearest residential land use. Tunneling activity at this location would not disturb any sensitive land use.

However, the tunneling location on Magnolia Avenue would be within 500 feet of residential land uses and would increase ambient noise levels in the project area. Based on the Federal Highway Administration Roadway Construction Noise Model, the maximum noise level for a horizontal boring hydraulic jack is 82 dBA at 50 feet. Since equipment used on construction sites often operates at less than full power, an acoustical usage factor is applied. The acoustical usage factor is a percentage of time that a particular piece of equipment is anticipated to be in full power operation during a typical construction day. The acoustical usage factor for a hydraulic jack is 25 percent and the noise level for the hydraulic jack is reduced to 80 dBA at 50 feet. The noise level generated from the hydraulic jack would exceed the 75 dBA at 50 feet noise limitation listed in Section 112.05 of the Los Angeles Municipal Code. Therefore, implementation of mitigation measures N-2 through N-11 would be required reduce tunneling noise. With implementation of mitigation, tunneling activity would result in a less than significant noise impact.

The proposed project could include nighttime construction activity to prevent traffic congestion. Section 41.40 (Noise Due to Construction, Excavation Work) of the Los Angeles Municipal states that construction activity that would disturb persons occupying sleeping quarters in any dwelling hotel, apartment, or other place of residence should not take place between 9:00 p.m. and 7:00 a.m. Based on language included in Section 112.04 of the Los Angeles Municipal Code, nighttime construction activity within 500 feet of sensitive land uses would not be consistent with the City Code and would result in a significant impact. Therefore, implementation of mitigation measure N-12 would be required to ensure that nighttime construction activity would not occur within 500 feet of land uses where people sleep. With implementation of mitigation, nighttime construction activity would result in a less than significant noise impact.

Operational Noise

Following installation of the proposed pipeline, there would be no operational component of the proposed project. Therefore, the proposed project would not create new sources of noise, and no operational noise impact would occur.

Mitigation Measures

- **N-1** All construction equipment shall be properly maintained and equipped with mufflers and other suitable noise attenuation devices.
- **N-2** LADWP shall endeavor to use rubber-tired equipment rather than track equipment. Noisy equipment shall be used only when necessary and shall be switched off when not in use.
- **N-3** LADWP shall ensure that all stockpiling and vehicle staging areas are located away from noise-sensitive receivers.
- **N-4** LADWP shall establish a public liaison for project construction that shall be responsible for addressing public concerns about construction activities,

- including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall work with LADWP to implement reasonable measures to address the concern.
- **N-5** The construction contractor shall develop a construction schedule to ensure that the construction would be completed quickly to minimize the time a sensitive receptor will be exposed to construction noise.
- **N-6** Construction supervisors shall be informed of project-specific noise requirements, noise issues for sensitive land uses adjacent to the pipeline route, and/or equipment operations.
- **N-7** Construction equipment shall be electric- and hydraulic-powered rather than diesel and pneumatic powered, as feasible.
- N-8 During all construction activities in residential neighborhoods, temporary barriers, such as noise blankets, shall be utilized, as applicable to site conditions, around noisy equipment located within 500 feet of a sensitive receptor. Staging sites shall not be located within 500 feet of a sensitive receptor. A temporary barrier shall be employed when staging sites are restricted to residential neighborhoods.
- **N-9** Prior to construction work, the public shall be notified of the location and dates of construction. Residents shall be kept informed of any changes to the schedule.
- **N-10** Haul routes shall be on major arterial roads within non-residential areas. If not feasible, haul routes shall be reviewed and approved by LADOT before the haul route can be on major arterial roads in residential areas.
- N-11 LADWP shall coordinate with the site administrator for institutional land uses located adjacent to the pipeline. These include North Hollywood High School, Oakwood Secondary School, North Hollywood Regional Library, James Madison Middle School, Valley Plaza Library, Sherman Oaks Hospital, Los Angeles Valley College, Birmingham High School, Valley Alternative School, High Tech High School, Mulholland Middle School, Veteran's Administration Hospital, Monroe High School, and Pierce College. Coordination between the site administrator and LADWP shall continue on an as-needed basis while construction is occurring adjacent to these land uses to minimize potential disruption to the land uses.
- **N-12** Construction activities are prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to increased nighttime noise levels.
- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project would cause excessive vibration levels. Vibration levels rarely affect human health. Instead, most people consider vibration

to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of vibration may damage fragile buildings. The peak particle velocity is most frequently used to describe vibration impacts to buildings and is measured in inches per second.

Heavy trucks can generate ground-borne vibrations that vary depending on vehicle type, weight, and pavement conditions. As heavy trucks typically operate on major streets, existing ground-borne vibration in the project vicinity is largely related to heavy truck traffic on the surrounding roadway network. Based on field visits, vibration levels from adjacent roadways are not perceptible along the proposed pipeline alignment.

Construction

Construction activity can result in varying degrees of vibration, depending on the equipment and methods employed. Operation of construction equipment causes vibrations that spread through the ground and diminish in strength with distance. The primary source of operational vibration includes on-site haul trucks. Directional drilling and standard construction equipment (e.g., a large bulldozer) generate vibration levels of approximately 0.089 inches per second at 25 feet. Table 6 presents typical vibration levels for such equipment at 12 to 150 feet. Other equipment used during construction activity such as jackhammers would generate less vibration than presented for drilling or a large bulldozer.

Table 6 Vibration Velocities for Construction Equipment

Equipment						
Distance from Equipment	Peak Particle Velocity					
(feet)	(inches/second)					
12	0.268					
15	0.191					
20	0.124					
25	0.089					
50	0.031					
75	0.017					
100	0.011					
125	0.008					
150	0.006					

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

The Federal Transit Administration has indicated that engineered concrete and masonry buildings can be exposed to vibration levels up to 0.3 inches per second, non-engineered timber and masonry buildings is 0.2 inches per second (typical of residential and institutional buildings), and buildings extremely susceptible to vibration damage is 0.12 inches per second (e.g., historical buildings). In accordance with Federal Transit Administration criteria, vibration is a function of the distance of the receiver from the vibration source (i.e., construction equipment or automobiles). As shown in Table 6, vibration dissipates rapidly with distance. Although the precise pipeline alignment will be determined during the final design process, it is estimated that construction-related building damage could occur when construction equipment would be located within 21 feet of buildings extremely susceptible to vibration damage, 15 feet of residential or institutional

buildings, or 12 feet of commercial buildings. As discussed in Section 1.7, to minimize vibration effects, LADWP would design the final alignment such that construction equipment would not be located within 15 feet of a residential or institutional building, or within 12 feet of a commercial building. Mitigation measure N-13 would be implemented to prevent vibration-related building damage in the event that the final alignment would not avoid locating construction equipment within 21 feet of buildings extremely susceptible to vibration damage. Therefore, with implementation of the mitigation measure, impacts related to construction vibration would be less than significant.

Operation

Following installation of the proposed pipeline, the proposed project would not have an operational component. Therefore, there would be no operational vibration impacts.

Mitigation Measure

Prior to the completion of final design, LADWP shall conduct a survey of N-13 the pipeline alignment to determine if buildings extremely susceptible to vibration damage are located less than 21 feet from the alignment. If identified, LADWP shall design the final pipeline alignment to avoid placing construction equipment within 21 feet of buildings extremely susceptible to vibration damage. In the event that avoidance is not possible, LADWP shall hire qualified structural and geotechnical engineers to review the predicted vibration levels and determine if there are any risks to the building(s). If potential risks are identified, all necessary steps would be taken to protect the building including, but not limited to, photographing and/or videotaping the building in order to provide a record of the existing conditions prior to construction activities. If any visible building damage occurs due to construction vibration activity, LADWP shall be responsible for performing repairs, under the direction of a qualified structural or geotechnical engineer, at the completion of construction.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. A significant impact would occur if the proposed project would cause a substantial permanent increase in noise levels above existing ambient levels. As discussed in Section XII(a) above, operation of the proposed project would create no new permanent sources of noise. Additionally, following installation of the recycled water pipeline, all roadways would be returned to their existing conditions. Operational activities would be the same as current levels. Therefore, the proposed project would not create a substantial permanent increase in noise levels above existing ambient levels. No impact would occur.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project would result in a substantial temporary or

periodic increase in ambient noise levels. Following installation of the recycled water pipeline, all roadways would be returned to their existing conditions. Operational activities would be the same as current levels. Therefore, operation of the proposed project would not result in an increase in ambient noise levels. However, as discussed in Section XII(a) above, construction activities would result in temporary increases in noise levels at the project site. With implementation of mitigation measures N-1 through N-11, construction noise impacts 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 expose people residing or working in the project area to excessive noise levels?

No Impact. A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels from a public airport or public use airport. As the proposed project does not include a residential component, this analysis focuses on construction worker exposure to aircraft noise. The closest airport to the project site is the Van Nuys Airport, located less than one mile west of the VA Hospital segment. The California State Airport Noise Standards Quarterly Report, *First Quarter 2011*, published on May 3, 2012, for the Van Nuys Airport included an Airport Impact Area map that shows the noise contour for Van Nuys Airport and the affected land uses. The noise contour map indicates an annual Community Noise Equivalent Level (CNEL) ranges between 52 to 63 dBA. Airport noise levels would be lower than construction noise levels generated from construction workers operating a hydraulic jack (80 dBA Leq). Therefore, no impacts related to exposing people working in the project area to excessive noise levels from a public airport or public use airport would occur.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels from a private airstrip. The project site is not located within 10 miles of a private airstrip, and noise levels generated at private airports are not audible at the project site. Therefore, no impacts related exposing people residing or working in the project area to excessive noise levels from a private airstrip would occur.

XIII. POPULATION AND HOUSING

Would the project:

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

No Impact. The proposed project does not include construction or operation of any residential or commercial land uses, and therefore, would not result in a direct population increase from construction of new homes or businesses. The proposed project would install recycled water pipelines to serve existing customers in

⁴² CNEL is an average sound level during a 24-hour period. In general, CNEL is within 2-dBA of the L_{eq}.

portions of the San Fernando Valley. Therefore, the proposed project would not result in indirect population growth. No impact to population growth would occur.

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

No Impact. All construction activity would occur in the existing road right-of-way and the roadways would be restored to their original condition following installation of the pipeline. Therefore, the proposed project would not require the removal of existing housing. Implementation of the proposed project would not impact the number or availability of existing housing in the area, and would not necessitate the construction of replacement housing elsewhere. No impact to housing would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. As discussed in Section XIII(b) above, construction would occur within existing roadways. Thus, there are currently no residential uses on the project site and no persons would be displaced as a result of implementation of the proposed project. Construction of replacement housing would not be necessary, and no impact would occur.

XIV. PUBLIC SERVICES

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

i) Fire protection?

Less Than Significant Impact. Fire protection services in the City are provided by the City of Los Angeles Fire Department (LAFD). There are several LAFD Fire Stations serving the project area. As the proposed project would serve existing customers, it would not generate population growth. Furthermore, no new habitable structures would be built as part of the proposed project. Therefore, construction and operation of the proposed project would not require the construction of additional fire protection services or facilities or expansion of existing facilities.

As discussed in Section VIII(h) above, the proposed alignment is not located within any lands designated as Wildfire Hazard Areas or a Fire Buffer Zone. Therefore, construction activities would not occur within an area designated with a substantial fire risk.

Fire protection could be required at the project site in the event of a construction accident. The likelihood of an accident requiring such a response would be low as project construction would not occur in areas of high fire danger. In addition, watering activities associated with dust suppression for disturbed areas would reduce the potential for accidental fire to occur.

Therefore, the service capacity of local fire stations in which accidents could happen would not be adversely affected by the proposed project.

Installation of the proposed pipeline would require temporary lane closures during the construction period, which could affect response times and emergency access. However, it is not anticipated that full roadway closures would be necessary and the operation of existing roadways would be preserved throughout construction. Vehicular access to intersecting streets would be limited during portions of the construction period. However, construction would occur in approximately 90-foot segments and no portion of the roadway would remain closed during the entire construction period. Additionally, it is anticipated that lane closures would be effective and access would be restricted during working hours only and would reopen at the end of each work day. Recessed steel plates would be used to cover any open trenches during non-work hours. Furthermore, LADWP would consult with LAFD regarding construction schedules and worksite traffic control and detour plans. Development of such plans and consultation with LAFD would ensure that impacts related to emergency response and access during construction would be less than significant.

ii) Police protection?

Less Than Significant Impact. The City of Los Angeles Police Department (LAPD) is the local law enforcement agency responsible for providing police protection services in the City. Several LAPD Community Police Stations serve the areas through which the proposed project would pass. As previously stated, the proposed project would not generate population growth. Therefore, construction and operation of the proposed project would not require the construction of additional police protection services or facilities or expansion of existing police facilities.

As discussed in Section XIV(a)(i) above, installation of the proposed pipeline would require temporary lane closures during the construction period, which could have an impact on response times and emergency access. However, full roadway closures are not anticipated and any open trenches would be covered with steel plates during non-work hours. Furthermore, LADWP would consult with LAPD regarding construction schedules and worksite traffic control and detour plans. Development of such plans and consultation with LAPD would ensure that impacts related to emergency response and access during construction would be less than significant.

iii) Schools?

No Impact. The proposed project involves an extension of the recycled water pipeline network in portions of the San Fernando Valley. As the proposed project does not include development of any residential uses, no increase in residential population would occur. Additionally, as the proposed project would serve existing customers, no housing or employment opportunities would be provided by the proposed project. Therefore, no indirect population growth would occur. No new students would be generated, and no increase in demand for local schools would result. No impact to schools would occur.

iv) Parks?

No Impact. Residential developments typically have the greatest potential to result in impacts to parks since these types of developments generate a permanent increase in residential population. As previously stated, the proposed project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand for local and regional park facilities. Therefore, no impact to parks would occur.

v) Other public facilities?

No Impact. The proposed project does not include development of residential or commercial uses and would not increase the demand for other public facilities. The proposed project involves an extension of the recycled water pipeline network in portions of the San Fernando Valley. The proposed project would not result in indirect population growth, which could increase demand for other public facilities. No impact to other public facilities would occur.

XV. RECREATION

Would the project:

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

No Impact. The proposed project involves an extension of the recycled water pipeline network in portions of the San Fernando Valley to serve existing customers. Neither construction nor operation of the proposed project would generate new permanent residents that would increase the use of existing parks and recreational facilities. Therefore, substantial physical deterioration of these facilities would not occur or be accelerated with implementation of the proposed project. No impact would occur.

b) Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project does not include development of any residential uses and, thus, would not generate new permanent residents that would increase the demand for recreational facilities. Further, the proposed project would serve existing customers and would not promote or indirectly induce new development that would require the construction or expansion of recreational facilities. Therefore, no impact would occur.

XVI. TRANSPORTATION/TRAFFIC

Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact with Mitigation Incorporated. This section evaluates the existing and future (cumulative) traffic conditions surrounding each segment of the proposed project and potential impacts to the study roadway segments associated with implementation of the proposed project. A copy of the traffic study by is included as Appendix D of this document.

Construction

Construction of the proposed project would result in temporary, localized increases in traffic volumes associated with construction activities and temporarily reduced roadway capacities during brief periods of time in the area in which construction is occurring. The proposed project would potentially conflict with the City of Los Angeles Mayor's Directive #2, which prohibits construction on major roads during rush hour periods (6:00 a.m. to 9:00 a.m. and 3:30 p.m. to 7:00 p.m.), if construction takes place during these times. As part of the variance to the Directive and to minimize traffic-related impacts during construction, detailed traffic control/handling plans would be prepared and subject to LADOT approval.

No complete street closures are anticipated during project construction. Existing on-street parking areas along the proposed pipeline alignment would be utilized as travel lanes to minimize traffic lane closures during construction, as necessary. Further, each roadway segment would be affected only as construction occurs on that segment, not for the duration of the construction period.

To determine the impacts of peak construction activity on the roadway system, construction generated traffic was added to existing traffic (year 2012), traffic generated by other projects in the surrounding area, and ambient (background) growth in traffic volumes to determine future (year 2022) plus project conditions. Impact thresholds defined by LADOT were not used for the proposed project traffic analysis. These standards define significant impacts to long-term traffic operations. Construction of the proposed project would temporarily constrict roadway capacity in affected segments, as the trench line would be returned to its existing condition and roadway operations fully restored following completion of construction activities. Thus, the impact analysis is based on roadway flow during construction and the generalized application of volume-to-capacity (V/C) calculations and levels of service (LOS). LADOT level of service definitions are provided in Table 7 below.

Table 7 Level of Service Definitions

LOS	V/C	Definition
Α	0.000 - 0.600	Excellent. No vehicle waits longer than one red light and no approach phase is fully used.
В	0.601 – 0.700	Very Good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
С	0.701 – 0.800	Good. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	Fair. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	Poor. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	Greater than 1.000	Failure. Backups from nearby intersections or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: City of Los Angeles Department of Transportation, *Traffic Study Policies & Procedures*, May 2012. Website: http://www.ladot.lacity.org/pdf/pdf223.pdf, accessed July 10, 2012.

The future traffic condition with peak construction traffic generated by the proposed project is shown in Table 8 below.

Table 8 Future With Project Study Conditions – Peak Hour Level of Service (2022)

#	Segment	AM Peak Hour			PM Peak Hour		
		V/C	LOS	Significant Impact?	V/C	LOS	Significant Impact?
	North Hollywood S	Segment					
1	Camarillo Street b/w Cahuenga Boulevard and Vineland Avenue/Lankershim Boulevard	1.227	F	Yes	1.286	F	No
2	Vineland Avenue b/w Camarillo Street and Magnolia Boulevard	0.749	С	No	0.455	Α	No
3	Magnolia Boulevard b/w SR 170 and Colfax Avenue	1.156	F	Yes	0.913	Е	No
	Valley Plaza Park	Segment					
4	Sherman Way b/w Woodman Avenue and Fulton Avenue	1.358	F	Yes	1.152	F	No
5	Sherman Way b/w Coldwater Canyon Avenue and Whitsett Avenue	1.300	F	Yes	1.159	F	No
6	Whitsett Avenue b/w Sherman Way and Vanowen Street	1.162	F	Yes	0.607	В	No
7	Vanowen Street b/w Whitsett Avenue and SR 170	1.509	F	Yes	0.953	Е	No
	Van Nuys Sherman Oaks	Park Seg	ment	1	1	•	1
8	Oxnard Street b/w Kester Avenue and Van Nuys Boulevard	1.318	F	Yes	0.793	С	No
9	Van Nuys Boulevard b/w Clark Street and Weddington Street	1.916	F	Yes	1.130	F	No
10	Burbank Boulevard b/w Hazeltine Avenue and Woodman Avenue	1.821	F	Yes	0.971	Е	No
11	Magnolia Boulevard b/w Van Nuys Boulevard and Hazeltine Avenue	1.812	F	Yes	0.906	Е	Yes
	Reseda Park Se	gment					
12	Victory Boulevard b/w Hayvenhurst Avenue and Balboa Boulevard	1.540	F	Yes	0.804	D	No
13	Victory Boulevard b/w Lindley Avenue and Reseda Boulevard	1.450	F	Yes	0.774	С	No
14	Balboa Boulevard b/w Victory Boulevard and Vanowen Street	1.069	F	Yes	0.863	D	No

Table 8 Future With Project Study Conditions – Peak Hour Level of Service (2022)

#	Segment	AM Peak Hour			PM Peak Hour			
		V/C	LOS	Significant Impact?	V/C	LOS	Significant Impact?	
VA Hospital Segment								
15	Woodley Avenue b/w Sherman Way and Saticoy St	1.890	F	Yes	0.934	Е	No	
16	Roscoe Boulevard b/w Woodley Avenue and Hayvenhurst Avenue	1.526	F	Yes	0.773	С	No	
17	Roscoe Boulevard b/w Woodley Avenue and Haskell Avenue	1.592	F	Yes	0.831	D	No	
18	Haskell Avenue b/w Roscoe Boulevard and Parthenia Street	0.633	F	No	0.263	Α	No	
19	Haskell Avenue b/w Nordoff Street and Plummer St	1.167	F	Yes	0.396	Α	No	
Pierce College Segment								
20	Victory Boulevard b/w Reseda Boulevard and Wilbur Avenue	2.549	F	Yes	1.123	F	No	
21	Victory Boulevard b/w Winnetka Avenue and Mason Street/Stadium Way	1.324	F	Yes	0.791	С	No	

Source: KOA Corporation, 2012.

As shown in Table 8, the construction impacts to traffic would be significant but temporary. Implementation of mitigation measures TR-1 and TR-2 are required to reduce the impact to a less than significant level.

Mitigation Measures

- TR-1 LADWP, prior to the start of construction, shall coordinate with LADOT to prepare a Traffic Management Plan (TMP). The TMP shall be prepared by a registered traffic or civil engineer, as appropriate, based on City of Los Angeles permit guidelines. The TMP shall consist of traffic control plans showing striping changes, and a traffic signal plan for any signalized intersections indicating modifications to existing traffic signals and associated controllers to be adjusted during the construction phase. Methods to inform the public regarding project construction and roadway detours and closures shall be implemented as part of the TMP. Additional measures to be incorporated into the TMP to improve traffic flow shall include the following:
 - a. Directional capacity (generally southbound/westbound in the morning peak hour and northbound/eastbound in the evening peak hour) shall be considered in roadway closure planning where work area placement is flexible. The provision of the original one-way capacity of the affected roadway (in number of travel lanes) in the peak direction, while providing a reduced number of travel lanes for the opposite direction of traffic flow, shall be used to alleviate any potential poor level of service conditions.
 - Left-turn lanes and other approach lanes (as feasible) shall be maintained in close vicinity to major intersections along the proposed pipeline routes.
 - c. Considerations for maintained access to adjacent residential driveways, as feasible, shall be incorporated into the construction planning process.
 - d. Provide continued through access via detours for vehicles and to provide for adequate pedestrian and transit circulation. Signed detour routes and other potential routes that drivers would utilize during the construction period would become alternate routes for a proportion of the vehicles that would otherwise travel along the corridor where construction would be taking place.
 - e. For the project detour routes, wayfinding signs and other relevant traffic control devices shall be placed on all major roadways into the larger area around each construction closure locations, and shall be repositioned for each construction segment (as the construction zones progress along the proposed project alignment). Wayfinding signs shall be placed at major detour decision points to keep vehicles on-track through the detour route, and shall also be placed at the next major intersection location in advance of the first detour decision point.
 - f. Consult with local transit agencies to minimize impacts to passenger loading areas and to minimize travel times on scheduled transit routes.

All affected transit agencies shall be contacted to provide for any required modifications or temporary relocation of transit facilities.

TR-2 LADWP shall consult with Caltrans to obtain permits for the transport of oversized loads, and to obtain encroachment permits for any work along State facilities.

Operation

Operation of the proposed project would not cause any increase in traffic in relation to the existing traffic load and capacity of the street system. Following completion of construction, the proposed project would not generate additional traffic. Therefore, the proposed project would not result in permanent impacts to traffic.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. Project-related traffic impacts would occur during construction activities only. No traffic impacts would occur during operation of the proposed project. The County of Los Angeles Congestion Management Program level of significance thresholds are not intended to be applied to construction activities. As such, the proposed project would not exceed the significant impact thresholds defined by the County's Congestion Management Program. The proposed project would not generate any new measurable and regular vehicle trips during project operation, and no impact would occur.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project would not result in a change in air traffic patterns. Construction and operation of the proposed project would not generate air traffic. Further, the proposed project would not include any high-rise structures that could act as a hazard to aircraft navigation. No impact would occur.

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

No Impact. The proposed project would be constructed within existing roadways. No design changes to the existing roadways or use of roadways would occur. Therefore, no impact related to an increase in hazards due to a design feature or incompatible uses would occur.

e) Result in inadequate emergency access?

Less Than Significant Impact. Installation of the proposed pipeline would require temporary lane closures during the construction period, which could have an effect on emergency access. Additionally, emergency services may be needed at a location where access is temporarily blocked by the construction zone. However, it is not anticipated that full roadway closures would be necessary and the operation of existing roadways would be preserved throughout construction. Vehicular access to intersecting streets would be limited during portions of the construction

period. However, construction would occur in approximately 90-foot segments per day and no portion of the roadway would remain closed during the entire construction period. Additionally, it is anticipated that lane closures would be effective and access would be restricted during working hours only and would reopen at the end of each work day. Recessed steel plates would be used to cover any open trenches during non-work hours. Furthermore, LADWP would consult with emergency service providers (e.g., LAPD, LAFD, etc.) regarding construction schedules and worksite traffic control and detour plans. Development of such plans and consultation with emergency service providers would ensure that impacts related to emergency response and access during construction would be less than significant.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact with Mitigation Incorporated. Construction activities would require the closure of one or two travel lanes and may result in left-turn restrictions. Construction activities are also anticipated to temporarily affect public transit, bicycle, or pedestrian facilities.

Public transportation may be affected as a result of construction because project construction activities may require the use of existing bus stop curb lane areas. To the extent practicable, temporary bus stop closures would be accommodated with replacement bus stops outside the immediate work area. These temporary closures, however, would need to be located along wide portions of the roadway where the maximum number of travel lanes can be accommodated during construction.

Woodley Avenue currently contains bike lanes along the portion of the proposed pipeline alignment to the VA Hospital. Additionally, the City of Los Angeles 2010 Bike Plan proposes bikeways along the following routes near the proposed pipeline alignment: Camarillo Street within the North Hollywood Park segment; Sherman Way within the Valley Plaza Park segment; Van Nuys Boulevard within the Van Nuys Sherman Oaks Park segment; Roscoe Boulevard along the VA Hospital segment; and Balboa Boulevard and Lindley Avenue along the Reseda Park segment. If bikeways are provided prior to project construction, it is likely that the proposed project would include the closure of these lanes. As a result, construction activities would potentially create unsafe conditions for bicyclists under restricted capacity conditions. Therefore, these particular bicycle routes would be closed temporarily. To notify the public, signs would be posted at the next major intersections to the north and south of the construction area (see mitigation measure TR-1 above). Development of a TMP and detour plan would minimize impacts. With implementation of mitigation measure TR-1, impacts to bicycle facilities would be less than significant.

No impacts to public transit, bicycle, or pedestrian facilities would occur during project operation.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. The proposed project involves extension of the recycled water pipeline network within portions of the San Fernando Valley. As discussed above, a SWPPP and erosion control plan would be prepared for the proposed project that would specify appropriate BMPs to control runoff from the project site during construction. Additionally, any wastewater discharged by the proposed project must comply with National Pollutant Discharge Elimination System requirements. Construction activities would comply with all applicable wastewater treatment requirements of the Regional Water Quality Control Board. The construction impact would be less than significant.

During project operation, the proposed recycled water pipeline would be located entirely below ground. There would be no waste discharged. No impact to the wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board would occur.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project involves the extension of the recycled water pipeline network within portions of the San Fernando Valley. These improvements would not increase the amount of water used or wastewater generated at the project site, and the proposed project would serve existing customers in the City. Thus, no new or expanded water or wastewater treatment facilities would be required due to implementation of the proposed project. No impact would occur.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The proposed project involves the extension of the recycled water pipeline network within portions of the San Fernando Valley. As discussed in Section IX(e) above, all drainage flows would be routed through existing storm water infrastructure serving the project site and surrounding area. Additionally, following construction of the proposed project, all roadways would be returned to their existing conditions. Following construction, storm water flows would be similar to the current condition. Therefore, the proposed project would not require or result in the construction or expansion of storm water drainage facilities. The impact would be less than significant.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. High water demand is typically associated with residences, hotels, and large offices.⁴³ The proposed project would provide recycled water to known

⁴³ City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 2002.

customers located within a portion of the San Fernando Valley in lieu of potable water supplies. Therefore, additional water supplies would not be needed and the proposed project would have the beneficial impact of offsetting a portion of the City's potable water demand. No impact would occur.

e) 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. As discussed in Section XVII(d) above, the recycled water pipelines would reduce the potable water demand and usage at the identified customers for irrigation and industrial uses. Therefore, no additional demand for wastewater treatment would be created. No impact to wastewater treatment capacity would occur.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. Construction activities would generate construction waste, such as demolition debris. As discussed in Section 1.7, proposed project construction would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the Citywide Construction and Demolition Debris Recycling Ordinance. These measures would minimize the amount of construction debris generated by the proposed project that would need to be disposed of in an area landfill. Any non-recyclable construction waste generated would be disposed of at a landfill approved to accept such materials. The proposed project would not have an operational component. As such, no solid waste would be generated during project operation. The impact would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. As discussed in Section XVII(f) above, construction debris would be recycled or disposed of according to local and regional standards. All materials would be handled and disposed of in accordance with existing local, state, and federal regulations. Compliance with existing regulations would ensure a less than significant impact.

XVIII.MANDATORY FINDINGS OF SIGNIFICANCE

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

Less Than Significant Impact With Mitigation Incorporated. The proposed project would be constructed entirely within existing roadways. No vegetation

removal would occur, including sensitive vegetation communities or sensitive plant species. No impact to biological resources would occur.

As discussed in Section V(a) above, no historical resources are located within the proposed project alignment; therefore, no impacts related to such resources would occur. However, as discussed in Section V(b), it is possible that buried or otherwise obscured archaeological resources may be present within the North Hollywood Park, Van Nuys Sherman Oaks Park, and VA Hospital segments. As such, construction activities, including trenching, could affect previously undiscovered archaeological resources, including Native American cultural resources, within these segments. Therefore, the implementation of mitigation measure CR-1 would be required to minimize impacts to archaeological resources. With implementation of mitigation measure CR-1, impacts to archaeological resources would be less than significant.

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

Less Than Significant Impact with Mitigation Incorporated. As discussed in Section III(c) above, the proposed project is located within the Los Angeles County portion of the South Coast Air Basin, which is designated a non-attainment area for O_3 , PM_{10} , and $PM_{2.5}$. In order to maintain attainment status of the South Coast Air Basin and comply with the State Implementation Plan, the SCAQMD has developed project-level thresholds of significance for criteria pollutants. The proposed project would not generate regional construction emissions in excess of the SCAQMD thresholds. Therefore, no cumulatively considerable impact would occur during construction. The proposed project does not include an operational component. Therefore, no cumulatively considerable air quality impact would occur during operations.

As discussed in Section VII(a) above, GHG emissions contribute to the global condition known as the greenhouse effect. Because this issue is by its very nature cumulative, CARB established a threshold of significance and climate reduction strategies. The proposed project would generate short-term emissions of GHGs during construction. However, these emissions would be far less than the thresholds of significance. The cumulative impact would be less than significant.

As discussed in Sections XII(c) and XII(d) above, the proposed project would not have an operational component. Project operations would be the same as existing conditions. Therefore, there would be no permanent or temporary increase in ambient noise levels, and the proposed project would not result in a cumulatively considerable noise impact.

As discussed in Section XVI(a) above, the cumulative traffic analysis considered the addition of background traffic growth and other proposed projects combined with project construction traffic. Construction activities would result in significant impacts on project area roadways. These impacts would be reduced to a less than significant level with implementation of mitigation measures TR-1 and TR-2.

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

Less Than Significant Impact with Mitigation Incorporated. As discussed in Section XVI(f) above, construction activities would potentially result in temporary sidewalk and bicycle lane closures and the temporary relocation of bus stops. These activities could pose a hazard to human beings during construction. Therefore, implementation of mitigation measure TR-1 is required to reduce the impact to a less than significant level.



SECTION 4.0 LIST OF PREPARERS

LEAD AGENCY

Los Angeles Department of Water & Power 111 N. Hope Street, Room 1044 Los Angeles, CA 90012

PREPARED BY

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

Charles C. Holloway, Manager of Environmental Planning and Assessment Irene Paul, Environmental Project Manager

TECHNICAL ASSISTANCE PROVIDED BY

Melissa Hatcher, Project Director (AECOM) Shannon Ledet, Project Manager (AECOM) Cristina Lowery, Environmental Analyst (AECOM) Sara Dietler, Archaeologist (AECOM) Heather Gibson, Historic Archaeologist (AECOM) Trina Meiser, Architectural Historian (AECOM) Linda Kry, Archaeologist (AECOM)

James Wallace, Archaeologist (AECOM) Adela Amaral, Archaeologist (AECOM)

Donna Germann, Biologist (AECOM)

Tim Harris, GIS/Graphic Specialist (AECOM)

Sam Silverman, Senior Environmental Scientist (Terry A. Hayes Associates)

Annie Ho, Environmental Scientist (Terry A. Hayes Associates)

Brian Marchetti, Senior Transportation Planner (KOA Corporation)

Bruce Chow, Senior Transportation Planner (KOA Corporation)

