Initial Study/Proposed Mitigated Negative Declaration

Hansen Area Water Recycling Project

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

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Contents

Section 1.0 Project Description 1-1
- 1.1 Project Location 1-1
- 1.2 General Setting 1-1
- 1.3 Project Objectives 1-4
- 1.4 Historical Perspective 1-4
- 1.5 Project Description 1-4
- 1.6 Construction Methods 1-5
- 1.7 Construction Schedule 1-9
- 1.8 Land Use Consistency 1-9
- 1.9 Environmental Setting 1-9
- 1.10 Environmental Safeguards 1-9
- 1.11 Required Permits and Approvals 1-9

Section 2.0 Initial Study Checklist 2-1

Section 3.0 Environmental Impacts and Mitigation Measures 3-1
- I. Aesthetics 3-1
- II. Agriculture Resources 3-3
- III. Air Quality 3-4
- IV. Biological Resources 3-16
- V. Cultural Resources 3-19
- VI. Geology and Soils 3-22
- VII. Hazards and Hazardous Materials 3-26
- VIII. Hydrology and Water Quality 3-31
- IX. Land Use and Planning 3-35
- X. Mineral Resources 3-36
- XI. Noise 3-37
- XII. Population and Housing 3-45
- XIII. Public Services 3-46
- XIV. Recreation 3-47
- XV. Transportation/Traffic 3-48
- XVI. Utilities and Service Systems 3-53
- XVII. Mandatory Findings of Significance 3-55

Section 4.0 List of Preparers and References 4-1

List of Figures

Figure 1 Proposed Vicinity Map 1-2
Figure 2 Proposed Alignment 1-3

List of Tables

Table 1 Ambient Air Quality Monitoring Summary, East San Fernando Valley Air Monitoring Station 1999-2001 3-6
Table 2 State and Federal Ambient Air Quality Standards 3-7
Table 3 SCAQMD Air Quality Impact Significance Thresholds 3-8
Table 4 Estimated Air Emissions from Pipeline Construction 3-10
Table 5 Estimated Air Emissions from Booster Pump Station/Storage Tank Construction 3-12
Table 6 Ambient Noise Levels Through the Proposed Project Alignment 3-39
Table 7 Demolition and Construction Equipment Source Noise Levels 3-42

Appendices

Appendix A Air Quality Factors, Assumptions, and Calculations
Appendix B Biological Resources Technical Letter Report
Appendix C Cultural Resources Report
Appendix D EDR Report Map and Summary Sheets

SECTION 1.0

PROJECT DESCRIPTION

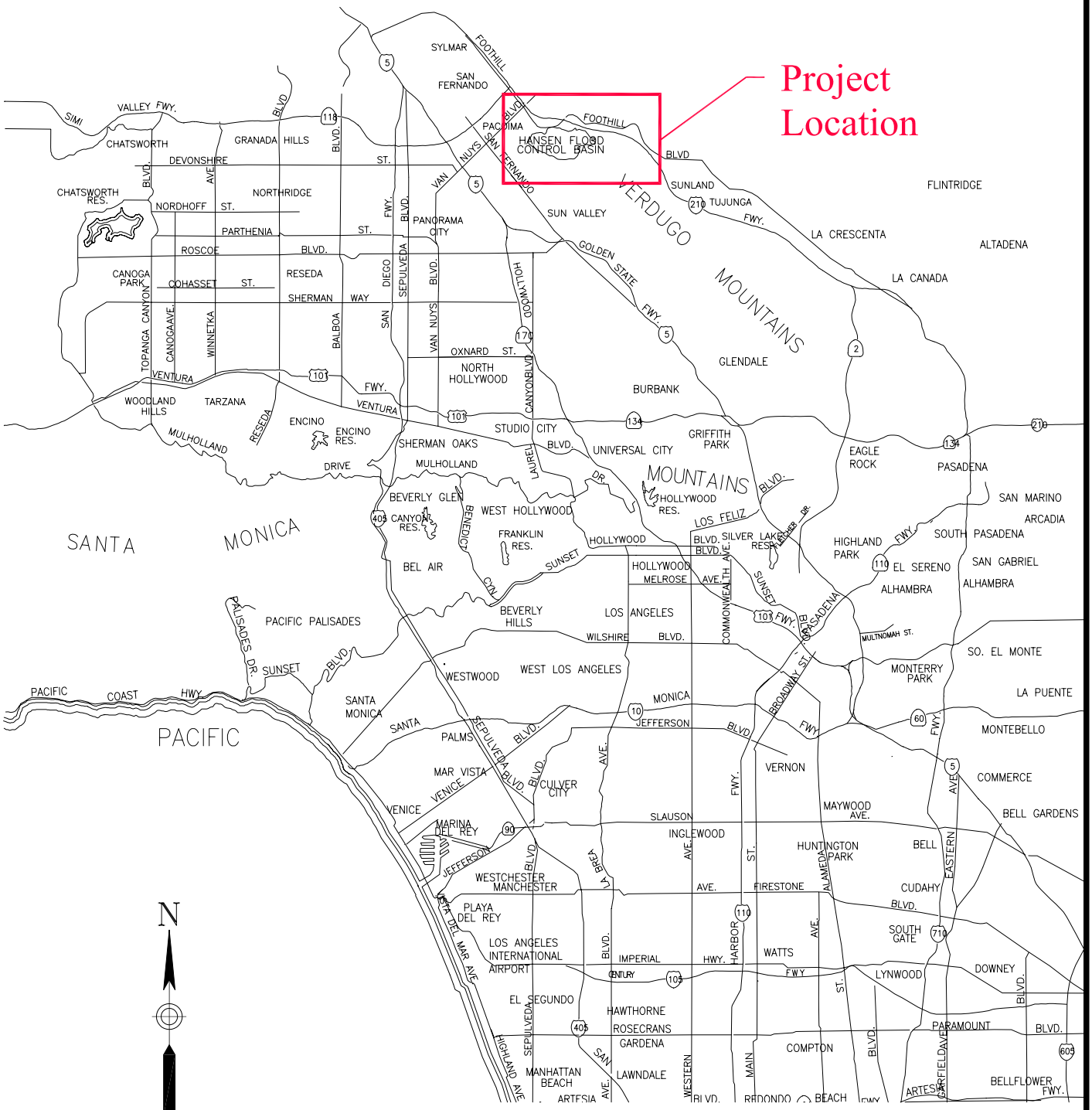
1.1 Project Location

The Los Angeles Department of Water and Power (LADWP) is proposing a new recycled water conveyance pipeline, a booster pump station, and a 1 MG recycled water storage tank, known as the Hansen Area Water Recycling Project (proposed project), which would be located in the Sun Valley, Pacoima, and Lakeview Terrace communities of the City of Los Angeles. The area through which the project is proposed to be constructed is bounded by Interstate 5 (Golden State Freeway) to the southwest, U.S. Highway 118 (Ronald Reagan Freeway) to the northwest, Sheldon Street/Wentworth Street to the southeast, and the Angeles National Forest to the north/northeast (*See Figure 1, Project Vicinity Map*). The alignment of the proposed project, from south to north, is as follows (*See Figure 2, Proposed Alignment)*:

- LADWP Valley Generating Station (VGS) site from the connection to a 7 million gallon (MG) recycled water storage tank and new booster pump station, southeast to Truesdale Street (which is an LADWP service road through the VGS site);
- Northeast along Truesdale Street to its intersection with Glenoaks Boulevard (through LADWP property);
- Glenoaks Boulevard from Truesdale Street northwest to Osborne Street;
- Osborne Street from Glenoaks Boulevard to Foothill Boulevard;
- Foothill Boulevard from Osborne Street to Conover Street; and
- Conover Street (via the Conover fire road/equestrian trail) to the connection to a new 1 MG recycled water storage tank in an open space area just north of the Angeles National Golf Course.

1.2 General Setting

The proposed project is located within an urbanized area in the City of Los Angeles. Land uses in the vicinity of the proposed project are predominantly open space, public facilities, and residential, though limited commercial and industrial uses occur along the proposed alignment. No schools or hospitals occur in close proximity to the approximately 6-mile alignment (i.e., within ½ mile), with the exception of the Lakeview Terrace Special Care Center sanitarium, near the northern terminus of the project alignment.



LOS ANGELES DEPARTMENT OF WATER AND POWER
HANSEN AREA WATER RECYCLING PROJECT

Project Vicinity Map

CDM

Figure 1

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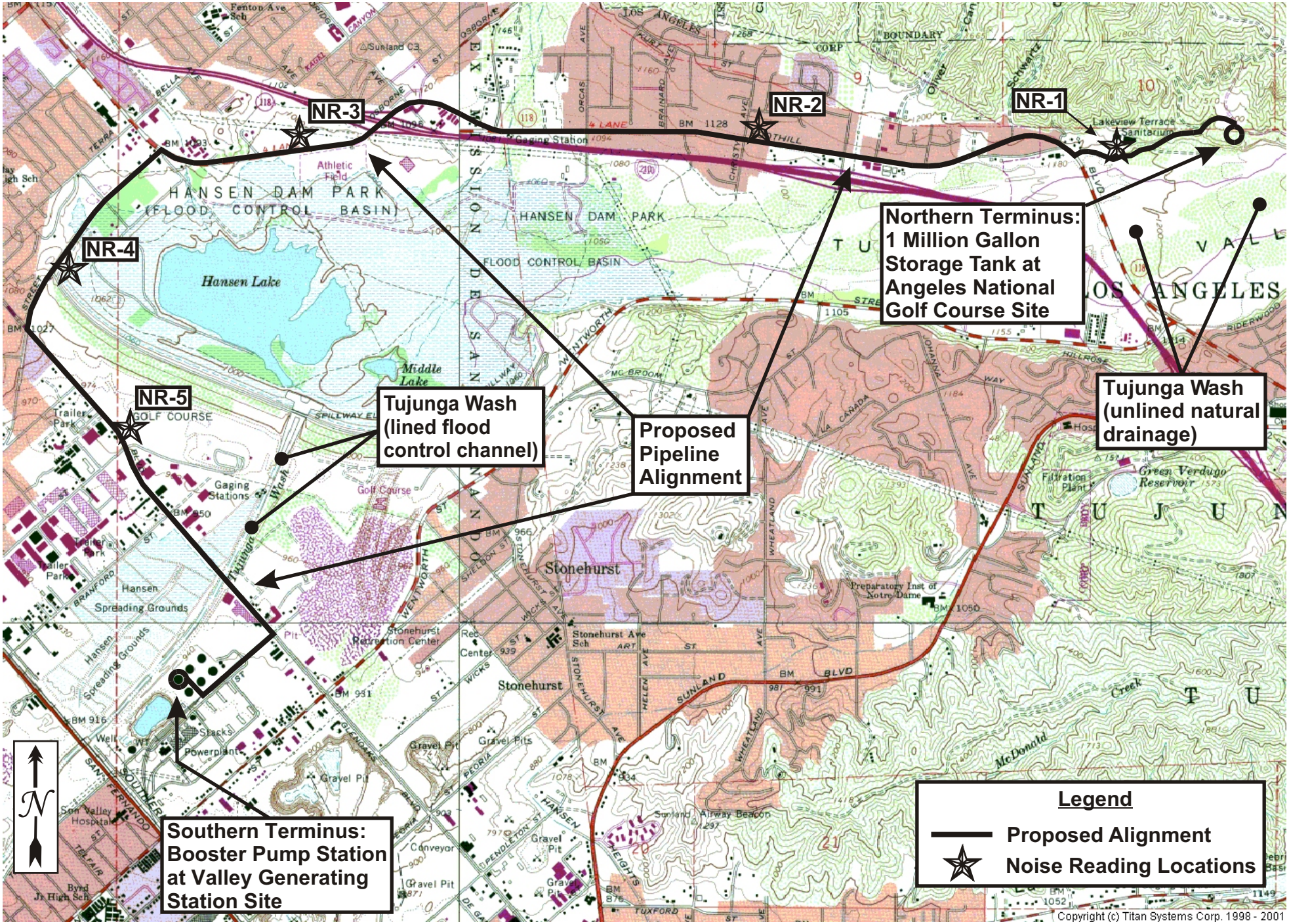

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LOS ANGELES DEPARTMENT OF WATER AND POWER
HANSEN AREA WATER RECYCLING PROJECT

Proposed Alignment

CDM

Figure 2

1.3 Project Objectives

The objectives of the proposed project include the following:

- Improve the reliability of the City's potable water supply through water recycling and conservation programs.
- Utilize reclaimed water generated by the Donald C. Tillman Water Reclamation Plant (TWRP) for irrigation at the Angeles National Golf Course and the Hansen Dam Recreation Area (HDRA).
- Serve as part of an aggressive water recycling program, which may be expanded to serve more areas of the eastern San Fernando Valley.

1.4 Historical Perspective

The LADWP recognizes the need to improve the reliability of the water supply for the City of Los Angeles by increasing the use of recycled water. LADWP has established a goal of meeting increased water demand through aggressive water recycling and conservation programs. The proposed project has been developed to provide an alternative water supply for irrigation uses (and potential future industrial uses). The proposed project is an extension of the East Valley Water Recycling Project (EVWRP), whereby water produced at the TWRP is conveyed to the east side of the San Fernando Valley. Prior to construction of the proposed project, a new 30-inch diameter pipeline connection to the existing EVWRP 54-inch pipeline and new 7 MG recycled water storage tank (located at the LADWP VGS site) would be completed by LADWP.

1.5 Project Description

The proposed project would involve the construction of approximately 26,900 linear feet of 20-inch diameter and 5,000 linear feet of 16-inch diameter ductile iron pipeline (total of about 6 miles), a booster pump station, and a 1 MG recycled water storage tank. Construction of the pipeline components of the proposed project would occur within the LADWP VGS site, along existing street rights-of-way, or within open space areas using the open-trench method, except at busy intersections (e.g., Glenoaks Boulevard at Osborne Street, and Osborne Street at Foothill Boulevard), where the pipeline may be jacked. Construction of the booster pump station would occur entirely within the LADWP VGS site and would not affect any surrounding uses. The 1 MG storage tank would be constructed within an open space area to the north of the Angeles National Golf Course. The proposed pipeline also includes construction of appurtenant structures (e.g., maintenance/access holes, flow meters, valves, and/or vaults). The pipeline, booster pump station, and storage tank would be constructed sequentially, such that only one project component would be under construction at any given time throughout the construction period.

The proposed project would provide recycled water to the Angeles National Golf Course and the HDRA, but is ultimately planned to provide recycled water to new distribution

infrastructure to serve other recycled water customers within the eastern San Fernando Valley.

1.6 Construction Methods

1.6.1 Pipeline Construction

Construction of the pipeline portion of the proposed project would occur at the LADWP VGS site, along existing street rights-of-way, and within open space areas using the open-trench method, except at busy intersections (e.g., Glenoaks Boulevard at Osborne Street and Osborne Street at Foothill Boulevard), where the proposed pipeline may be installed using the jacking method. In sequence, the general process for both methods consists of site preparation, excavation and shoring, pipe (and/or appurtenant structure) installation and backfilling, and street restoration (where applicable). Both construction methods would require an off-site staging area to temporarily store supplies and materials. Possible staging areas identified for the proposed project include: the LADWP VGS facility and vacant parcel(s) south of Interstate 210 at Wheatland Avenue along the north side of the Tujunga Wash (unlined natural drainage).

Open-Trench Excavation

Open-trench excavation is a construction method typically utilized to install pipelines and its appurtenant structures, which include maintenance holes, flow meters, valves, and vaults. In general, the process consists of site preparation, excavation and shoring, pipe installation and backfilling and street restoration (where applicable). Construction usually progresses along the alignment with the maximum length of open trench at one time being approximately 500 feet in length with a work area of up to approximately 2,000 linear feet. The following is a description of the phases of construction for trenching:

Site Preparation. Traffic control plans, where necessary, are first prepared in coordination with the Los Angeles Department of Transportation (LADOT) to detour and delineate the traffic lanes around the work area. The approved plans are then implemented. The existing pavement along the pipeline alignment is then cut with a concrete saw or otherwise broken and then removed using jackhammers, pavement breakers, and loaders. Other similar equipment may be used. The pavement is removed from the project site and recycled, reused as a backfill material, or disposed of at an appropriate facility.

Excavation and Shoring. A trench is excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to some utilities may be manually excavated. The excavated soil may be temporarily stored in single rows adjacent to the trenches, stored at off-site staging areas, or immediately hauled away off-site.

The size of the trench for the proposed 16- and 20-inch diameter pipeline would be approximately 4 feet wide by 500 feet long. In addition, depending on the depth of adjacent substructures along the alignment, the depth of the trench would range from approximately 7 feet to 25 feet below the ground surface**.** As the trench is excavated,

the trench walls are supported, or shored, typically with hydraulic jacks or trench boxes.[1] Steel or wood sheeting between H-beams (e.g., beam and plate) may also be used for shoring. Other similar shoring methods may be utilized. Utilities not relocated prior to trenching are supported as excavation and shoring occurs.

If construction occurs in areas with high groundwater, the groundwater would be removed during the excavation of the trenches, usually by pumping it from the ground through dewatering wells that have been drilled along the alignment. The extracted groundwater would first be treated for any contaminants, if present, before being discharged to the storm drain system under a permit issued by the Regional Water Quality Control Board.

Pipe Installation and Backfilling. Once the trench has been excavated and shored, pipelaying begins. Bedding material (such as sand or slurry) would be placed on the bottom of the trench. Pipe segments would then be lowered into the trench and placed on the bedding. The segments would be connected to one another at the joints. The amount of pipe installed in a single day varies, but is expected to range from 40 to 120 feet per day for the proposed project. Prior to backfilling, appurtenant structures would be installed as necessitated by design. After laying the pipe and securing the joints, the trench is immediately backfilled with native soils, crushed miscellaneous bases, or cement slurry. Not more than 500 feet of trench, or the amount of open trench in one day, is left unbackfilled.

Street Restoration. Any portion of the roadway damaged as a result of construction activities will be repaved and restored in accordance with all applicable City of Los Angeles Department of Public Works standards. Once the pavement has been restored, traffic delineation (restriping) will also be restored.

Jacking Method

Pipe-jacking, which is a form of tunneling, may be the method utilized in the proposed project when open-trenching is not feasible, to avoid large substructure utilities, or to avoid the disruption of busy intersections (e.g., Glenoaks Boulevard at Osborne Street and Osborne Street at Foothill Boulevard). Although the installation of pipelines using jacking techniques avoids the continuous surface disruption common to open-trench construction, some surface disruption is unavoidable because jacking and receiving pits are required and may be located in street rights-of-way.

Pipe-jacking is an operation in which the soil ahead of the steel casing is excavated and brought out through the steel casing barrel while the casing is pushed forward by a horizontal, hydraulic jack which is placed at the rear of the casing. The jacking equipment utilized for this operation is placed in the jacking pit. Once the casing is placed, the pipe is installed inside the casing.

As with open trench excavation, the four primary phases for pipe-jacking are site preparation, excavation and shoring, pipe installation, and site restoration.

[1] Trenches greater than 5 feet deep require shoring to prevent the sides from caving in or collapsing (an OSHA requirement).

Site Preparation. Traffic control plans, where necessary, are first prepared in coordination with the Los Angeles Department of Transportation to detour and delineate the traffic lanes around the work area. The approved plans are then implemented. In preparing to construct the jacking and receiving pits, the pavement is first cut using a concrete saw or pavement breaker. As with open-trench excavation, the pavement is removed from the project site and recycled, reused as a backfill material, or disposed of at an appropriate facility.

Excavation and Shoring. A jacking pit and a receiving pit are generally used for each jacking location, one at each end of the pipe segment. The distance between the pits typically ranges from 250 to 500 feet, but may be longer or shorter depending on site conditions.

For the proposed project, the size of the jacking pit would be approximately 40 feet long, 12 feet wide and 25 feet deep. The size of the receiving pit would be approximately 18 feet long, 10 feet wide, and 25 feet deep. The pits are excavated with backhoes, cranes, and other excavation equipment. The excavated soil is immediately hauled away. As excavation occurs, the pits are shored utilizing a beam and plate shoring system.

Pipe Installation. Once the pits are constructed and shored, a horizontal hydraulic jack is placed at the bottom of the jacking pit. An approximate 30-inch diameter steel casing is lowered into the pit with a crane and placed on the jack. A simple cutting shield is placed in front of the pipe segment to cut through the soil more easily. As the jack pushes the steel casing and cutting shield into the soil, soil is removed from within the leading casing with an auger or boring machine, either by hand or on a conveyor. Once the segment has been pushed into the soil, a new segment is lowered, set in place, and connected to the casing that has been pushed. Installation of the 30-inch diameter steel casing is expected to progress at approximately 20 feet per day. Once the casing has been installed, the 16- and/or 20-inch diameter carrier pipe is then lowered and placed on the jacks, which push the pipe into the steel casing. Installation of the 16- and/or 20-inch diameter pipe is expected to progress at approximately 40 feet per day.

Site Restoration. After completion of the pipe installation along the jacking location, the shoring system is disassembled as the pits are backfilled, the soil compacted and the pavement above replaced. Once the pavement has been restored, traffic delineation (restriping) will also be restored.

1.6.2 Storage Tank Construction

Construction of the 1 MG storage tank at the northern terminus of the proposed alignment would consist of grading/excavation for the new tank, tank construction, and backfilling and site restoration (including landscaping). The new tank would be partially below grade, and would be built using pre-stressed concrete on the slopes just north of the Tujunga Wash (unlined natural drainage) on the Angeles National Golf Course site. Tank construction would include the following activities:

- Construction of new surface water diversion channels to accommodate tank location (construction of formwork and placing of pre-stressed concrete sections);

- Excavation to accommodate tank and related construction activities including excavation for a gradually descending access road (to be backfilled after construction);
- Removal of excavated material;
- Delivery of construction materials;
- Foundation work (drill shafts or other foundation possibly requiring removal of existing material and subsequent compaction);
- Placing of forms and concrete for the foundation;
- Construction of the tank 85 feet in diameter and 25 feet in height (10 feet of this height would be below grade) using pre-stressed concrete sections;
- Backfilling around below-grade portion of completed tank; and
- Site restoration, including landscaping.

Construction of the tank would also include construction of an access road for maintenance access, cut and fill slopes to the south and north of the tank site (to achieve a 2:1 [horizontal to vertical] slope per Los Angeles Building Code), a down slope berm with trees and other landscaping (to help conceal the tank from local views), and surface drainage benches located 25 feet apart to control erosion from surface runoff.

Actual construction methods and activities associated with construction of the storage tank would be developed primarily by the engineer and the contractor consistent with criteria developed jointly by LADWP and the affected community representatives.

1.6.3 Booster Pump Station Construction

Construction of the booster pump station would occur within the bermed area surrounding the existing 7 MG storage tank at the LADWP VGS site. Construction of the booster pump station would include grading, foundation work, trenching for pipeline sections, and construction of the pump station facility. Specifically, booster pump station construction would include the following activities:

- Excavation and removal of excavated materials;
- Delivery of construction materials;
- Foundation work (drill shafts or other foundation requiring removal of existing material and subsequent compaction);
- Construction of forms and placing of main floor concrete below grade;
- Delivery and installation of suction manifold and connection to outlet line;
- Delivery and installation of surge tanks;
- Construction of above-grade structure (mezzanine level, crane, roof, etc.)

- Delivery and installation of equipment (pumps, piping, instruments, ventilation, etc.); and
- Final alignment of access road.

As would be the case with the proposed storage tank, actual construction methods and activities associated with construction of the booster pump station would be developed primarily by the engineer and the contractor consistent with criteria developed jointly by LADWP and the affected community representatives.

1.7 Construction Schedule

If approved, the construction of the proposed project is anticipated to commence in November 2005 and would be completed by May 2008.

1.8 Land Use Consistency

Construction and operation of the proposed project would be consistent with all surrounding land use designations within the project site.

1.9 Environmental Setting

As mentioned previously, the area surrounding the proposed project is characterized by public facilities and open space, as well as residential and limited industrial and commercial development. There are very limited, if any, sensitive natural resources along the majority of the project alignment (i.e., near existing roadways and public facilities), though some sensitive wildlife resources may exist in proximity to some areas near the proposed project, such as the Tujunga Wash Natural Resource Preserve (designated as an Ecologically Important Area in the City of Los Angeles General Plan).

1.10 Environmental Safeguards

To avoid any potential traffic/transportation impacts, construction of the proposed project would be conducted in accordance with the Standard Specifications for Public Works Construction (Greenbook), the City of Los Angeles Work Area Traffic Control Handbook (WATCH), and traffic control plans approved by LADOT, to allow acceptable levels of service, traffic safety, and emergency access for the site vicinity during construction.

1.11 Required Permits and Approvals

Permits and/or necessary approvals may be required from the following agencies for the activities described:

- City of Los Angeles, Department of Transportation – approval for temporary lane closures and traffic/transportation-related issues during construction;
- Federal/California Occupational Safety and Health Administration (OSHA/Cal OSHA) – approval for pipe-jacking operations (with reference to harmful substances in tunnels);

- California Department of Transportation (Caltrans) – encroachment permit for trenching activities near Interstate 210 on- and off-ramps at Foothill Boulevard;
- County of Los Angeles, Department of Public Works – coordination of jacking activities beneath various intersections (utility locations);
- County of Los Angeles, Department of Health Services – coordination of design and construction involving activities that might potentially affect water supplies;
- City of Los Angeles, Department of Public Works, Bureau of Engineering – approval for trench excavation activities within public right-of-way;
- City of Los Angeles, Department of Recreation and Parks – coordination of construction activities within the Hansen Dam Park Flood Control Basin
- United States Army Corps of Engineers – coordination of construction activities within and near the Hansen Dam Park Flood Control Basin (also called the Hansen Dam Recreation Area by the City of Los Angeles Department of Recreation and Parks); and
- Los Angeles Regional Water Quality Control Board – approval for general construction runoff and/or construction dewatering discharges under National Pollutant Discharge Elimination System (NPDES).

SECTION 2.0

INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2003) to determine if the project may have any significant effect on the environment.

A brief explanation is provided for all determinations. A "No Impact" or "Less than Significant Impact" determination is made when the project will not have any impact or will not have a significant effect on the environment for that issue area based on a project-specific analysis.

CEQA ENVIRONMENTAL CHECKLIST FORM AND INITIAL STUDY

Project Title:

Hansen Area Water Recycling Project

Lead Agency Name and Address:

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

Contact Person and Phone Number:

Charles Holloway
Supervisor of Environmental Assessment
Los Angeles Department of Water and Power
(213) 367-0285

Project Location:

Public street rights-of-way, open space areas, and City of Los Angeles Department of Water and Power (LADWP) Valley Generating Station (VGS) property within the Sun Valley, Pacoima, and Lakeview Terrace communities of the City of Los Angeles (see Section 1.1 for details).

Council District:

Districts 2, 6, and 7

Project Sponsor's Name and Address:

Los Angeles Department of Water and Power
Water Resources Business Unit – Water Recycling Group
111 North Hope Street, Room 1315

Los Angeles, CA 90012

General Plan Designation:

The Hansen Area Water Recycling Project (proposed project) would directly affect the following general plan designations: single-family residential, commercial, industrial, public facilities, and open space.

Zoning

The zoning designations vary along the proposed alignment.

Description of Project:

The proposed project would involve the construction of approximately 26,900 linear feet of 20-inch diameter and 5,000 linear feet of 16-inch diameter (about 6 miles) ductile iron pipeline, a booster pump station, and a 1 million gallon (MG) recycled water storage tank. Construction of the pipeline components of the proposed project would occur within the LADWP VGS site, along existing street right-of-way, or within open space areas using the open-trench method, except at busy intersections (e.g., Glenoaks Boulevard at Osborne Street and Osborne Street at Foothill Boulevard), where the pipeline may be jacked. Construction of the booster pump station would occur entirely within the LADWP VGS site and would not affect any surrounding uses. The 1 MG storage tank would be constructed within an open space area north of the Angeles National Golf Course site. The proposed project also includes construction of appurtenant structures (e.g., maintenance/access holes, flow meters, valves, and/or vaults). The proposed project would provide recycled water to the Angeles National Golf Course and the Hansen Dam Recreation Area (HDRA), but is ultimately planned to provide recycled water to new distribution infrastructure to serve other recycled water customers within the eastern San Fernando Valley.

Surrounding Land Uses and Setting:

The proposed project is located within an urbanized area in the City of Los Angeles. Land uses in the vicinity of the proposed project are predominantly open space, single-family residential and public facilities, though limited commercial (near the northern terminus) and industrial (near the southern terminus) uses occur along the proposed alignment. Several existing and proposed schools, and one hospital (i.e., the Lakeview Terrace Special Care Center sanitarium) are located in proximity (i.e., within ½ mile) to the approximately 6-mile alignment.

Agencies that may have an interest in the proposed project:

<u>Responsible/Trustee Agencies</u>

- Federal/California Occupational Safety and Health Administration
- City of Los Angeles Department of Transportation
- Los Angeles Regional Water Quality Control Board
- City of Los Angeles Department of Public Works

- California Department of Transportation
- California Department of Fish and Game

Reviewing Agencies

- United States Army Corps of Engineers
- California Department of Health Services
- County of Los Angeles Department of Health Services
- County of Los Angeles Department of Public Works
- City of Los Angeles Police Department
- City of Los Angeles Department of Recreation and Parks
- City of Los Angeles Fire Department

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, including at least one impact that is a "Potentially Significant Impact" as indicated by the Environmental Checklist below, and discussed in Section 3.0, .

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project may have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Thomas C. Wailor For — 1/22/04

Signature — Date

Charles Holloway
Supervisor of Environmental Assessment
Los Angeles Department of Water and Power

ENVIRONMENTAL CHECKLIST

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
I. 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 RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				**X**
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan [e.g., the South Coast Air Quality Management District (SCAQMD) Plan or Congestion Management Plan]?				**X**

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
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 US Fish and Wildlife Service?				X
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?				X
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)?				X
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?				X

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		
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.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
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?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				X

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. 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?				**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 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?			**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**
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?			**X**	

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
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)?			X	
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?				X
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?				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?			X	
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?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	
IX. 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

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
X. 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?				X
XI. 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?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
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
XII. 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,				X

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
necessitating the construction of replacement housing elsewhere?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIII. PUBLIC SERVICES --				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?			X	
iv) Parks?			X	
v) Other public facilities?			X	
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management			X	

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
agency for designated roads or highways?				
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)?				X
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?			X	
g) Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
XVI. 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 storm water 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 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?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. 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 which will cause substantial adverse effects on human beings, either directly or indirectly?				X

SECTION 3.0

DISCUSSION OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

INTRODUCTION

The following discussion addresses impacts to various environmental resources, per the Initial Study Checklist questions contained in Appendix G of the State CEQA Guidelines, as summarized above in Section 2.0, Initial Study Checklist. In some instances, one response addresses two or more checklist questions.

I. AESTHETICS

Would the project:

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

No Impact. The proposed project is located within an urbanized area surrounded by single- and multi-family residential, industrial, open space, and commercial uses, as well as various public facilities (e.g., power plant, flood control basin/recreation areas, and other drainage infrastructure). No scenic vistas exist within the area of the proposed project; therefore, the construction and operation of the project would not have any effect on scenic vistas. No impacts are expected, and no mitigation is required.

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

No Impact. No scenic resources (including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway) exist along or near the proposed project. Roadways that provide scenic views within the state of California are classified by California Department of Transportation (Caltrans) as officially designated scenic highways.[2] The proposed alignment is not located in the vicinity of a state scenic highway. The closest officially designated state scenic highway to the proposed project is State Route 2, which is located approximately 9 miles southeast of the project at the closest point. Roadways that provide scenic views within and around the City of Los Angeles are classified by the City of Los Angeles as designated scenic highways.[3] The City of Los Angeles has classified two roadway segments within the proposed project vicinity designated scenic highways: Interstate 210 and Wentworth Street. However, the proposed project would not

[2] California Department of Transportation website: *http://www.dot.ca.gov/hq/LandArch/scenic_highways/*. "Officially Designated State Scenic Highways (Los Angeles County)". Updated July 25, 2000.
[3] City of Los Angeles Department of City Planning. *Transportation Element of the General Plan, Map E: Scenic Highways in the City of Los Angeles.* June 1998.

permanently adversely affect views from these roadways, as the proposed project within these areas would be buried below grade. Therefore, no impacts to state scenic highways would result from construction or operation of the proposed project and no mitigation is required.

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

Less Than Significant Impact. The proposed project would involve the construction of approximately 6 miles of underground recycled water pipeline with appurtenant structures, a booster pump station (at the existing LADWP VGS facility), and a 1 MG storage tank north of the Tujunga Wash (unlined natural drainage) on the Angeles National Golf Course site. Visual impacts to the surrounding community would occur temporarily during the construction phase, and only for a maximum of about three months in any one location (within the viewshed of any one residence or business), with the exception of the construction of the storage tank, which would occur for approximately 12 months at the proposed tank site. Because the pipeline would be placed underground, operation of the pipeline would not affect the visual character of the community in the vicinity of the project. Some of the appurtenant structures (such as air vacuum valves and cabinets), the booster pump station, and a large portion of the 1 MG storage tank would be located aboveground. The pipeline appurtenances would be located within the sidewalk portion of the public right-of-way (for on-street segments of the pipeline) or in other open space areas along the proposed alignment, and are necessary for the operation and maintenance of the pipeline. These structures would be placed, as necessary, along the alignment. The booster pump station would be located within the LADWP VGS site, which is a power plant facility that contains various structures similar in appearance and function to the proposed booster pump station (i.e., the power plant currently utilizes booster pumps for boiler feed water). The 1 MG storage tank would be located within an open space area north of Tujunga Wash (unlined natural drainage) on the Angeles National Golf Course property, and would be placed such that impacts to the visual character of the golf course and surrounding property would be minimized (i.e., the storage tank would be mostly buried belowground, and the aboveground portion would be obscured from view by a downslope berm and landscaping, including trees and other vegetation); it is anticipated that such landscaping would reduce or avoid any adverse visual effects of the proposed storage tank. These structures are common elements of the urban environment, and although they may be placed aboveground in proximity to, though not within, roadways designated as scenic highways by the City of Los Angeles General Plan Transportation Element, they are not anticipated to significantly impact the visual character of the surrounding community. Therefore, impacts to the visual character of the surrounding area would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. The pipeline portion of the proposed project would be located below ground along roadways (Local and Secondary Streets and Major Class II Highways) and in open space areas surrounded by a dense mixture of several urban uses, including residential, industrial, and commercial uses and various public facilities. The proposed booster pump station and a portion of the 1 MG storage tank would be located aboveground at the LADWP VGS site, and in an open space area north of Tujunga Wash (unlined natural drainage) on the Angeles National Golf Course property, respectively. External and internal night and day illumination is already in place within the project area, where necessary. The proposed project would involve the construction of a below ground recycled water pipeline and the associated aboveground appurtenant structures, booster pump station, and 1 MG storage tank; the construction phase would be temporary and activities would only occur during daylight hours. However, traffic control and safety measures, such as barriers, reflective signs, and flashing warnings would be implemented, as necessary, and could introduce sources of light and/or glare into the surrounding area, but only on a temporary basis during construction. Operation of the pipeline portion of the proposed project would occur below the ground surface of the existing grade; therefore, no light or glare impacts would occur from pipeline operation. Operation of the pipeline appurtenant structures, the booster pump station, and the storage tank would not create or require new sources of light or glare. No significant impact is anticipated from the construction and operation of the proposed project and no mitigation is required.

II. AGRICULTURE 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?

See item c) below.

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

See item c) below.

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

No Impact. The proposed project would be located in an urbanized area of the City of Los Angeles, which is surrounded by single-family residential, open space, commercial, public facility, industrial uses. No agricultural operations, aside from small-scale greenhouse agriculture, occur in the vicinity of the pipeline portion of the proposed project. Operation of the

proposed pipeline would occur passively below ground along the alignment, operation of the booster pump station would occur within the developed LADWP VGS site, and operation of the 1 MG tank would occur within an open space area north of the Tujunga Wash (unlined natural drainage) on the Angeles National Golf Course property (characterized by native chaparral vegetation); no agricultural operations occur at the LADWP VGS site, the open space area north of the Angeles National Golf Course, or along the proposed pipeline alignment. Construction of the proposed project is not expected to interfere with any agricultural activities. Therefore, there would be no potential for the construction or operation of the project to convert farmland, either directly or indirectly, to non-agricultural use. No piece of land in the surrounding vicinity is zoned specifically for agricultural uses or enrolled in a Williamson Act contract. The construction and operation of the proposed project does not involve changes to the existing environment that could result in the conversion of Farmland to non-agricultural use. No impacts are expected and no mitigation is required.

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)?

No Impact. Within the project area, the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) have responsibility for preparing an Air Quality Management Plan (AQMP),[4] which addresses federal and state Clean Air Act requirements. The AQMP details goals, policies, and programs for improving air quality and establishes thresholds for daily operational emissions. Environmental review of individual projects within the region must demonstrate that daily construction and operational emissions thresholds as established by SCAQMD would not be exceeded, nor would the number or severity of existing air quality violations be increased. The construction and operation of the proposed project is being undertaken to help meet the needs of LADWP for water system operational flexibility and reliability. The implementation of the proposed project would not affect population, housing units, or employment, and would thus be consistent with SCAG's Growth Management Plan. The proposed project would not have an impact on the type, size, or location of transportation infrastructure in the long-term, and would thus be consistent with SCAG's Regional Mobility Plan. The construction and operation of the proposed project is not anticipated to exceed the AQMP's daily emissions thresholds (as discussed in items b) and c) below), and would therefore not conflict with or obstruct implementation of the AQMP. There are no Los Angeles County Metropolitan Transportation Authority (MTA)

[4] The AQMP is developed using SCAG population data, as included in SCAG's Growth Management Plan (GMP) and Regional Mobility Plan (RMP). The AQMP estimates regional air pollutant emissions based on per capita emissions, as determined by historic AQMD air monitoring data. Inasmuch as SCAG population growth data is used to develop the AQMP, GMP and RMP SCAG and SCAQMD base regional traffic, as associated air quality, conditions on per capita impacts.

Congestion Management Plan (CMP) arterial corridors or intersections within or along the proposed project site. No such arteries, intersections, or freeway onramps or offramps would be affected by project construction activities or by operation of the proposed project (see Section XV, Transportation/Traffic, starting on page 3-48, for further discussion of the CMP and related traffic issues). As such, no impacts to the local or regional air quality or congestion management plans would occur, and no mitigation is required.

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

See item c) below.

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 be located in the Los Angeles County sub-area of the South Coast Air Basin (Basin). Los Angeles County is designated as a "non-attainment" area for ozone (O_3), particulates (PM_{10}), carbon monoxide (CO) and a "maintenance" area for oxides of nitrogen (NO_x), which denotes that it had once been a non-attainment area for the pollutant. SCAQMD, the regional agency that regulates stationary sources, maintains an extensive air quality monitoring network to measure criteria pollutant concentrations throughout the Basin. The closest air monitoring station to the project is the East San Fernando Valley Air Monitoring Station, located in the City of Burbank, near the intersection of West Magnolia Boulevard and Interstate 5. The latest air quality data at this station (1999-2001) is summarized in Table 1.

State and federal agencies have set ambient air quality standards for various pollutants. Both California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) have been established to protect the public health and welfare (See Table 2). SCAQMD has prepared the *CEQA Air Quality Handbook* to provide guidance to those who analyze the air quality impacts of proposed projects. Based on Section 182(e) of the Federal Clean Air Act, SCAQMD has set significance thresholds for five criteria pollutants. The SCAQMD significance threshold criteria are shown in Table 3.

Table 1
Ambient Air Quality Monitoring Summary,
East San Fernando Valley Air Monitoring Station 1999-2001

Pollutant/Standard	Number of Days Threshold Were Exceeded at Monitoring Station and Maximum Levels During Such Violations		
	1999	**2000**	**2001**
Ozone			
State 1-Hour ≥ 0.09 ppm	13	16	15
Federal 1-Hour > 0.12 ppm	0	3	2
Federal 8-Hour > 0.08 ppm	3	11	5
Max. 1-Hour Conc. (ppm)	0.12	0.15	0.13
Max. 8-Hour Conc. (ppm)	0.10	0.12	0.10
Carbon Monoxide			
State 1-Hour > 20 ppm	0	0	0
State 8-Hour > 9.0 ppm	0	0	0
Federal 8-Hour > 9.5 ppm	0	0	0
Max 1-Hour Conc. (ppm)	9	8	6
Max. 8-Hour Conc. (ppm)	9.0	6.1	4.9
Nitrogen Dioxide			
State 1-Hour > 0.25 ppm	0	0	0
Max. 1-Hour Conc. (ppm)	0.18	0.17	0.25
Sulfur Dioxide			
State 1-Hour > 0.25 ppm	0	0	0
Max. 1-Hour Conc. (ppm)	0.01	0.01	0.01
Inhalable Particulates (PM10)[b]			
State 24-Hour > 50 µg/m^3	35	23	23
Federal 24-Hour > 150 µg/m^3	0	0	0
Max. 24-Hour Conc. (µg/m^3)	82.0	74.0	86.0
Fine Particulates (PM2.5)[b]			
Federal 24-Hour > 65 µg/m^3	0.9	4.3[a]	3.4
Max. 24-Hour Conc. (µg/m^3)	79.5	84.4[a]	94.7

ppm = parts per million
µg/m^3 = micrograms per cubic meter
NM = Not Measured
[a] Less than 12 full months of data and may not be representative.
[b] Percent of samples exceeding standard.

Source: South Coast Air Quality Management District, Current Air Quality Trends (Tables). http://www.aqmd.gov/smog

Table 2
State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	NAAQS	
			Primary	Secondary
Ozone (O_3)	8-Hour	N/A	0.08 ppm (157 µg/m^3)	Same as Primary
	1-Hour	0.09 ppm (180 µg/m^3)	0.12 ppm (235 µg/m^3)	Same as Primary
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	N/A
	1-Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	N/A
Nitrogen Dioxide (NO_2)	Annual	N/A	0.053 ppm (100 µg/m^3)	Same as Primary
	1-Hour	0.25 ppm (470 µg/m^3)	N/A	N/A
Sulfur Dioxide (SO_2)	Annual	N/A	0.030 ppm (80 µg/m^3)	N/A
	24-Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	N/A
	3-Hour	N/A	N/A	0.5 ppm (1300 µg/m^3)
	1-Hour	0.25 ppm (655 µg/m^3)	N/A	N/A
Respirable Particulate Matter (PM_{10})	AAM	20 µg/m^3	50 µg/m^3	Same as Primary
	24-Hour	50 µg/m^3	150 µg/m^3	Same as Primary
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m^3	15 µg/m^3	Same as Primary
	24-Hour	N/A	65 µg/m^3	Same as Primary
Lead (Pb)	Quarterly	N/A	1.5 µg/m^3	Same as Primary
	Monthly	1.5 µg/m^3	N/A	N/A
Sulfates	24-Hour	25 µg/m^3	N/A	N/A

ppm = parts per million (by volume).
N/A = Not applicable.
µg/m^3 = micrograms per cubic meter.
mg/m^3 = milligrams per cubic meter.
AAM = Annual arithmetic mean.

Source: California Air Resources Board, Ambient Air Quality Standards (California and Federal), Available: http://www.arb.ca.gov/aqs/aaqs2.pdf [September 8, 2003].

Table 3
SCAQMD Air Quality Impact Significance Thresholds

Pollutant	Construction Phase		Operational Phase
Air Pollutant	***(lbs/day)***	***(tons/quarter)***	***(lbs/day)***
Reactive Organic Compounds (ROCs)	75	2.50	55
Carbon Monoxide (CO)	550	24.75	550
Nitrogen Oxides (NO_x)	100	2.50	55
Sulfur Oxides (SO_x)	150	6.75	150
Particulates (PM_{10})	150	6.75	150

Source: SCAQMD, CEQA Air Quality Handbook, 1993

Construction Emissions

The air quality impacts of construction and operations were evaluated using methods recommended in the latest SCAQMD *CEQA Air Quality Handbook* (April 1993). This analysis also used emission factors from the California Air Resources Board EMFAC2002 (Version 2.2) model for mobile source emissions (construction worker commute vehicles, on-site welder's truck and pick-up trucks [light trucks], and heavy diesel truck haul trips). Construction equipment emissions factors were obtained from Table A9-8-A and A9-8-B of the SCAQMD *CEQA Air Quality Handbook*. The following air quality analysis assumes that all proposed project components are constructed sequentially (individually), in order to minimize air quality impacts to the surrounding community. Refer to Appendix A for emissions and load factors, assumptions, and calculations.

Pipeline Construction

Air contaminant emissions would result from the use of construction equipment, construction worker vehicles, and truck haul trips during construction of the pipeline component of the proposed project. Site preparation and construction activities would primarily consist of operation of the following: one excavator, one water truck, one welder's truck, three pick-up trucks, one dump truck, one loader, one backhoe, one crane, one compactor, one paver, and several (24 assumed) construction worker vehicles that would be traveling to and from the proposed project site from the nearest LADWP facility. On a typical workday, workers would travel directly to one of the predetermined staging areas, where they would gather equipment and proceed in work crews to the construction site along the alignment. Additionally, diesel emissions would result from truck trips associated with supply delivery (including pipeline sections and construction equipment), transport of excavated soil from trenching (soil would be transported to the closest appropriate LADWP facility, as is standard LADWP

practice, for reuse or ultimate disposal), and transport of backfill and paving materials to the site. It is assumed that such truck operations would require 6 trucks to travel 20 miles per day, or an equivalent mix of trucks and trips, to a maximum of 120 miles per day.

Project-related construction traffic and operation of diesel equipment would have a temporary effect on air quality in the vicinity of the proposed pipeline alignment. Construction worker vehicles and diesel-powered equipment would emit ROCs, CO, NO_x, SO_x, and PM_{10}. These emissions would increase local concentrations temporarily but would not be expected to increase the frequency of violations of air quality standards.

The air quality emissions calculations for the pipeline component of the proposed project assume 24 employees would drive 20 miles round-trip each day. Under these assumptions, air emissions from worker commutes would not exceed SCAQMD significance threshold criteria. This is due to the fact that these emissions would represent a very small percentage of the total emissions projected to result from pipeline construction activities, with the exception of CO and ROCs. Worker commute emissions for these pollutants would be 7.1 lbs/day of CO (11.5% of total CO daily pipeline construction emissions) and 0.7 lbs/day of ROC (7.0% of total ROC daily pipeline construction emissions). Haul trips associated with soil transport, paving material transport, and equipment/pipeline deliveries would result in a relatively small increase in criteria pollutant emissions for mobile equipment, with the exception of NO_x. Haul trip emissions for NO_x would be 5.5 lbs/day (5.9% of the total daily NO_x pipeline construction emissions). See Table 4 for daily construction emissions totals for the pipeline component of the proposed project (i.e., from stationary [off-road] construction equipment operation, on-site light truck trips, heavy diesel haul truck trips, and worker commutes).

Pipeline construction activities are not anticipated to generate significant amounts of PM_{10}. The emissions estimates in Table 4 for PM_{10} include dust from site preparation activities and from operation of on-site gasoline and diesel construction equipment. The dust generation factor used (assuming worst-case conditions) is 0.42 tons per acre-month, which is recommended by SCAQMD.[5] It is estimated that the pipeline construction activities would emit approximately 5.9 pounds per day of PM_{10} resulting from dust generation. This estimate is based on an LADWP work area 2,000 feet long and 4 feet wide (for 16- and 20-inch pipeline), yielding an exposed area of 8,000 square feet, or approximately 0.184 acre. This dust generation estimate represents approximately 57.2% of the total PM_{10} emissions projected to result from pipeline construction activities, which is 10.4 pounds per day, including gasoline and diesel emissions (see Appendix A for detailed calculations). Although dust generation accounts for a large percentage of PM_{10} emissions,

[5] Midwest Research Institute. *Improvement of Specific Emission Factors (BACM Project No. 1) Final Report, for SCAQMD* (for PM_{10} dust emissions). March 29, 1996.

the daily emissions of this pollutant would be well below SCAQMD significance thresholds, as indicated in Table 4.

Table 4
Estimated Air Emissions From Pipeline Construction

Air Pollutant	Estimated Emissions (lbs/day)	SCAQMD Threshold (lbs/day)
Reactive Organic Compounds (ROCs)	9.58	75
Carbon Monoxide (CO)	62.04	550
Nitrogen Oxides (NO_x)	93.50	100
Sulfur Oxides (SO_x)	7.57	150
Particulates (PM_{10})	10.38*	150

Source: SCAQMD, *CEQA Air Quality Handbook*, April 1993; EMFAC2001.
Notes: *Includes a worst-case dust generation factor of 0.42 tons/acre-month for PM_{10} during site preparation, based on SCAQMD's recommendations for conservative assessment.

Booster Pump Station/Storage Tank Construction

As would be the case with pipeline construction, air contaminant emissions would result from the use of construction equipment, construction worker vehicles, and truck haul trips during booster pump station and storage tank construction. The daily air contaminant emissions resulting from storage tank construction also apply to the construction of the booster pump station, despite the fact that the booster pump station would require substantially less construction activity to complete relative to the storage tank. This is due to the similarity in construction equipment mix for the two components; the storage tank will require approximately the same type and number of pieces of equipment as the booster pump station, but the booster pump station will require considerably less intensive use of equipment and less overall time to complete. As such, the emissions estimates for the booster pump station are considered conservative.

Site preparation and construction activities for the booster pump station and storage tank would primarily consist of operation of the following: one bulldozer, two water trucks, one welder's truck, three pick-up trucks, two dump trucks, one loader, one backhoe, one crane, one compactor, one grader, one concrete mixer, and several (24 assumed) construction worker vehicles that would be traveling to and from the proposed project site from the nearest LADWP facility (the work crew that would construct the pump station and storage tank would follow the same procedures as during pipeline construction activities). Diesel emissions would also result from truck trips associated with supply delivery (including storage tank sections, booster

pump station components, and landscaping materials for storage tank site) and transport of excavated soil from grading for booster pump station and storage tank construction. As is the case for the pipeline component, it is assumed that truck operations would also require, 6 trucks to travel 20 miles per day, or an equivalent mix of trucks and trips, to a maximum of 120 miles per day.

Project-related construction traffic and operation of diesel equipment would have a temporary effect on air quality in the vicinity of the pump station and storage tank sites. Construction worker vehicles and diesel-powered equipment would emit ROCs, CO, NO_x, SO_x, and PM_{10}. These emissions would increase local concentrations temporarily but would not be expected to increase the frequency of violations of air quality standards.

As indicated above, similar to pipeline construction activities, the air quality emissions calculations for the pump station and storage tank assume 24 employees would drive 20 miles round-trip each day. As such, worker commute-related emissions would be essentially the same as those for the pipeline component. Worker commute emissions for CO and ROC, relative to the overall emissions for booster pump and storage tank construction, would be 7.1 lbs/day of CO (11.8% of total CO daily pump station/storage tank construction emissions) and 0.7 lbs/day of ROC (6.2% of total daily ROC pump station/storage tank construction emissions). Haul trips associated with soil transport, storage tank and pump station component transport, and other equipment deliveries would result in a relatively small increase in criteria pollutant emissions for mobile equipment, with the exception of NO_x. Haul trip emissions for NO_x would be 5.5 lbs/day (6.7% of the total daily NO_x pump station/storage tank construction emissions). See Table 5 for daily pump station/storage tank construction emissions totals (i.e., from stationary [off-road] construction equipment operation, on-site light truck trips, heavy diesel haul truck trips, and worker commutes).

It is estimated that the pump station/storage tank construction activities would emit a maximum of approximately 34.1 pounds per day of PM_{10} resulting from dust generation. This estimate is based on an area of disturbance of approximately 46,000 square feet (approximately 1.056 acres), which includes the area for slope improvements, access road, and the tank site itself. This estimate also applies to (and is conservative for) construction of the booster pump station because the pump station, as indicated above, is anticipated to require considerably less area of ground disturbance/soil exposure (i.e., the storage tank would be substantially larger than the booster pump station). This dust generation estimate represents approximately 91.3% of the total PM_{10} emissions projected to result from pump station/storage tank construction activities, which is 37.4 pounds per day, including gasoline and diesel emissions (see Appendix A for detailed calculations). Although dust generation accounts for a large percentage of PM_{10} emissions, the daily emissions of this pollutant would be well below SCAQMD significance thresholds, as indicated in Table 5.

Table 5
Estimated Air Emissions From Booster Pump Station/Storage Tank Construction

Air Pollutant	Estimated Emissions (lbs/day)	SCAQMD Threshold (lbs/day)
Reactive Organic Compounds (ROCs)	10.94	75
Carbon Monoxide (CO)	60.02	550
Nitrogen Oxides (NO_x)	81.81	100
Sulfur Oxides (SO_x)	6.71	150
Particulates (PM_{10})	37.37*	150

Source: SCAQMD, *CEQA Air Quality Handbook*, April 1993; EMFAC2001.
Notes: *Includes a worst-case dust generation factor of 0.42 tons/acre-month for PM_{10} during site preparation, based on SCAQMD's recommendations for conservative assessment.

As indicated in Tables 4 and 5, all criteria pollutants for all project components would be below SCAQMD significance thresholds for construction activities. Furthermore, construction emissions would be short-term in nature, and would be limited only to the time period when construction activity is taking place (i.e., 3 months for pipeline, and up to 12 months for storage tank construction). Additionally, the construction emissions analysis incorporated conservative assumptions. For example, all 24 workers were assumed to drive their own vehicle 20 miles round-trip each workday, daily construction equipment emissions for booster pump station construction were considered to be the same as those for construction of the storage tank, and worst-case conditions for fugitive dust generation were assumed (i.e., high wind conditions with minimal, if any, soil stabilization). As such, construction emissions are not expected to add to long-term air quality degradation. Further, the proposed project would implement standard SCAQMD-approved construction procedures, such as those provided in Tables 11-2 and 11-3 of the *CEQA Air Quality Handbook* (for exhaust emissions), and comply with applicable provisions of the most recently-adopted SCAQMD Rule 403 (Fugitive Dust). Adherence to such procedures and provisions of the SCAQMD are standard practice for any construction project in the South Coast Air Basin (SCAB), and are not project-specific mitigation measures, as project-related construction emissions impacts were found to be less than significant, as discussed above. Procedures listed in Tables 11-2 and 11-3 and the provisions of Rule 403 are summarized as follows:

Mitigation for On-Road Mobile Source Emissions - Construction:

1. Configure construction parking to minimize traffic interference;
2. Provide temporary traffic control during all phases of construction activities to improve traffic flow (e.g., flag person);
3. Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 7:00 p.m. and 6:00 a.m. and between 10:00 a.m. and 3:00 p.m.);
4. Develop a trip reduction plan to achieve a 1.5 average vehicle ridership (AVR) for construction employees;
5. Implement a shuttle service to and from retail services and food establishments during lunch hours;
6. Develop a construction traffic management plan that includes, but is not limited to:
    a. Rerouting construction trucks off congested streets
    b. Consolidating truck deliveries
    c. Providing dedicated turn lanes for movement of construction trucks and equipment on- and off-site
7. Prohibit truck idling in excess of two minutes.

Mitigation for Off-Road Mobile Source Emissions - Construction:

1. Methanol-fueled pile drivers;
2. Suspend use of all construction equipment operations during second stage smog alerts;
3. Prevent trucks from idling longer than two minutes;
4. Use electricity from power poles rather than temporary diesel power generators;
5. Use electricity from power poles rather than temporary gasoline power generators;
6. Use of methanol or natural gas on-site mobile equipment instead of diesel; and
7. Use of propane- or butane-powered on-site mobile equipment instead of gasoline.

Rule 403 Provisions:

1. A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source.
2. A person conducting active operations within the boundaries of the South Coast Air Basin shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation.
3. A person conducting active operations outside the boundaries of the South Coast Air Basin may utilize reasonably available control measures in lieu of best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation.
4. A person shall not cause or allow PM_{10} levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM_{10} monitoring. If sampling is conducted, samplers shall be:
    a. Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM_{10}.
    b. Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.
5. Any person in the South Coast Air Basin shall:
    a. Prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations; or
    b. Take at least one of the actions listed in Table 3 of Rule 403 and:
        i. Prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and
        ii. Remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the

conclusion of each work day when active operations cease.

Based on the above, with implementation of the applicable adopted SCAQMD Rules and procedures, construction-related emissions impacts would not be considered significant and no mitigation is required.

Operation Emissions

Operation of the proposed project (including the pipeline, storage tank, and pump station) would not generate any emissions of criteria pollutants, as it would operate as a closed system and would only store and transport recycled water. As such, no operational air quality impacts would result from the proposed project and no mitigation is required.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The proposed project would, for the most part, not be immediately bordered by sensitive receptors, namely single- and multi-family residences and other pollutant-sensitive uses (e.g., public and private schools and hospitals). Daily construction emissions would be below significance thresholds, as noted above. Furthermore, construction activities would generally occur in one location for a maximum of approximately 3 months for pipeline construction, or up to 12 months for storage tank construction, such that any one sensitive receptor, if present, would be exposed to pollutants from construction activities for a limited period of time (the storage tank site is relatively remote, with very limited populations located within ¼ mile). As such, impacts to sensitive receptors from construction-related air emissions would be less than significant. To further ensure that impacts are less than significant, the measures listed above under item c) would be implemented. The operation of the proposed project would not result in a significant impact to adjacent sensitive receptors, due to the fact that operation of the proposed project would not generate vehicle trips or produce air emissions. No significant impacts are anticipated and no mitigation is required.

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

Less Than Significant Impact. Any odors (e.g., odors from construction vehicle emissions) would be controlled in accordance with SCAQMD Rule 402 (Nuisance Emissions). Other than construction vehicle operation, no activities are anticipated to occur, and no materials or chemicals would be stored on-site, that would have the potential to cause odor impacts during the construction and operation of the proposed project (including the pipeline and any appurtenant structures, the booster pump station, and storage tank). Also, the operation of the proposed project would not include any activity that would create odors. Therefore, no significant odor impacts would occur and no mitigation is required.

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. A search of available literature was conducted to identify special status plants, wildlife, and habitats known to occur in the vicinity of the proposed project by reviewing the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2003), *Federal Register* notices and final rules, a compendia of special status species published by the California Department of Fish and Game (CDFG), the California Natural Diversity Database (CNDDB, 2003) as well as other resources as appropriate (see Appendix B, Biological Resources Technical Memorandum). [6]

This review provided current or historic records of 15 plant species: Nevin's barberry (*Berberis nevinii*), Plummer's mariposa lily (*Calochortus plummerae*), many-stemmed dudleya (*Dudleya multicaulis*), Davidson's bush mallow (*Malacothamnus davidsonii*), Braunton's milk-vetch (*Astrgalus brauntonii*), Southern tarplant (*Centromadia parryi* ssp. *australis*), San Fernando Valley spineflower (*Chorizanthe parryi* ssp *fernandina*), Greata's aster (*Aster greatea*), Parish's brittlescale (*Atriplex parishii*), Lewis's evening primrose (*Camissonia lewisii*), slender-horned spineflower (*Dodecahema leptocerus*), Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*), San Gabriel linanthus (*Linanthus concinnus*), and California orcutt grass (*Ocuttia californica*) and 13 animal species: Santa Ana speckled dace (*Rhinichthys ossulus* ssp. *3*), Santa Ana sucker (*Catostomuis santanae*), arroyo toad (*Bufo californicus*), western spadefoot toad (*Scaphiopus hammondi*), mountain yellow-legged frog (*Rana muscosa*), silvery legless lizard (*Anniella pulchra pulchra*), orange-throated whiptail (*Cnemidophorus hperythrus beldingi*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), southwestern pond turtle (*Clemmys marmorata pallida*), yellow-billed cuckoo (*Coccyzus americanus occidentalis*), California gnatcatcher (*Polioptila californica*), least Bell's vireo (*Vireo bellii pusillus*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) in the vicinity of the project. Not one of these species was observed during surveys, and none are expected to occur due to lack of potentially supporting habitat within the proposed alignment.

No adverse direct or indirect effects from construction and operation of the proposed project are expected and no mitigation is required.

[6] BonTerra Consulting. *Biological Letter Report for the Los Angeles Department of Water and Power Hansen Area Water Reclamation Project (Tujunga Wash Alignment), City of Los Angeles, California*. January 9, 2004

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. The literature search recorded the current or historic presence of 5 sensitive habitats within the project vicinity: California walnut woodland, Southern sycamore alder riparian woodland, Southern cottonwood-willow riparian forest, South coast live oak riparian forest, and Riversidian alluvial fan sage scrub. Riversidian alluvial fan sage scrub was observed within the Tujunga Wash (unlined natural drainage), proximal to the proposed alignment. Nonetheless, the proposed project would not affect any such sensitive habitat, as construction activities near the northern terminus of the alignment would occur at considerable distance from the Tujunga Wash and associated habitat areas. Furthermore, direct impacts to any of these habitats that occur near the proposed alignment would be avoided through limiting the construction footprint to within existing roadway rights-of-way or other disturbed/developed areas (including Conover fire road/equestrian trail near the northern terminus of the proposed alignment). The proposed project would operate as a closed system; therefore, no impacts are anticipated to occur on riparian or other sensitive natural habitats or communities. No adverse direct or indirect effects from construction and operation of the proposed project are expected and no mitigation is required.

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, filing, hydrological interruption, or other means?

No Impact. Though a formal jurisdictional wetland delineation was not conducted in support of the survey effort, the Tujunga Wash (unlined natural drainage) in the project vicinity exhibits function and value typical of jurisdictional waters or wetlands protected by Section 404 of the federal Clean Water Act. No other potential jurisdictional waters or wetlands were identified within or proximal to the proposed project during surveys. As indicated in item b) above, construction and operation of the proposed project would not occur within the bed or bank of jurisdictional waters or wetlands associated with the Tujunga Wash; therefore, no potential impacts to jurisdictional waters or wetland habitat from the proposed project are anticipated and no mitigation is required.

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. The proposed project vicinity and region has been substantially urbanized and/or developed for decades; therefore, with the exception of

Tujunga Wash (unlined natural drainage), virtually all of the viable wildlife movement that historically occurred through the area (e.g., drainages, canyons and ridgelines) has been constrained by existing land uses and development. Tujunga Wash provides some function and limited value as a wildlife movement corridor, while the area immediately behind Hansen Dam provides potential wildlife movement function and value for migratory birds. The proposed project would avoid impacting habitat in Tujunga Wash and Hansen Dam through limiting construction activities to existing city street rights-of-way or other developed/disturbed areas (including the LADWP VGS site and Conover fire road/equestrian trail); as such, the proposed project would be expected to avoid impacting the movement of any native resident or migratory fish or wildlife species, any established native resident or migratory wildlife corridors, or any native wildlife nursery/breeding site in the project area. The proposed project would mostly operate below ground; therefore, it is not anticipated that impacts would occur from the project on movement of native resident or migratory wildlife. No impacts are expected and no mitigation is required.

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

No Impact. It is anticipated that biological and other natural resources protected by local resource protection ordinances and policies in the proposed project vicinity have already been impacted or modified by existing land uses. Since the proposed project is an underground pipeline, booster pump station, and storage tank, any potential conflicts with local ordinances would apply mainly to construction and maintenance of the proposed project components. As discussed above, the proposed project would avoid impacting Tujunga Wash (unlined natural drainage), which is considered Significant Ecological Area No. 24 by Los Angeles County. It is anticipated that implementation of the proposed project within street rights-of-way would result in only temporary removal of landscaping planted along these corridors (where applicable). The proposed project would be operated and maintained consistent with all local policies and ordinances protecting natural resources. The proposed project's avoidance of natural areas would result in the expectation that no impact would occur; therefore, no mitigation would be required.

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. With the exception of Tujunga Wash (i.e., Los Angeles County Significant Ecological Area No. 24), no species or habitats covered within any Habitat Conservation Plans, Critical Habitat Designations, Natural Community Conservation Plans, Significant Ecological Areas, or other approved

conservation plans have been identified within the project vicinity. Similarly, potential "take" or impacts to endangered, threatened, or other special status plants, animals or habitats, are not expected to occur with implementation of the proposed project.

The proposed project is located within a substantially developed urban area. Construction, operation and maintenance activities are expected to be limited to the existing street rights-of-way or other developed/disturbed areas. Any necessary staging or spoil areas are expected to be located within underutilized parcels along the alignment or LADWP property (e.g., LADWP VGS site). Since these potential staging areas are expected to occur within a historically urbanized area that would not support sensitive or special status species or their habitats, no impacts to sensitive biological resources are anticipated. The proposed project is not located within an area affected by or subject to an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan. The proposed project would operate as a closed system; therefore, no impacts are anticipated to occur on the Tujunga Wash unlined natural drainage area. No impacts are expected and no mitigation is required.

V. CULTURAL RESOURCES

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?

No Impact. The proposed project would not cause any adverse change to above-ground historical resources (buildings or structures that are eligible for the National Register of Historic Places or the California Register of Historical Resources). A search of the Historic Property Data File (HPDF),[7] maintained by the State Office of Historic Preservation showed that two structures built in the 1920s are located along the pipeline route on Foothill Boulevard. Both have been evaluated as ineligible for the National Register of Historical Places and the California Register of Historical Resources. No structures would be demolished as a result of the project. In addition, since the project is entirely below-ground, there would be no impacts to the setting of any historical resources. Therefore, no impacts to historical structures are expected and no mitigation is required.

[7] The Historic Property Data File maintains a list of historic resources designated under the National Register of Historic Places, California Register of Historic Resources, State Historic Landmarks, and State Historic Points of Interest.

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

Potentially Significant Unless Mitigation Incorporation. A records search performed at the South Central Coastal Information Center of the California Historical Resources Information System showed that three prehistoric and six historic archaeological sites have been recorded within one half mile of the project (see Appendix C for the Cultural Resources Report). A portion of one of the prehistoric sites, CA-LAN-167, is in the impact area on Foothill Boulevard and has been identified as the Gabrielino village of Tujunga. In addition, structures dating to the nineteenth century (no longer extant) are indicated in this area on the 1900 edition of the USGS Fernando Quad. One of the historic archaeological sites, CA-LAN-2313H is directly adjacent to the pipeline route on the south side of Conover Street. However, it is at the base of a slope below the level of the road. Trenching in the road will not impact the site. No archaeological resources were identified as a result of the field survey. It is possible that significant archaeological resources associated with CA-LAN-167 or with the nineteenth century structures, could be encountered during trenching for pipeline installation. However, with implementation of the following mitigation measure, impacts to archaeological resources would be reduced to a level less than significant.

Mitigation Measure:

M-1 *All trenching along Foothill Boulevard between the eastern boundary of the Lakeview Terrace Recreation Center (where it intersects the north side of Foothill Boulevard) and Brainard Avenue shall be monitored by a qualified archaeologist. In the event archaeological resources are discovered during excavation or construction, activity shall cease until the qualified archaeologist can assess the potential significance of such finds and/or remove the items. If significant, mitigation would consist of avoidance or data recovery.*

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potentially Significant Unless Mitigation Incorporation. A records search and literature review performed by the San Bernardino County Museum show that sediments underlying the Hansen Basin area (i.e., HDRA) consist of the Monterey Formation, the recent alluvium, and the older Pleistocene Alluvium. The Pleistocene Alluvium is found underlying the recent alluvium. The Monterey Formation and the Pleistocene Alluvium have high paleontologic sensitivity. The Monterey Formation has produced numerous Miocene marine vertebrates and invertebrates. The older Pleistocene alluvium has

yielded fossil remains of mastodon, horse, camel, and bison. It is possible that significant paleontologic resources associated with the Monterey Formation or the older Pleistocene alluvium could be encountered during trenching for pipeline installation, and excavation for the booster pump station and storage tank (i.e., fossils may be encountered in areas near the HDRA where Monterey Formation and Pleistocene Alluvium occur). However, with implementation of the following mitigation measure, impacts to paleontological resources would be reduced to a level less than significant.

Mitigation Measure:

M-2 *All trenching in the Monterey Formation and the older Pleistocene Alluvium shall be monitored by a qualified paleontological monitor. In the event paleontologic resources are discovered during excavation or construction, construction activity shall cease until they can be removed by the paleontologist. All recovered specimens shall be prepared to the point of identification and curated in an accredited museum repository. A report of findings will be prepared by the paleontologist and submitted to the Lead Agency.*

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

Potentially Significant Unless Mitigation Incorporation. The proposed project would not impact known cemeteries. However, prehistoric village sites usually have cemeteries. Archaeological site CA-LAN-167, which could be impacted by trenching, may contain burials. However, with implementation of the following mitigation measure, impacts to human remains would be less than significant.

Mitigation Measure:

M-3 *All trenching between along Foothill Boulevard between the eastern boundary of the Lakeview Terrace Recreation Center (where it intersects the north side of Foothill Boulevard) and Brainard Avenue shall be monitored by a qualified archaeologist. In the event human remains are encountered during excavation or construction, activity in the area of the find shall cease, and the County Coroner shall be contacted. The County Coroner shall assess the find, and advise whether the remains are of modern or prehistoric origin. If modern, the Coroner will assume jurisdiction. If prehistoric, the Coroner will contact the Native American Heritage Commission in accord with Section 7050.5 of the Health and Safety Code so that the requirements of Section 5097.98 of the Public Resources Code can be implemented.*

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. Two portions of the proposed project alignment are located within the boundaries of a state-designated Alquist-Priolo Special Study Zone and/or Fault Rupture Study Area.[8] The southern terminus of the proposed project is located immediately adjacent to an Alquist-Priolo Fault Rupture Study Area, and the northern terminus of the alignment passes through an Alquist-Priolo Special Study Zone. The proposed project consists of an underground pipeline, booster pump station, and storage tank, which would serve to store and convey recycled water to various users in the eastern San Fernando Valley, construction and operation of which would not increase risks to people or structures from earthquake activity or fault rupture, since the project would not involve new buildings or populations. The proposed storage tank would be located within a hillside area adjacent to the Tujunga Wash (unlined natural drainage); earthquake fault impacts to the tank could, at worst, result in tank failure, in which case recycled water could be released very rapidly. Under this scenario, the released recycled water would drain into the Tujunga Wash (i.e., the Tujunga Wash is directly downstream of the proposed tank site), which is an unlined flood control drainage channel. No populations or structures are located in the path of such floodwaters, were a release to occur as a result of seismic activity. The construction and operation of the proposed project would therefore not expose people or structures to potential significant adverse effects from the rupture of a known earthquake fault, and no mitigation is required.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Seismic activity at area faults may result in groundshaking at the project site. Seismic hazards from groundshaking are typical for many areas of Southern California. Along the proposed pipeline alignment, the potential for seismic activity would not be greater than for much of the City of Los Angeles. Furthermore, all pipeline structures and elements, the booster pump station, and the storage tank would be constructed to meet all applicable Uniform Building Code and seismic safety standards, including the earthquake-resistant standards

[8] City of Los Angeles Department of City Planning. *City of Los Angeles General Plan, Safety Element. Exhibit A: "Alquist-Priolo Special Study Zones & Fault Rupture Study Areas In the City of Los Angeles."* March 1994.

required by the LADWP Engineering Standards Manual. The fact that the proposed pipeline would be constructed and operated underground minimizes the potential for aboveground impacts, and belowground impacts would be limited to the area surrounding the point of pipe failure to a shallow depth, if failure were to occur. The booster pump station would be constructed and operated entirely within a bermed area adjacent to the existing 7 MG storage tank at the LADWP VGS site. Damage to the booster pump station in the event of strong seismic ground shaking is not anticipated to pose a risk to people or structures, since no people work within the bermed area where the pump station would operate, and the pump station could not foreseeably cause damage to the adjacent 7 MG storage tank. As discussed in item i) above, any damage to the proposed 1 MG storage tank (north of the Tujunga Wash unlined natural drainage) from a seismic event (including strong seismic ground shaking) would not pose a significant risk to people or structures, even if the tank were to fail and all its contents released. Therefore, the proposed project is not expected to increase the risk of exposure of people or structures to strong seismic ground shaking and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Depending on the levels of ground shaking, groundwater conditions, the relative density of soils, and the age of the geologic units in the area, the potential for liquefaction varies throughout the City of Los Angeles. Seismic-related ground failure, including liquefaction, occurs when saturated, granular deposits of low relative density are subject to extreme shaking and, as a result, lose strength or stiffness due to increased pore water pressure. The consequences of liquefaction are typically characterized by settlement or uplift of structures, and an increase in lateral pressure on buried structures. The majority of the proposed alignment is located within a liquefaction hazard area.[9] However, the proposed project components would be constructed to meet all applicable Uniform Building Code and seismic safety standards. Additionally, all trenches (including storage tank excavation) would be backfilled with engineered fill, which meets proper compaction and shear strength requirements, and therefore has little liquefiable potential. The proposed pipeline would operate as an underground structure and portions of the booster pump station and storage tank would operate below-grade; however, due to the application of engineered fill during construction, damage to the pipeline structure and/or underground portions of the booster pump station and storage tank from an increase in lateral pressure is not expected. Additionally, as discussed above, the proposed pipeline, booster pump station, and storage tank would be constructed and operated in compliance with standards required by the LADWP Engineering Standards Manual. As

[9] City of Los Angeles Department of City Planning. *City of Los Angeles General Plan, Safety Element. Exhibit B: "Areas Susceptible to Liquefaction In the City of Los Angeles".* October 1993.

such, seismic ground failure impacts that could expose people or structures (including the proposed project) to risk of substantial adverse effects (e.g., from liquefaction) would be less than significant, and no mitigation is required.

iv) Landslides?

Less Than Significant Impact. The proposed project site, although the northern terminus would be constructed and operated in a designated hillside area, is not located in an area susceptible to landslides.[10] Landslides or mudflows are not anticipated to occur in the general area of the proposed project due to the flatness of the terrain and the fact that the pipeline, booster pump station (the pipeline components of the pump station), and a large portion of the storage tank would be constructed below native grade. The storage tank would be constructed utilizing retaining walls and engineered slopes to minimize the potential for landslide impacts from storage tank construction and operation. Impacts would be less than significant and no mitigation is required.

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

Less Than Significant Impact. The construction and operation of the proposed project would occur along previously disturbed areas, which consist of sections of paved streets, the LADWP VGS facility, and open space areas (e.g., fire roads/equestrian trails and open space north of the Tujunga Wash unlined natural drainage on the Angeles National Golf Course property). During construction, short-term erosion impacts could occur as a result of grading/excavation from construction activities. These exposed soils could potentially cause erosion impacts during windy conditions and from construction vehicles traveling through the site. Precipitation during the storm events could cause the exposed soils to run off into public rights-of-way and/or storm drainage systems. The contractor would be required to develop and implement a plan to control erosion of soil from the site during construction. Because the on-street portions of the proposed project site have been previously excavated, and because the open space portion of the alignment would represent a small proportion of the overall construction project, with implementation of an erosion control plan significant losses of topsoil are not anticipated. The development and implementation of the erosion control plan would keep impacts resulting from construction to less than significant levels, particularly in off-street portions of the alignment. The proposed project would operate as a closed system, and the majority of the project components would operate below grade; therefore, no additional impacts relative to soil erosion or loss of topsoil are expected and no mitigation is required.

[10] City of Los Angeles Department of City Planning. *City of Los Angeles General Plan, Safety Element. Exhibit C: "Landslide Inventory & Hillside Areas In the City of Los Angeles"*. June 1994.

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. The project area, with the exception of the northern terminus (i.e., the hillside open space area north of the Tujunga Wash unlined natural drainage on the Angeles National Golf Course site), is characterized by relatively flat topography. Most of the alignment is located on a geologic unit or soil that is unstable when subject to strong seismic ground shaking (i.e., the majority of the alignment is subject to liquefaction). However, lateral spreading, subsidence, and collapse are not expected to occur along the proposed alignment, because the majority of the route was graded when the streets were originally developed. Additionally, as indicated in item a) above, there is no landslide hazard at the site, and any liquefaction hazards would be minimized or avoided by application of engineered fill, and by compliance with applicable Uniform Building Code and other seismic safety and engineering standards during pipeline, booster pump station, and storage tank design and construction. Therefore, construction and operation of the proposed project are not expected to cause the local geologic units or soils to become unstable, or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and no mitigation is required.

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. The proposed project alignment is located in an urbanized area that is currently developed, and construction activities and operation of project components would occur along previously disturbed street rights-of-way and in open space areas. The shallow soils in the vicinity of the project area are alluvial deposits, mostly Quaternary Alluvium. Such soils can exhibit shrink-swell potential (as is characteristic of expansive soils) when exposed to moisture (e.g., groundwater and/or percolating surface runoff). However, as discussed above, the proposed project would be constructed to meet all applicable Uniform Building Code and seismic safety standards, and would incorporate engineered backfill during construction. No significant impacts are anticipated and no mitigation is required.

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 area does not contain soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. The project area is serviced by a sewer system operated and maintained by the City of Los Angeles Department of Public Works. Construction and operation of the proposed project would not affect any existing, or hinder future, septic tanks or alternative wastewater disposal systems, or the soils that would adequately support those systems.

Therefore, no impacts related to soil compatibility with septic or other alternative wastewater systems would occur and no mitigation is required.

VII. 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?

No Impact. Though construction of the proposed project would involve the excavation and transport of paving materials (e.g., asphalt, concrete, road bed fill materials) that could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, other automotive chemicals), the project does not involve the routine transport, use, or disposal of hazardous materials. All such paving and road bed materials would be transported and disposed of in accordance with applicable codes and regulations. Such transport and disposal is not expected to create a significant hazard to workers or the surrounding community. Operation of the proposed project would involve the storage and conveyance of recycled water, and would not require the use, storage, or disposal of hazardous substances. Therefore, the proposed project would not create impacts related to the routine transport, use, or disposal of hazardous materials, and no mitigation is required.

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. Implementation of the proposed project would not involve the use, storage, or disposal of hazardous substances that could result in an upset and accident condition. Before commencing any excavation, the construction contractor would be required to obtain an "Underground Service Alert Identification Number". To minimize potential damage to any existing utilities, the contractor would not be allowed to excavate until all utility owners are notified, and all substructures are clearly identified. As the proposed project would convey and store recycled water, operation would not create a significant hazard to the public or environment involving the release of hazardous materials (i.e., recycled water is treated and, as such, is not considered hazardous). No reasonably foreseeable upset or accident conditions that could involve the release of hazardous materials into the environment are anticipated during construction or operation. Therefore, no impacts are anticipated and no mitigation is required.

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. As discussed in the Air Quality section (starting on page 3-4), operation of construction equipment would produce air contaminant emissions. None of these emissions are expected to be

generated at levels that are considered hazardous. Construction of the proposed project would also involve the excavation and transport of paving materials (e.g., asphalt, concrete, road bed fill materials) that could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, other automotive chemicals). All such materials would be transported and disposed of in accordance with applicable codes and regulations. Such transport and disposal is not expected to involve acutely hazardous materials, substances or waste. Although several existing and proposed schools are located within one-quarter mile of the proposed project, construction and operation of the proposed project is not anticipated to have an adverse effect on these facilities, since construction activities (as mentioned above) and operation would not involve hazardous emissions or materials. The proposed project would store recycled water at the Angeles National Golf Course, and convey it under pressure along existing public rights-of-way and within open space areas. If there were any emergency condition related to the proposed project, the result would involve the release of recycled water, which poses no immediate health threats; therefore, impacts to schools are anticipated to be less than significant and no mitigation is required.

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. A government records search[11] was conducted for the proposed project alignment that identified hazardous materials sites listed pursuant to Government Code Section 65962.5. The EDR search was designed to meet the government records search requirements of the American Society for Testing and Materials' (ASTM's) Standard Practice for Environmental Site Assessments. A summary of the results of the search is as follows (See Appendix D for a summary of the EDR report, including a map, and an explanation of acronyms):

- **Federal ASTM Standard** – 25 RCRIS Small Quantity Generator, 4 RCRIS Large Quantity Generator, 2 CERCLIS, 1 RCRIS TSD, and 1 CERC-NFRAP site;
- **State ASTM Standard** –24 CA FID UST, 21 HIST UST, 18 Cortese, 13 LUST, 10 UST, 7 CHMIRS, 4 State Landfill, 4 WMUDS/SWAT, 2 VCP, 1 Cal-Sites, and 1 AWP site;
- **Federal ASTM Supplemental** – 34 FINDS and 2 TRIS sites;
- **State or Local ASTM Supplemental** – 63 HAZNET, 8 EMI, 2 CA SLIC, 2 NFE, 2 Los Angeles County HMS, and 1 AST site; and
- **Brownfields Databases** – 2 VCP sites.

[11] Environmental Data Resources, Inc. The EDR Corridor Study Report: Study Area Hansen Area Water Recycling Project, Los Angeles, California 91352. October 2, 2003.

The proposed project alignment contains several utility pipelines under the street surface, none of which transport hazardous materials. Based on the EDR database search, several sites have been identified in the surrounding area that are listed in various databases compiled pursuant to Government Code Section 65962.5. Ten of these sites are located on, or immediately adjacent to, the proposed project alignment (see Appendix D). These sites (Sites 4, 6, 7, 8, 9, 10, 12, 13, 16, and 20 on the EDR map) are listed, for the most part, because they handle small quantities of identified hazardous materials (e.g., automotive repair shops recycling motor oil and handling solvents and other automotive fluids) or operate underground storage tanks (e.g., gas stations).

Seven of these sites (Sites 4, 6, 7, 8, 9, 12, and 13), although located immediately along the proposed alignment, were not listed in the records search as having had releases of hazardous materials, but are listed because they are regulated by applicable agencies for the handling, treatment, storage, and/or disposal of hazardous materials. As such, these seven sites are not discussed in further detail, as they do not have the potential to pose a threat related to releases of hazardous materials (i.e., from proposed project construction activities in proximity to these sites). Three of the ten sites (Sites 10, 16, and 20), however, have had releases of hazardous materials, and the particular events and status of such releases are described as follows:

An underground gasoline storage tank leak was discovered at Site 10 in April 1992, and remedial action (contamination characterization and cleanup) was begun in September 1997. The Los Angeles Regional Water Quality Control Board (RWQCB) is the lead agency overseeing the cleanup process, since groundwater was affected by the contamination. Currently, remedial action is underway, which includes excavation and disposal of contaminated soil. The RWQCB last reviewed the remedial activities in September 2002, and remediation is ongoing.

Site 16 includes several facilities that are listed due to releases of hazardous materials. The Los Angeles County Metropolitan Transit Authority (MTA) facility (formerly the Southern California Rapid Transit District – Division 15 facility) was the site of a gasoline leak from an underground storage tank in April 1984, which affected soil at the site (no groundwater was affected). Nonetheless, the RWQCB required ongoing pollution characterization to ensure that no groundwater is affected, and such characterization is ongoing at the facility. A release of crude oil (i.e., an oil slick) was reported in a storm drain near Site 16 in January 1994, but was contained and cleaned up by the City of Los Angeles Department of Public Works. The cause of crude oil release was not determined, though illegal dumping was suspected. At an industrial facility near Site 16, 2 personnel were contaminated with several (more than 2) unreported hazardous compounds in January 1991. However, the contamination was resolved the same day, and the personnel were successfully decontaminated. At the HR Textron facility near Site 16, poor waste handling procedures were observed by RWQCB staff, which led to

sampling in which petroleum hydrocarbons and volatile organic compounds (VOCs) were discovered at depths of 120 feet below grade. The California Environmental Protection Agency (CalEPA)'s Department of Toxic Substances Control (DTSC) required a health risk assessment in response to the discovery of contamination. In June 1993, based on the risk assessment, DTSC determined that no further action would be required to protect public health. Also at the HR Textron site, a historic release of stoddard solvent (within the last 25-30 years) from a leaking underground storage tank was discovered during concrete repair work. The RWQCB required remediation of the contamination utilizing the vapor extraction method in April 1988, and the case was closed in March 1996. The last facility near Site 16 was the former Ledger Landfill, in which mixed wastes (including hazardous materials) were dumped into the landfill. Two (2) soil sample borings taken at the site indicated that petroleum hydrocarbons and VOCs were present at depths of 120 feet below grade, but it is not clear if this contamination was the result of contamination from the nearby HR Textron facility (discussed above) or from waste dumped at the landfill, since information regarding the two sample borings was very limited. As of January 2001, a DTSC-mandated health risk assessment is ongoing.

The LADWP VGS facility was listed as Site 20, at which releases of petroleum hydrocarbons, polychlorinated biphenyls (PCBs), asbestos, and lead were discovered in shallow soils. Approximately 1,200 tons of contaminated soil were excavated and transported to a disposal facility. The remaining contamination is approximately 125 feet wide by 225 feet long by 7 feet deep. Due to evidence of a release, DTSC recommended a preliminary risk assessment, and currently a remedial action workplan is pending, which is due to be completed by December 2004.

Given that the contamination at these sites was remediated, or is otherwise being addressed, to the satisfaction of the applicable regulatory agencies, or were not considered hazardous enough to require remediation, there exists limited potential of the listed sites immediately adjacent to the alignment to present a risk to human health (to nearby residents/employees or construction workers). Furthermore, all other listed sites (i.e., those sites not specifically addressed above) are located at considerable distance from the proposed alignment, and would not have the potential to affect, or be affected by, proposed project construction activities or operation. Therefore, given the status and location of the sites, it is concluded that the potential for environmental impacts to the proposed project relative to these sites is low. If, during construction or operation of the proposed project, contamination is discovered with the potential to create a significant hazard to the public or the environment, the applicable regulatory agency would be contacted and the appropriate corrective actions undertaken to eliminate the hazard. No significant impacts are anticipated and no mitigation is required.

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

Less Than Significant Impact. Although not located within the boundaries of an airport land use plan, the southern terminus of the proposed alignment is located approximately 1 mile southeast of Whiteman Airpark (a public airport). Nonetheless, construction of the proposed project would not affect airport activities, due to the limited scale and temporary nature of construction activities. Once completed, the proposed pipeline would operate underground in public rights-of-way (e.g., roadways) or open space areas (e.g., fire roads/other areas near Angeles National Golf Course). The proposed booster pump station would be constructed and operated at the LADWP VGS facility, which is characterized by power generation structures and associated equipment that are much greater in height and bulk than the proposed pump station. The proposed storage tank would be located to the north of the Angeles National Golf Course, at considerable distance from the airport. Despite the proximity of the southern terminus of the alignment to Whiteman Airpark, none of the project components would have the potential to interfere with, nor be affected by, airport operations. Therefore, neither construction nor operation of the proposed project would have a significant impact on the nearby airport and no mitigation is required.

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 proposed alignment is not located in the vicinity of a private airstrip. As such, the project would have no potential to affect, or be affected by, private airstrip operations. No impacts to, or from, private airstrips are anticipated and no mitigation is required.

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

No Impact. The proposed project would not impair or physically interfere with an adopted emergency response plan or a local, state, or federal agency's emergency evacuation plan, except for possible short-term periods during construction of the proposed project, when roadway access may be limited in some areas. The on-street construction activities would conform to all City of Los Angeles Department of Transportation (LADOT), Los Angeles Police Department (LAPD), and Los Angeles Fire Department (LAFD) access standards to allow adequate emergency access. The booster pump station would be constructed and operated entirely within the LADWP VGS facility (adjacent to the existing 7 MG storage tank); it is anticipated that the operation of the booster pump station at the VGS site would be incorporated into the existing emergency response/evacuation plan currently in-place for the VGS facility, and would not impair implementation or physically interfere

with the existing plan. The 1 MG storage tank would be located in an open space area north of the Tujunga Wash (unlined natural drainage), and the pipeline would be located underground within public rights-of-way (e.g., roadways). Thus, the pipeline and storage tank would not interfere with any existing emergency response or evacuation plans. No adverse impacts to emergency response or emergency evacuation plans are anticipated and no mitigation is required.

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. Portions of the project site are located within selected wildfire hazard areas, namely City of Los Angeles Fire Buffer Zones and Mountain Fire District areas.[12] However, the proposed project would not involve the placement of people or populated structures within these areas. Furthermore, the structures to be constructed as part of the proposed project (e.g., booster pump station, storage tank, and pipeline appurtenant structures) would not pose a risk of loss, injury, or death that could result from wildland fires, as these structures would store and convey recycled water. As such, construction and operation of the proposed project would not expose any people or structures to a significant risk of loss, injury or death involving wildland fires. Therefore, no impacts are expected and no mitigation is required.

VIII. HYDROLOGY AND WATER QUALITY

Would the project:

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

Less Than Significant Impact. The construction and operation of the proposed project would not generate any wastewater or significantly increase urban runoff into existing storm drains. While dewatering would be unlikely for the majority of construction, due to the shallow depth at which it is planned to be placed, some dewatering may be necessary for jacking under the Tujunga Wash flood control channel (lined portion downstream of Hansen Dam) and/or busy intersections. This would generate minimal quantities of discharge water, which would be pumped into the flood control channel directly, or into existing storm drains nearby. Also, hydrotesting and/or cleaning of the inside of the tank would generate water that would need to be discharged. This discharge water is not expected to contain any contaminants that would cause its release to violate any water quality standards or waste discharge requirements. All dewatering discharges would be carried out in accordance with all applicable requirements of RWQCB. The water that the proposed project would supply would meet all applicable

[12] City of Los Angeles Department of City Planning. *City of Los Angeles General Plan, Safety Element. "Exhibit D: Selected Wildfire Hazard Areas in the City of Los Angeles".* April 1996.

water quality standards. Therefore, no significant impacts to water quality from construction or operation are anticipated and no mitigation is required.

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. During construction, the only groundwater impacts that the proposed project could cause would be from dewatering activities. Groundwater may be encountered during construction, due to the fact that the depths to groundwater in area surrounding the HDRA vary and may be relatively shallow. In the event that groundwater is encountered during construction, dewatering is not expected to occur in quantities that would substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The proposed project would serve to increase the reliability and adaptability of the existing LADWP water supply system, and would not contribute to the depletion of groundwater supplies, interfere substantially with groundwater recharge, or lower the groundwater table. No adverse impacts to groundwater supply or recharge are expected and no mitigation is required.

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?

See item d) below.

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?

No Impact. The proposed project would be constructed along public streets and rights-of-way and through open space areas, and would not permanently alter the drainage pattern of the area. The proposed project would cross the Tujunga Wash flood control channel (concrete-lined channel); however, construction at this location would be carried out using the jacking method. Construction of the proposed project would not alter the course of a stream or river, and an erosion control plan would be developed and implemented for all project components, which would minimize the potential for erosion or siltation on- or off-site. Neither open-trench nor jacking construction methods would substantially increase the rate or amount of surface runoff, or result in flooding on- or off-site. Operation of the proposed project would occur below grade within public rights-of-way and through open space areas, and would

not affect the course of a stream or river. Therefore, no impact is anticipated and no mitigation is required.

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. Dewatering that may be required for jacking would contribute minimal amounts of discharge water. This dewatering discharge water is not expected to be released in substantial quantities and is not expected to exceed the existing or planned capacity of the local stormwater drainage system. Furthermore, as mentioned above, the discharge water is not anticipated to contain significant quantities of contaminants, and would be of limited volume. The proposed project would operate as a closed system that would not create or contribute runoff water. Consequently, impacts to stormwater systems from increased runoff volumes or polluted runoff due to construction and operation of the proposed project would be less than significant and no mitigation is required.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. Potential short-term erosion effects could occur during site excavation and construction activities associated with the proposed pipeline, booster pump station, and 1 MG storage tank that could affect surface water quality with runoff. Due to the linear nature of the area of the proposed pipeline and limited area of ground disturbance associated with its construction, this effect is expected to be minimal. Construction of the proposed booster pump station would require limited excavation, and construction activities would occur entirely within a bermed area immediately adjacent to the existing 7 MG storage tank at the LADWP VGS facility. Given the limited area of ground disturbance, and the fact that booster pump station construction would occur within a contained (bermed) area, impacts to water quality from construction-related runoff are expected to be minimal. Construction activities associated with the proposed storage tank would result in a substantially larger area of disturbed soil (i.e., approximately 1 acre) for a period of approximately 12 months. However, as would be the case with the pipeline and booster pump station components, an erosion control plan would be developed and implemented during construction activities that would minimize transport of soil materials off-site. On-site soils would be stabilized and drainage structures (temporary and permanent) would be constructed, as applicable, to control the flow of runoff and minimize the potential for erosion. If dewatering is necessary during construction, the water would be treated, as necessary, and discharged into the nearby storm drain system or flood control channel. Operation of the proposed project would be a closed system and therefore not substantially degrade or affect water quality. All construction and operational activities that would potentially affect water quality will be performed under all applicable rules, regulations and standards (e.g., Clean Water Act, California Water Code, and Basin Plan for the Los Angeles

Region). A less than significant impact is anticipated relative to water quality and no mitigation is required.

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?

See item i) below.

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

See item i) below.

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?

Less Than Significant Impact. The construction and operation of the proposed project would not involve the placement of people or structures (including housing) within a 100-year flood hazard area, or impede or redirect flood flows. Although portions of the project alignment traverse 100-year flood zones,[13] construction activities near such areas would not interfere with the movement of water (i.e., pipeline would be jacked), and operation of the proposed pipeline would occur passively below grade. The proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding. In the event the pipeline fails, safety valves throughout the water distribution system may be shut off (as deemed necessary by LADWP) in response to a loss of pressure and to isolate the break. The volume of recycled water released in such an event would be limited to the amount of water contained in the section of pipeline between the shut-off valves, which is not expected to yield enough water to pose a threat to life or property. As discussed previously, any event involving rupture or failure of the proposed storage tank would result in a worst-case scenario of all the contents of the tank (when full) being released suddenly. During such an event, all 1 million gallons of recycled water would be released and would flow downgradient into the Tujunga Wash (unlined natural drainage), located immediately adjacent to, and downhill from, the proposed storage tank site. Because the Tujunga Wash is a large-capacity, unlined flood control drainage channel, the volume of water released from the tank under this scenario is not expected to cause flooding such that a significant risk of loss, injury or death would result. Therefore, flooding impacts are expected to be less than significant and no mitigation is required.

j) Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. The proposed project is not subject to seiche- or tsunami-related inundation as it is not located within the range of a

[13] City of Los Angeles, *General Plan Safety Element Exhibit F: "100-Year & 500-Year Floodplains In the City of Los Angeles".* March 1994.

seiche hazard zone or tsunami hazard zone.[14] However, given the proximity of the northern terminus (i.e., storage tank location) to the Tujunga Wash (unlined natural drainage) and its location on a hillside area, there may be some potential for mudflows during storm events. Nonetheless, given that the storage tank and pipeline segments in this area would be designed and constructed to meet applicable building codes and would incorporate stormwater drainage infrastructure, the potential for impacts to the tank and/or pipeline from mudflows is expected to be very low. Therefore, the potential impact on or to the proposed project, during either construction or operation, from inundation by seiche, tsunami, or mudflow would be less than significant, and no mitigation is required.

IX. LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. Construction impacts from the proposed project would be short-term and would occur entirely within street rights-of-way, the LADWP VGS facility, and open space areas near the Angeles National Golf Course. The construction would not transverse any established communities, and the proposed project would operate passively as a closed system within the aforementioned areas; therefore, it would not physically divide any community. No impacts are expected and no mitigation is required.

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. Construction and operation of the proposed project would occur within public rights-of-way and open space areas, and the majority of project components would be buried underground. The aboveground portions of the project would be located either within the LADWP VGS facility (an industrial site) or within a relatively remote open space area (i.e., at a substantial distance from other land uses). Thus, the project is not anticipated to affect any land uses along or near the proposed alignment, or conflict with any General Plan designations or zoning ordinances. No impacts are expected and no mitigation is required.

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

No Impact. The proposed alignment is not located within an area subject to a habitat conservation plan or natural community conservation plan. The booster pump station would be located entirely within the LADWP VGS facility

[14] City of Los Angeles, *General Plan Safety Element Exhibit G: "Inundation & Tsunami Hazard Areas In the City of Los Angeles."* March 1994.

(an industrial site), and the majority of the pipeline alignment would be located within existing streets. The northern terminus of the proposed alignment traverses near the northern boundary of a designated City of Los Angeles Natural Resource Preserve (i.e., the Tujunga Wash, considered an "Ecologically Important Area") along an existing fire road/equestrian trail; however, the construction of the pipeline and storage tank in this area is not anticipated to adversely affect the preserve area, as construction activities would occur well outside the Preserve boundaries. Furthermore, operation of the pipeline and tank in this area would occur passively as a closed system, and would not have the potential to adversely affect the preserve or conflict with any applicable conservation plans. Therefore, the construction and operation of the proposed project would not conflict with, or adversely impact, any habitat or natural community conservation plans, and no mitigation is required.

X. 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?

Less Than Significant Impact. Development of the proposed project would involve the use of construction materials, which include negligible quantities of non-renewable resources. Construction of the proposed project would follow industry standards and would not use non-renewable resources in a wasteful or inefficient manner. Although the proposed project is located within the vicinity of a Significant Mineral Aggregate Resources Area as designated by the State of California Department of Conservation (i.e., the Sun Valley Production Area), construction of the proposed booster pump station, storage tank, and pipeline would not affect mineral mining operations. Therefore, the proposed project would not result in the loss of availability of any mineral resource that would be of value to the region and the residents of the state. Once constructed, the proposed project would not affect known mineral resources, due to the passive nature of its operation. Impacts to known mineral resources (i.e., aggregate resources and/or petroleum fuels) from construction and operation of the proposed project are expected to be less than significant and no mitigation is required.

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 proposed project is located in an area designated as containing locally important mineral resources.[15] However, construction and operation of the proposed booster pump station, storage tank, and pipeline

[15] City of Los Angeles Department of City Planning. *Los Angeles Citywide General Plan Framework Draft Environmental Impact Report*. January 1995.

would not prevent, or otherwise restrict, access to any such mineral resources in the project vicinity. Therefore, the construction and operation of the proposed project would not result in the loss of availability of any mineral resource and no mitigation is required.

XI. 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?

Potentially Significant Unless Mitigation Incorporation. Sound is defined as any pressure variation detected by the human ear. Noise is defined as any unwanted sound. The preferred unit for measuring sound is the decibel (dB). The dB expresses the logarithmic ratio of the amount of energy radiating from a source in the form of an acoustic wave.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. Sound intensity is measured in decibels that are A-weighted (dBA) to correct for the relative frequency response of the human ear. L_{eq} is the equivalent sound level, which is used to describe average noise levels over a specified period of time. On average, noise attenuates (lessens) at a rate of 6 dBA for every doubling of distance from a source, depending on environmental conditions (e.g., atmospheric conditions, noise barriers, ground covering, etc.).

The proposed project is located in an area primarily consisting of residential uses, with some religious, commercial, industrial, and open space uses (See Figure 2).

From the northern terminus of the alignment, the pipeline would enter the public right-of-way at the east end of Conover Street. Conover Street includes the “Lakeview Terrace Special Care Center” sanitarium as well as three single-family residential units.

The pipeline would then proceed west along Foothill Boulevard. This section includes both single- and multi-family residential units, schools, places of worship, riding stables, and commercial greenhouses. While single-family homes are located along the entirety of Foothill Boulevard, the multi-family units are clustered near Osborne Street. Schools are located along the north side of the street, while greenhouses tend to be on the south side. The western portion of the pipeline is to pass the HDRA. The HDRA represents an open space/recreational area.

The pipeline would then turn southwest along Osborne Street. A public library is located toward the southeast corner and multi-family residential units are located along the west side of the roadway.

The pipeline would then veer southeast upon reaching Glenoaks Boulevard. Glenoaks Boulevard includes a variety of land uses. The Hansen Dam Golf Course lies at the northeast portion of the alignment. Both multi-family residential units and a trailer park are located across from the golf course. However, all land uses southeast of Montague Street are commercial or industrial, none of which would be considered as noise-sensitive land uses/receptors. The route would then turn southwest at Truesdale Street, entering the LADWP VGS facility.

Residences, schools, hospitals (i.e., the Lakeview Terrace Special Care Center sanitarium), and churches, all of which qualify as noise-sensitive land uses, would be exposed to noise generated from on-site construction activities. Sensitive land uses within the project area typically have extended setbacks from the road, but the distance from the boundary of the proposed construction activities to the closest sensitive receptors is less than 100 feet.

To determine ambient noise levels, noise monitoring was conducted on Tuesday, October 14, 2003 using a Quest Technologies Model 2900 Type 2 Integrating/logging Sound Level Meter. The unit meets the American National Standards Institute Standard S1.4-1983 for Type 2, International Electrotechnical Commission Standard 651-1979 for Type 2, and International Electro-technical Commission Standard 651-1979 for Type 2 sound level meters. The unit was field calibrated at 10:33 a.m. using a Quest Technologies QC-10 calibrator immediately prior to the readings. The calibration unit meets the requirements of the American National Standards Institute Standard S1.4-1984 and the International Electrotechnical Commission Standard 942: 1988 for Class 1 equipment. The calibration was re-checked at 1:59 p.m. after the readings and no meter “drift” was noted.

The field study included five noise readings. The L_{eq}, L_{02}, L_{08}, L_{25}, L_{50}, L_{min}, and L_{max} values were recorded. The L_{eq} value is representative of the equivalent noise level or logarithmic average noise level obtained over the measurement period. The L_{02}, L_{08}, L_{25}, and L_{50} values represent the levels that are exceeded 2, 8, 25, and 50 percent of the time, or for periods of 1, 5, 15, and 30 minutes during a 1-hour period (if the reading was extrapolated out for a duration of 1 hour). The L_{min} and L_{max} represent the minimum and maximum root-mean-square noise levels obtained over a period of 1 second. The monitoring locations are shown in Figure 2 and the readings are included in Table 6 and summarized below.

Table 6
Ambient Noise Levels Along the Proposed Pipeline Alignment

Location	L_{eq} (dBA)	L_{02} (dBA)	L_{08} (dBA)	L_{25} (dBA)	L_{50} (dBA)	L_{max} (dBA)	L_{min} (dBA)
NR-1	54.7	61.0	57.4	55.1	53.7	64.2	47.7
NR-2	65.7	71.2	68.7	66.4	64.2	78.9	59.8
NR-3	64.0	71.7	68.7	64.6	60.1	76.2	48.2
NR-4	68.8	77.0	73.0	69.3	65.5	82.8	45.0
NR-5	68.6	75.6	72.3	69.2	66.1	82.1	54.1

NR-1 – The pipeline (starting at the northern terminus) would initially enter the public right-of-way at the east end of Conover Street to the east of Foothill Boulevard. This noise reading was obtained at the eastern terminus of Conover Street at the base of the "Lakeview Terrace Special Care Center." This point represents the easternmost position of the proposed pipeline to be located on public land.

The meter was placed along the northern curb line at the distance of approximately 178 feet east of the eastern curb line of Foothill Boulevard immediately south of the Center. Three single-family residential units are also located along the north side of the street, the nearest of which is approximately 75 feet from the centerline of the road. The south side of the street includes undeveloped open space with a golf course being constructed to the south of the open space area (i.e., Tujunga Wash unlined natural drainage). A 15-minute reading was taken starting at 10:36 a.m.. Skies were clear and winds were calm. The primary source of noise was that from vehicles on the Foothill Freeway and Foothill Boulevard, but aircraft overflights and bird calls also added to the reading. Conover Street traffic included three cars all passing within approximately 15 to 20 feet of the meter.

NR-2 - This noise reading was obtained along the north side of Foothill Boulevard 65 feet east of Christy Avenue. The meter was placed at a distance of 50 feet north of the centerline of travel of Foothill Boulevard's outer westbound lane. The reading is indicative of what is typically experienced by the residents located along the north side of Foothill Boulevard and north of the I-210 Freeway. Sensitive receptors, including residents and churches located along the south side of Foothill Boulevard could receive slightly more freeway noise, while those located to the east of

Foothill Place could receive slightly less noise as they are somewhat further from the freeway with an obscured view of the lanes. A 15-minute reading was taken starting at 11:06 a.m. The main source of noise was that from vehicles on freeway, but Foothill Boulevard traffic was also readily audible. East-bound Foothill Boulevard traffic included 44 automobiles and one medium truck. West-bound traffic consisted of 40 automobiles, one medium truck, and one heavy truck.

NR-3 - This noise reading was performed along the north side of Foothill Boulevard across from the Hansen Dam Park approximately ¼ mile west of the I-210 under crossing. The meter was placed along the north side of the street at a distance of 50 feet from the centerline of the outer, westbound lane. The 16-minute reading began at 11:47 a.m. The main source of noise was that from traffic traveling along Foothill Boulevard; however, the freeway was also audible in the background. Aircraft overflights, including one helicopter, also added to the ambient noise. Eastbound traffic included 68 automobiles, six medium trucks, and three heavy trucks. Westbound traffic consisted of 80 automobiles, five medium trucks, and two heavy trucks.

NR-4 - This noise measurement was obtained along the east side of Osborne Street in the parking area at the top of the dam. Multi-family units are located along the west side of the street on either side of the slope. The meter was placed at a distance of 50 feet from the centerline of the outer, northeast-bound lane. A 15-minute measurement was taken starting at 1:05 p.m.. The main source of noise was that from traffic traveling along Osborne Street. This noise was elevated due to the grade of the road over the dam that raises truck engine noise. Aircraft noise, including a helicopter, was also noted. Additionally, one car passed within approximately 10 feet of the meter within the parking area. Northeast-bound traffic included 114 automobiles, five medium trucks, and six heavy trucks. Southwest-bound traffic consisted of 103 automobiles, four medium trucks, and four heavy trucks.

NR-5 - This noise reading was obtained along the northeast side of Glenoaks Boulevard, 81 feet northwest of Montague Street. The meter was placed at a distance of 50 feet northeast of the centerline of travel of Glenoaks Boulevard's outer, northwest-bound lane. The reading represents the noise level potentially experienced by residents (both multi-family and trailer park) located across Glenoaks Boulevard to the northwest. The 15-minute reading was obtained starting at 1:36 p.m. The main source of noise was that from vehicles on Glenoaks Boulevard, but aircraft noise was also noted. Southeast-bound Glenoaks Boulevard traffic included 168 automobiles, 11 medium trucks, and seven heavy trucks. Northwest-bound traffic consisted of 156 automobiles, nine medium trucks, and eight heavy trucks.

The proposed project is located within the City of Los Angeles and is thus subject to its General Plan and noise ordinances. In assessing the impact of construction noise upon the environment, the provisions set forth in the noise ordinances (within the City's Municipal Code) address noise generated at

construction sites. For example, Section 41.40 of the Los Angeles Municipal Code (LAMC) indicates that no construction or repair work that makes loud noises to the disturbance of persons occupying a residence shall be performed between the hours of 9 p.m. and 7 a.m. on any day. No person, other than an individual homeowner engaged in the repair or construction of his single family dwelling, shall perform any construction or repair work of any kind before 8 a.m. or after 6 p.m. on any Saturday or federal holiday, nor at any time on Sunday within 500 feet of residential property.

Within the City of Los Angeles, as stated in the City of Los Angeles Draft LA CEQA Thresholds Guide (Thresholds Guide),[16] a project would normally have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use;
- Construction activities lasting more than 10 days in a three-month period which exceed the existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or
- Construction activities which exceed the ambient noise level by 5 dBA at a noise-sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at anytime on Sunday.

Construction noise levels at and near the proposed project would fluctuate depending on the particular type, number, and duration of use of various pieces of construction equipment. Table 7 shows noise levels associated with various types of construction-related machinery. According to this table, noise levels as high as 88 dBA could be experienced at a distance of 50 feet from the construction effort. While most receptors have an extended setback from the road, the most proximate could be on the order of 75 feet and noise at this distance is estimated at approximately 84 dBA if noise attenuation is not used. Noise-attenuated sites and equipment could produce noise levels as high as 79 dBA.

[16] City of Los Angeles, *Draft L.A. CEQA Threshold Guide*, May 14, 1998.

Table 7
Demolition and Construction Equipment Source Noise Levels

Equipment Type	Typical Equipment at 50 ft. (in dBA)	Quieted Equipment at 50 ft. (in dBA)[1]
Air Compressor	81	71
Backhoe	85	80
Concrete Pump	82	80
Concrete Vibrator	76	70
Concrete Breaker	82	75
Truck Crane	88	80
Dozer	87	83
Generator	78	71
Loader	84	80
Paver	88	80
Pneumatic Tools	85	75
Water Pump	76	71
Power Hand Saw	78	70
Shovel	82	80
Trucks	88	83

Source: Bolt, Beranek, and Newman, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, U.S. Environmental Protection Agency*, 1971.

Notes: [1] Quieted equipment can be designed with enclosures, mufflers, or other noise-reducing features.

The proposed project would be expected to last more than 10 days in a three-month period and ambient exterior noise levels exceeded by more than 5 dBA at a noise sensitive use. Therefore, construction of the proposed project has the potential to create a significant impact on adjacent noise sensitive uses (e.g., near the Lakeview Terrace Special Care Center [NR-1], where ambient noise levels are particularly low) could be potentially significant. However, the exposure of persons to a periodic increase in ambient noise levels would generally be short-term (i.e., construction in any one location/area would occur for approximately 3 months for pipeline construction, and up to 12 months at the storage tank construction site). Construction activities at the storage tank site would employ noise-dampening screens and/or walls and any other feasible measures (see mitigation measures below), in order to minimize noise impacts to the Lakeview Terrace Special Care Center sanitarium and/or nearby residences. In addition, construction would be carried out in compliance with all applicable City of Los Angeles noise regulations (e.g., construction hours would be limited to normal working hours when most residents are away from their homes). Adherence to noise regulations/ordinances would reduce potential noise impacts. However, the mitigation measures provided below would further reduce noise impacts from construction activities to a level less than significant.

Mitigation Measures:

M-4 *All construction equipment, stationary and mobile, shall be equipped with properly operating and maintained muffling devices.*

M-5 *Use noise control devices, such as equipment mufflers, enclosures, and barriers as technically feasible or practicable.*

M-6 *Stage construction operations as far from noise sensitive uses as possible.*

M-7 *Effective communication with the local residents shall be maintained during construction including keeping them informed of the schedule, duration, and progress of the construction to minimize public complaints regarding noise levels.*

Due to the passive nature of pipeline operation (and operation would occur underground), and the fact that operation of the booster pump station and storage tank would occur at a substantial distance from any potential sensitive receptors, no noise impacts to the surrounding community would occur as a result of the operation of the proposed project and no mitigation is required.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Groundborne vibration is measured in terms of the velocity of the vibration oscillations. As with noise, a logarithmic decibel scale (VdB) is used to quantify vibration intensity. When groundborne vibration exceeds 75 to 80 VdB, it is usually perceived as annoying to building occupants. The degree of annoyance is dependent upon type of land use, individual sensitivity to vibration, and the frequency of the vibration events. Typically, vibration levels must exceed 100 VdB before any building damage occurs.[17]

It is not anticipated that construction of the proposed project would involve pile-driving activities. The use of jackhammers and/or pavement breakers associated with construction, and pipe jacking under the Tujunga Wash (concrete-lined flood control channel) and various intersections would be temporary and therefore would not affect a given location for more than a few days. In addition, the use of such equipment would generally be limited to daytime hours. As a result, although construction of the proposed project would include use of heavy equipment, it is unlikely that construction would result in perceptible, let alone excessive, groundborne vibration or groundborne noise levels. Operation of the proposed pump station would occur entirely within a bermed area at the LADWP VGS facility, and noise generated by the pumps would be minimal, if even perceptible, relative to the

[17] Office of Planning, Federal Transit Administration, *"Traffic Noise and Vibration Impact Assessment, Final Report"*, April 1995.

ambient noise levels at the facility. The proposed storage tank would not require the operation of pumps or other noise-generating equipment; as the tank operation would be passive, no noise would be generated. Likewise, operation of the proposed pipeline would occur passively underground and would therefore not cause substantial groundborne vibration or noise. No significant impacts would occur and no mitigation is required.

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

No Impact. Operation of the proposed pipeline would occur belowground, operation of the booster pump station would occur within the LADWP VGS facility (an industrial site), and operation of the storage tank would occur within an open space area at a substantial distance from any potential sensitive receptors. The pipeline and storage tank would operate passively (i.e., they would generate no noise), and the booster pump station would result in an imperceptible noise increase from pump operation relative to the ambient noise at the LADWP VGS facility. Therefore, no substantial permanent increase in ambient noise levels would occur in the project vicinity above levels existing without the project. No impacts are expected and no mitigation is required.

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

Potentially Significant Unless Mitigation Incorporation. As discussed in item a) above, construction noise levels at and near the project site would fluctuate depending on the particular type, number and duration of use of various pieces of construction equipment. Construction would generate a temporary increase in ambient noise levels in the project vicinity. The exposure of persons to the periodic increase in noise levels would be short-term (i.e., construction in any one location would occur for approximately 3 months for pipeline construction, and up to 12 months at the storage tank site). Nonetheless, with adherence to the noise ordinance and the mitigation measures listed above under item a), the impact of the proposed project on temporarily increasing ambient noise levels in the project vicinity would be reduced to a level 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?

Less than Significant Impact. No portion of the proposed project alignment is located within an airport land use plan or in the immediate vicinity of any airport or private airstrip. At its most proximate point, the pipeline is located approximately 0.7 mile to the northeast of Whiteman Airpark runway. The most recent noise analysis for the airpark was prepared in 1980. The study showed that to the southeast, toward the project area, the 65 dBA CNEL

contour (i.e., the imaginary line at which distance one would experience the 65 dBA CNEL) was contained within the confines of the airpark. The 65 dBA CNEL contour extended just beyond the airpark to the northwest away from the project area. Current contours could extend slightly further, but the project is still well outside of the 65 dBA CNEL contour. Therefore, the construction of the proposed project would not expose residents or workers to excessive noise levels and no mitigation is required.

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. No portion of the proposed project alignment is located in the vicinity of a private airstrip. Therefore, no impacts to, or from, private airstrip operations would occur and no mitigation is required.

XII. 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. Construction and operation of the proposed project would serve to increase the reliability of water supply in the LADWP service area, and would not increase the available supply of potable water in the region (i.e., the application of recycled water would offset the use of potable water, but would not increase overall supply). As such, the project would not induce population growth in the area, either directly or indirectly. No growth-inducing impacts are anticipated to result from the proposed project, as the project would accommodate existing LADWP water customers; therefore, no mitigation is required.

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

No Impact. The construction and operation of the proposed project would occur within public street rights-of-way and open space areas, and staging areas would be located at existing nearby LADWP facilities or vacant/undeveloped lots along the northern edge of the Tujunga Wash (unlined natural drainage), south of the I-210 freeway. No housing is to be removed as part of the proposed project. Therefore, construction and operation of the proposed project would not have any impacts on the number or availability of existing housing in the area and would not necessitate the construction of replacement housing elsewhere and no mitigation is required.

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

No Impact. As mentioned in item b) above, the construction and operation of the proposed project would not displace any housing, and therefore would not result in the displacement of people and no mitigation is required.

XIII. 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. Construction of the proposed project could have the potential to reduce access for emergency vehicles at locations along the project alignment. However, all construction activities would be carried out in accordance with all applicable LADOT and LAFD emergency access standards, and access would be maintained during construction. Operation of the proposed project would occur passively and would not require additional fire protection. No substantial adverse physical impacts would occur relative to fire services and no mitigation is required.

ii) Police protection?

Less Than Significant Impact. As discussed in item i) above, construction of the proposed project could have the potential to reduce access for emergency vehicles at locations along the project alignment. However, all construction activities would be carried out in accordance with all applicable LADOT and LAPD emergency access standards, and access will be maintained during construction. Operation of the proposed project would occur passively and would not require additional police protection. No substantial adverse physical impacts would occur relative to police services and no mitigation is required.

iii) Schools?

Less Than Significant Impact. No population increase in the project area would result from the construction and operation of the proposed project, and construction of the proposed project would not have the potential to reduce access to schools in the vicinity of the proposed project, as access would be maintained per LADOT requirements. Therefore, no substantial adverse physical impacts to local schools would occur from construction activities. The proposed booster pump station would operate entirely within the LADWP VGS facility, at a substantial

distance from any schools (i.e., greater than 1 mile from any existing or proposed schools). Operation of the proposed pipeline and storage tank would occur passively as a closed system and would not adversely impact schools. Therefore, the proposed project would not result in the need for new or expanded schools, or otherwise adversely affect any schools in the project vicinity. Impacts to schools would be less than significant and no mitigation is required.

iv) Parks?

Less Than Significant Impact. The construction and operation of the proposed project would not generate any additional population that would increase demand for neighborhood or regional parks or other recreational facilities. The construction activities in the vicinity of the HDRA may have the potential to disrupt recreational activities in the immediate area where construction is occurring (i.e., street rights-of-way adjacent to the HDRA); however, such impacts would be limited to the local street rights-of-way, and would be temporary, thereby avoiding long-term impacts to parks or other recreational facilities in the project vicinity. No significant adverse physical impact to parks would result, and no mitigation is required.

v) Other public facilities?

Less Than Significant Impact. Construction and operation of the proposed project is not expected to result in physical impacts associated with any other public facilities in the project vicinity or in the City of Los Angeles as a whole. No substantial adverse physical impacts to public facilities (e.g., hospitals, flood control infrastructure) are anticipated and no mitigation is required.

XIV. 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?

Less Than Significant Impact. Neither the construction nor operation of the proposed project would generate any additional population that would increase the use of existing neighborhood or regional parks or other recreational facilities. Furthermore, any impacts to recreational activities at any neighborhood parks along the alignment, or in the vicinity of the HDRA, resulting from construction of the proposed project would be temporary in nature and would be limited to the immediate area in which construction activities are occurring (i.e., street rights-of-way near parks along the alignment or adjacent to the HDRA). Operation of the proposed pipeline in the vicinity of the HDRA and other parks along the alignment would occur passively underground. Construction and operation of the proposed booster pump station would occur entirely within the LADWP VGS facility, and

therefore would not have the potential to affect parks or other recreational facilities. Construction and operation of the proposed project components at and near the Angeles National Golf Course (i.e., pipeline and storage tank) would be coordinated with the City of Los Angeles' Department of Recreation and Parks so as not to adversely affect golf course activities permanently or in the short-term (i.e., the Tujunga Wash unlined natural drainage lies between playable areas of the golf course and the pipeline/storage tank site). Therefore, impacts to existing neighborhood and regional parks or other recreational centers would be less than significant, and no mitigation is required.

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 is a booster pump station, storage tank, and pipeline with appurtenant structures necessary for the operation and maintenance of the pipeline. Construction and operation of the proposed project would not include recreational facilities or require construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impacts are expected and no mitigation is required.

XV. TRANSPORTATION/TRAFFIC

The proposed project is located within an urbanized area in the City of Los Angeles. Key streets along the project alignment can be described as follows (See Figure 2):

- Glenoaks Boulevard is classified as a Major Highway Class II. It has two lanes in each direction from Truesdale Street to Osborne Street. In this segment, Glenoaks Boulevard has a two-way left-turn lane. At the southern end of Glenoaks Boulevard before Truesdale Street, the median transitions to a raised median. Unrestricted curbside parking is allowed on this segment of Glenoaks Boulevard along both directions except for a small portion north of Truesdale Street. The posted speed limit is 45 mph.
- Osborne Street is classified as a Major Highway Class II. It has two lanes in each direction from Glenoaks Boulevard to Foothill Boulevard. In this segment, Osborne Street has a two-way left-turn lane. Curbside parking is prohibited along both directions on this segment of Osborne Street. The posted speed limit is 40 mph.
- Foothill Boulevard is classified as a Major Highway Class II. It has two lanes in each direction from Osborne Street to Conover Street. It also provides access to I-210 freeway interchange near Osborne Street, with the four diamond ramps each carrying a daily volume of 4,100 to 5,500 vehicles per day, according to the California Department of Transportation (Caltrans) ramp volume data for 2002. Opposing traffic flows are

separated by a two-way left-turn lane on this segment of Foothill Boulevard. East of Wheatland Avenue, the median transitions to solid double yellow line west of Wheatland Avenue. Parking is prohibited along the both directions of this segment at all times. The posted speed limit varies between 45 mph and 50 mph.

Several public transportation routes traverse the proposed alignment:

- MTA Route 90/91 travels along Foothill Boulevard between the Olive View Medical Center and Glendale.
- MTA Route 92 travels along Glenoaks Boulevard between the Sylmar/San Fernando Metrolink station and Burbank.
- MTA Route 166 travels along Nordhoff Street, Osborne Street, Glenoaks Boulevard, and Lankershim Boulevard between the Chatsworth Transportation Center and the North Hollywood Metrolink station.

Would the project:

a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?

Less Than Significant Impact. For a temporary period during construction, there would be minor alterations to the current traffic patterns. The pipeline would be installed in sections no longer than 500 feet (approximately the length of a short street block), within an approximately 1,200-foot work zone (up to a maximum of about 2,000 feet). After the installation of pipe within the work zone, the open trench in the street would be backfilled, paved, and returned to normal operation.

Prior to construction, LADWP would submit traffic control plans for approval to LADOT to ensure that traffic impacts, including impacts to public transportation routes, are kept to a minimum. LADWP would comply with any requirements specified by LADOT. In order to be consistent with requirements specified by LADOT, as well as ensure job site safety, LADWP would implement the following construction practices, as necessary:

- Construction areas would be separated by concrete barriers.
- During construction, temporary traffic control devices, signs, and flagmen would be utilized to minimize traffic congestion. At nighttime, all barricades would be provided with flashing/steady burn warnings, and all delineators would have white reflective bands. All barricading and traffic controls would conform to the latest editions of the Standard Specifications for Public Works Construction (Greenbook) and the Work Area Traffic Control Handbook (WATCH).

- Safe and adequate pedestrian and vehicular access would be provided to police and fire stations, schools, fire hydrants, hospitals, commercial buildings, industrial establishments, and residential uses. The access to these facilities would be continuous and unobstructed.
- The construction of the pipeline would be coordinated with the MTA to temporarily relocate bus stops if needed.
- Temporary traffic lanes would have a minimum width of 10 feet to provide safe access to cars, buses, trucks, and trailers.
- Generally, sections of the proposed pipeline would be installed using the open-trench method, along existing street rights-of-way or open space areas. The open trenches should be covered with plates to allow traffic flow during peak periods and times when construction work is not taking place, if open trench construction is blocking traffic lanes.
- The pipeline segment that extends along Foothill Boulevard near to the I-210/Osborne Street freeway ramps would be installed using the open-trench method. The approximate duration of the pipeline construction on this segment is estimated to be one week. Access to the ramps may be partially or completely restricted during the period of construction, potentially requiring temporary closure of one or more ramps at the Foothill Boulevard/Osborne Street interchange. During periods when access to the ramps is restricted, traffic served by these ramps would temporarily access the freeway via Foothill Boulevard at the Wheatland Avenue interchange to the east. To the extent possible, such closures should be avoided during peak traffic periods, potentially by use of plates to cover the open trenches near the freeway ramps during peak periods. Temporary detour plans would be developed for approval by LADOT and Caltrans.
- Pipe jacking would be utilized in the proposed project when open trenching is not feasible, in order to avoid large substructure utilities and to avoid the disruption of other facilities such as flood control channels and bike paths along the alignment. The proposed locations for pipe jacking are at the intersections of Glenoaks Boulevard/Branford Avenue, Glenoaks Boulevard/Osborne Street and Osborne Street/Foothill Boulevard.
- The pipeline segment along Glenoaks Boulevard across Tujunga Wash (concrete-lined flood control channel) would be installed by either the pipe jacking method, or it may be suspended from the existing bridge. This stretch of construction may require the closure of curb lane of Glenoaks Boulevard in the northbound direction for approximately one week.
- Construction would generally be carried out between 7 a.m. and 6 p.m., Mondays to Fridays and 8 a.m. and 5 p.m. on Saturdays.

- Staging equipment for both the open trench and jacking method would occur off-street. Possible staging areas include vacant parcels along the south side of I-210 (Foothill Freeway) at Wheatland Avenue north of Tujunga Wash (unlined natural drainage), and at the LADWP VGS site. With staging areas off-street, the equipment would not cause additional disruption to traffic flow during the construction period.
- The construction of the pipeline could create some minor temporary impacts to the existing street parking facilities; however, LADWP would coordinate the construction activities with the LADOT to minimize any potential impacts to the existing street parking facilities. The maximum length of open trench would be limited to 500 feet.
- Excavations would be fenced to provide protection against anyone falling into the excavation.
- LADWP would assign a full-time construction inspector to the project to monitor the construction activities and to ensure that all traffic requirements specified by LADOT are implemented.

No significant adverse environmental impacts associated with traffic load or congestion are anticipated to result from construction and operation of this pipeline project. No mitigation is required.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by MTA. The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed if an Environmental Impact Report (EIR) is being prepared. Although an EIR is not being prepared for the proposed project, an analysis of regional impacts as outlined in the CMP was conducted.

A specific system of arterial roadways plus all freeways comprises the CMP system. A total of 164 intersections are identified for monitoring on the system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is to be conducted:

- At CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed project would add 50 or more trips during either the morning or evening weekday peak hours.
- At CMP mainline freeway monitoring locations, where the project would add 150 or more trips in either direction during the either the morning or evening weekday peak hours.

The proposed project is not expected to add more than 24 a.m. or p.m. weekday peak hours trips, based on 24 workers in a typical 11-hour day

driving alone to the project site. Given this worst-case condition (i.e., every worker drives individually everyday and does not carpool or use transit), 24 peak-hour trips would be generated by the construction crew only for the temporary construction period.

During construction of the pipeline segment on Foothill Boulevard near the I-210/Osborne Street interchange, access to the freeway ramps could be restricted for an estimated period of one week. Traffic detour plans would be developed for approval by LADOT and Caltrans. The pipeline, once constructed, would operate passively underground; as such, no traffic impacts would occur as a result of project operation. Additionally, no CMP arterial monitoring intersections are located along the pipeline route.

Construction activities would not add enough peak-hour trips to the existing street system to trigger further analysis as set forth by the CMP. Impacts to levels of service on the CMP network from construction of the proposed pipeline would be less than significant and no mitigation is required.

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 generate air traffic nor affect such activities. No impacts are anticipated and no mitigation is required.

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. Construction and operation of the proposed pipeline would temporarily alter existing street/traffic patterns along the alignment. These temporary changes to traffic patterns and levels of service during the construction phase would be temporary and limited to the immediate area in which construction activities are occurring. All changes to traffic patterns (i.e., lane or ramp closures) would be coordinated with LADOT, Caltrans, and/or MTA, as appropriate, to minimize impacts to motorists, public transportation patrons, and pedestrians. No design features (e.g., sharp curves or dangerous intersections) or incompatible uses are proposed as part of this project. As such, no impacts are anticipated and no mitigation is required.

e) Result in inadequate emergency access?

Less Than Significant Impact. The proposed project would not hinder emergency access in the area except for short-term periods during construction. As mentioned above, all construction activities would be carried out in accordance with LADOT, LAFD, and LAPD emergency access requirements and access would be maintained during construction. No significant emergency access impacts are expected and no mitigation is required.

f) Result in inadequate parking capacity?

Less Than Significant Impact. Lane closures resulting from construction activities in the existing street rights-of-way could result in short-term loss of parking capacity on affected sections of streets along the proposed alignment. Such parking deficits would be temporary and would not affect the long-term parking capacity along the pipeline alignment or the surrounding vicinity. The construction zone would be up to approximately 2,000 feet in length (approximately the length of three short street blocks), and any affected street parking would be restored after the installation of each segment of pipe. The operation of the proposed pipeline project would not generate any vehicle trips, nor require any parking as part of its operation. No significant impacts would occur and no mitigation is required.

g) Would the project conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. The proposed project would not conflict with adopted policies supporting alternative transportation. As discussed above, construction activities would be coordinated with MTA and LADOT in order to minimize impacts to alternative transportation facilities (e.g., bus stops, bike lanes). Access to public transportation and bike lanes would be maintained throughout construction, as required by LADOT and MTA. As a result, no impacts to alternative transportation would result from the proposed project and no mitigation is required.

XVI. UTILITIES AND SERVICE SYSTEMS

Would the project:

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

No Impact. The proposed project would not result in changes to facilities or operations at existing wastewater treatment facilities (including the Tillman Water Reclamation Plant [TWRP]). Consequently, no modification to a wastewater treatment facility's current wastewater discharges would occur; hence, no impact to wastewater treatment requirements of the Los Angeles RWQCB would occur and no mitigation is required.

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. It is not anticipated that the construction and operation of the proposed project would generate wastewater, and would therefore not require the construction of new water or wastewater treatment facilities or expansion of existing facilities. No impacts are anticipated and no mitigation is required.

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. Stormwater drainage facilities are provided along the proposed alignment and surrounding vicinity. Construction of the proposed project is not expected to increase stormwater runoff in the project area, since the project would be placed beneath previously developed surfaces (e.g., street rights-of-way and open space areas). Although limited dewatering may be required during construction, this activity would be temporary in nature and the amount of dewatering discharge would not exceed the capacity of the existing stormwater drainage facilities, nor require new or expanded facilities of this type. The proposed project, once operational, would be a closed system, and therefore would not impact stormwater drainage facilities. The construction and operation of the proposed project is not anticipated to require, or indirectly result in, the construction of new stormwater drainage facilities or the expansion of existing facilities. The only exception to this would be the construction of drainage benches above and below the proposed storage tank site, which would be very limited and would drain into the Tujunga Wash (unlined natural drainage) located directly below the tank site; nonetheless, such construction would be very limited in scale and would not result in significant environmental effects. Therefore, impacts to stormwater drainage facilities would be less than significant and no mitigation is required.

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

No Impact. The proposed project is a water supply project that would convey recycled water as part of the existing LADWP water supply infrastructure and serve the area from existing entitlements and resources. No new or expanded entitlements would be needed during construction or operation of the proposed project. No water supply impacts would result and no mitigation is required.

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. Construction and operation of the proposed project would not generate or require wastewater capacity. No impacts to wastewater treatment capacity are anticipated and no mitigation is required.

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

Less Than Significant Impact. Excavation and construction debris would be recycled or transported to the nearest landfill site and disposed of

appropriately. The construction contractor will work with the City of Los Angeles' Recycling Coordinator to ensure that source reduction techniques and recycling measures are incorporated into project construction. The amount of debris generated during project construction is not expected to significantly impact landfill capacities. Operation of the proposed project would not generate any solid waste. No significant impacts to landfill capacity are anticipated and no mitigation is required.

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

Less Than Significant Impact. As mentioned in item f) above, construction debris would be recycled or disposed of in accordance with local and regional standards, and operation of the project would not generate any solid waste. As such, no significant impacts related to compliance with solid waste statutes and regulations are expected and no mitigation is required.

XVII. 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?

No Impact. The analysis conducted in this Initial Study results in a determination that the proposed project, either individually or cumulatively, would not have a significant effect on the local environment. Since the proposed pipeline would be placed underground under existing street rights-of-way (e.g., Glenoaks Boulevard, Osborne Street, Foothill Boulevard, and Conover Street), within the LADWP VGS site, and within open space areas (almost all portions of which have been previously disturbed), and, the proposed alignment is devoid of fish, significant wildlife, and/or plant populations, the proposed project would not have the potential to degrade the environment in this regard. As described above, the potential for impacts to cultural resources from construction of the proposed project, with implementation of the identified project-specific mitigation measures, was found to be low; as such, significant adverse impacts to cultural resources are not anticipated. It is hereby found that the proposed project involves no potential for any impacts, either individually or cumulatively, on wildlife resources and cultural resources, and no mitigation is required.

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.)

No Impact. As discussed in the respective issue areas, the proposed project would have minor, or less than significant, impacts to some environmental resources. The implementation of the identified project-specific mitigation measures and compliance with applicable codes, ordinances, laws and other required regulations would reduce the magnitude of any impacts associated with construction activities to a level of less than significant. Thus, for the reasons set forth below, impacts would not be cumulatively considerable.

At this level of planning, it is not possible to identify all present and probable future projects in the vicinity of the proposed project alignment. Currently, however, two non-LADWP projects have been identified in close proximity to the proposed alignment, which are either in construction or planned for construction. The first of the these projects is an international church complex within an area zoned for commercial uses, located south of Foothill Boulevard and north of I-210 near the eastern end of the Foothill Boulevard segment of the proposed alignment. This project is currently under construction, and it is anticipated that construction will be completed prior to the start of proposed project construction activities. The second project is a new school project, undertaken by the Los Angeles Unified School District, called the Maclay New Primary Center, located near the intersection of Glenoaks Boulevard and Osborne Street. This project is scheduled to be in construction from December 2003 to December 2004. As such, both of these construction projects are anticipated to be completed and operational by the start of proposed project construction activities, and there would be no potential for cumulative construction impacts to result. Operation of the proposed project would not result in cumulative effects relative to these projects, as the proposed project would operate passively as a closed system.

Although all current and probable future projects located near the proposed project cannot be ascertained based on available data, as mentioned above, it is reasonable to assume that the projects with the potential to contribute to cumulative impacts would be those projects occurring concurrent with, and in proximity to, the proposed project. Such projects, as may be determined at this level of planning, would be other linear utility projects being undertaken by LADWP within, or near, the proposed project alignment at the time of the proposed project construction activities. Such projects would include other LADWP water and/or power system improvement projects. The impacts of these projects, as well as those of the proposed project (as discussed above), would be temporary in nature, and would generally be limited to the area in

which construction activities are occurring. Given that these infrastructure projects would be coordinated by LADWP, it can be anticipated that LADWP would initiate construction of each project in a manner such that construction activities associated with different projects would occur either at different times or at sufficient distance from one another as to avoid cumulative effects relative to air quality, noise, and traffic.

With regard to air quality, the SCAQMD has established incremental emissions thresholds to determine whether a project will contribute to significant impacts. Because the proposed project would contribute emissions at rates below SCAQMD significance thresholds, and given the aforementioned assumption that related LADWP projects would be coordinated as to avoid cumulative impacts in any one area (at any given time), it is anticipated that the air quality impacts of the proposed project and other related projects would not be cumulatively considerable.

Noise impacts, similar to those related to air quality, would be dependent on the timing and location of related project construction in conjunction with the construction of the proposed project. As such, assuming that LADWP would phase such projects to avoid, to the extent feasible, concurrent construction activities in any one location, it can be concluded that noise impacts of the proposed project and related projects (given that project-specific noise impacts are less than significant) would not result in noise impacts that are cumulatively considerable.

With regard to traffic, construction activities would generate truck traffic and vehicular traffic associated with construction worker travel, as well as result in lane closures and temporary loss of parking capacity along affected streets. Impacts resulting from the proposed project's construction traffic would be temporary and are not expected to be significant, as discussed above. Traffic impacts of the proposed project, in conjunction with those of the related LADWP projects, would be minimized by coordination with LADOT, which is required to maintain proper levels of service and the overall function of the City's transportation network. Given that all LADWP projects are subject to review by LADOT (when traffic system components or function are affected), it is assumed that LADOT would require that LADWP coordinate its projects such that the traffic system and levels of service in any one area are maintained. Review by, and coordination with, LADOT would preclude the possibility of cumulative traffic impacts resulting from proposed project and related project construction activities. Based on the above, the proposed project is not anticipated to result in traffic impacts that are cumulatively considerable.

Therefore, no impacts under this category are anticipated and no mitigation is required.

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

No Impact. The proposed project would have no adverse effects on human beings other than the beneficial effect of providing a more reliable water supply for existing LADWP water service customers. Therefore, the proposed project is not anticipated to have a direct or indirect substantial adverse effect on human beings and no mitigation is required.

SECTION 4.0

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