



ERIC GARCETTI
Mayor

Commission
THOMAS S. SAYLES, *President*
ERIC HOLOMAN, *Vice President*
RICHARD F. MOSS
CHRISTINA E. NOONAN
JONATHAN PARFREY
BARBARA E. MOSCHOS, *Secretary*

RONALD O. NICHOLS
General Manager

July 30, 2013

To: Responsible and Trustee Agencies, Organizations, and Interested Parties

Subject: **Notice of Intent (NOI) to Adopt an Initial Study/Mitigated Negative Declaration (IS/MND) for the Proposed Well V817 Rose Valley Pipeline Installation Project**

An Initial Study (IS) and a Mitigated Negative Declaration (MND) has been prepared by the City of Los Angeles, Department of Water and Power (LADWP) for the proposed Well V817 Rose Valley Pipeline Installation Project. Pursuant to the California Environmental Quality Act (CEQA), LADWP is the Lead Agency and is responsible for the preparation of this document.

PROJECT DESCRIPTION

The Los Angeles Department of Water and Power proposes to install an 8-inch diameter water pipeline, with a length of approximately 1,540 linear feet, along an access road within an abandoned agricultural field in the Rose Valley area of Inyo County. The pipeline would transport water from Well V817 to the First Los Angeles Aqueduct (LAA1), providing water from the existing but unused well. The well would be equipped to draw water from the deep aquifer, with the pipeline conveying water to the LAA1.

PROJECT LOCATION

The proposed project area is located east of Highway 395 and south of the South Haiwee Reservoir in the Rose Valley area of Inyo County. The project site is located on LADWP-owned land within Township 21S, Range 37E, Section 23 (Lat: 36.10068, Long: -117.956061). The LAA1 runs along the west side of the proposed project area. V817 is one of two inactive wells (V816 is the other) located in the project area. Only V817 will be converted into a production well; V816 will be used as a monitoring well.

PUBLIC COMMENT PERIOD

The 30-day public comment period for this IS/MND will commence on **August 5, 2013** and conclude at **5:00 pm on September 4, 2013**. The IS/MND are electronically available for review on the LADWP website at: <http://www.ladwp.com/envnotices>.

Water and Power Conservation . . . a way of life

111 North Hope Street, Los Angeles, California 90012-2607 Mailing address: Box 51111, Los Angeles 90051-5700
Telephone: (213) 367-4211 Cable address: DEWAPOLA

Printed copies of the IS/MND are also available for review at the following locations:

LADWP
Environmental Assessment
111 N. Hope St., Rm. 1044
Los Angeles, CA 90012
213-367-0395

LADWP
Water Operations
300 Mandich Street
Bishop, CA 93514
(760) 873-0312

Lone Pine Library
Post Office Box 745
Lone Pine, CA 93545
Reference Section
(760) 878-0260

Comments on the IS/MND must be received in writing no later than 5:00 pm on September 4, 2013 and sent to:

Los Angeles Department of Water and Power
Environmental Assessment and Planning
Attention: Mr. Michael Mercado
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Comments may be emailed to michael.mercado@ladwp.com; they may also be faxed to Mr. Mercado at (213) 367-4710. All comments received related to issues discussed in the IS/MND will be included in the final package that is forwarded to the Board of Water and Power Commissioners for final consideration.

If you have any questions regarding the IS/MND, please contact Mr. Michael Mercado at (213) 367-0395.



Charles C. Holloway, Manager

Environmental Planning and Assessment

Initial Study and Mitigated Negative Declaration for
**WATER PIPELINE INSTALLATION PROJECT -
WELL V817 TO THE FIRST LOS ANGELES AQUEDUCT**

Prepared for
Los Angeles Department
of Water and Power

July 2013



Initial Study and Mitigated Negative Declaration for
**WATER PIPELINE INSTALLATION PROJECT -
WELL V817 TO THE FIRST LOS ANGELES AQUEDUCT**

Prepared for
Los Angeles Department
of Water and Power

July 2013



626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300
www.esassoc.com

Oakland

Orlando

Palm Springs

Petaluma

Portland

Sacramento

San Diego

San Francisco

Santa Cruz

Seattle

Tampa

Woodland Hills

211490.04

TABLE OF CONTENTS

Water Pipeline Installation Project (from Well V817 to First Los Angeles Aqueduct) Initial Study / Mitigated Negative Declaration

	<u>Page</u>
1. Project Description.....	1-1
1.1 Overview of the Project	1-1
1.2 California Environmental Quality Act	1-1
1.3 Project Location and Environmental Setting.....	1-2
1.4 Project Objective	1-5
1.5 Project Background.....	1-5
1.6 Project Description	1-6
1.7 Project Review and Approvals.....	1-9
2. Environmental Checklist	2-1
2.1 CEQA Initial Study Form	2-1
2.2 Environmental Factors Potentially Affected.....	2-2
2.3 Determination: (To be completed by Lead Agency)	2-2
3. Environmental Impact Assessment.....	3-1
3.1 Aesthetics.....	3-1
3.2 Agricultural and Forest Resources	3-3
3.3 Air Quality.....	3-5
3.4 Biological Resources.....	3-9
3.5 Cultural Resources.....	3-26
3.6 Geology, Soils, and Seismicity	3-34
3.7 Greenhouse Gas Emissions.....	3-38
3.8 Hazards and Hazardous Materials	3-39
3.9 Hydrology and Water Quality.....	3-42
3.10 Land Use and Land Use Planning.....	3-47
3.11 Mineral Resources	3-48
3.12 Noise	3-49
3.13 Population and Housing	3-51
3.14 Public Services.....	3-52
3.15 Recreation	3-54
3.16 Transportation and Traffic	3-55
3.17 Utilities and Service Systems	3-57
3.18 Mandatory Findings of Significance.....	3-59
4. References, Acronyms, and Report Preparers	4-1
4.1 Document References.....	4-1
4.2 Acronyms	4-4
4.3 Report Preparers.....	4-6

Page**Figures**

Figure 1	Regional Location	1-3
Figure 2	Project Vicinity Map.....	1-4
Figure 3	Existing Setting	1-7
Figure 4	Existing Setting	1-8
Figure 5	California Natural Diversity Database (CNDDDB) Special Status Species Occurrences	3-10
Figure 6	Existing Vegetation	3-19

Tables

Table 1	Maximum Daily Emissions from Project Construction	3-7
Table 2	Special-Status Plant Species with Potential to Occur in Project Area	3-11
Table 3	Special-Status Wildlife Species with Potential to Occur in Project Area.....	3-15
Table 4	Project Impacts to Habitat	3-20

SECTION 1

Project Description

1.1 Overview of the Project

The Los Angeles Department of Water and Power (LADWP) is proposing to implement the Well V817 Rose Valley Pipeline Installation Project (“proposed project”). The proposed project would provide 1,100 acre feet per year (AFY) of water recovered from seepage losses from the Haiwee Reservoir to the Los Angeles Aqueduct. The proposed project would install an 8-inch PVC pipe along a dirt access road that would extend from Well V817 and connect to the First Los Angeles Aqueduct (LAA1) at a concrete access box at Station 156+94. Additionally, Well V817 would be equipped to pump approximately 1.5 cubic feet per second (cfs) of water through the new pipe to the LAA1 with a 100 horsepower (hp) submersible pump and motor. The proposed project is located on LADWP-owned land in the Rose Valley Area of Inyo County, east of Highway 395 and south of South Haiwee Reservoir.

1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. CEQA Guidelines Section 15367 states that the “lead agency,” LADWP, has the principal responsibility for carrying out or approving a project and is responsible for compliance with CEQA. As lead agency, LADWP must complete an environmental review to determine if implementation of the proposed project would result in significant adverse environmental impacts. In compliance with CEQA, an Initial Study has been prepared to assist in making that determination. Based on the nature and scope of the proposed project and the evaluation contained in the Initial Study environmental checklist (contained herein), LADWP has concluded that a Mitigated Negative Declaration (MND) is the appropriate level of analysis for this project. The MND shows that impacts of the proposed project are either less than significant or significant but mitigable with the incorporation of appropriate mitigation measures.

As stated in CEQA Guidelines Section 15070, an MND can be prepared when “(a) the initial study shows that there is not substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or (b) the initial study identifies potentially significant effects, but (1) revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and (2) there is no substantial evidence, in light of the whole

record before the agency, that the project as revised may have a significant effect on the environment.”

1.3 Project Location and Environmental Setting

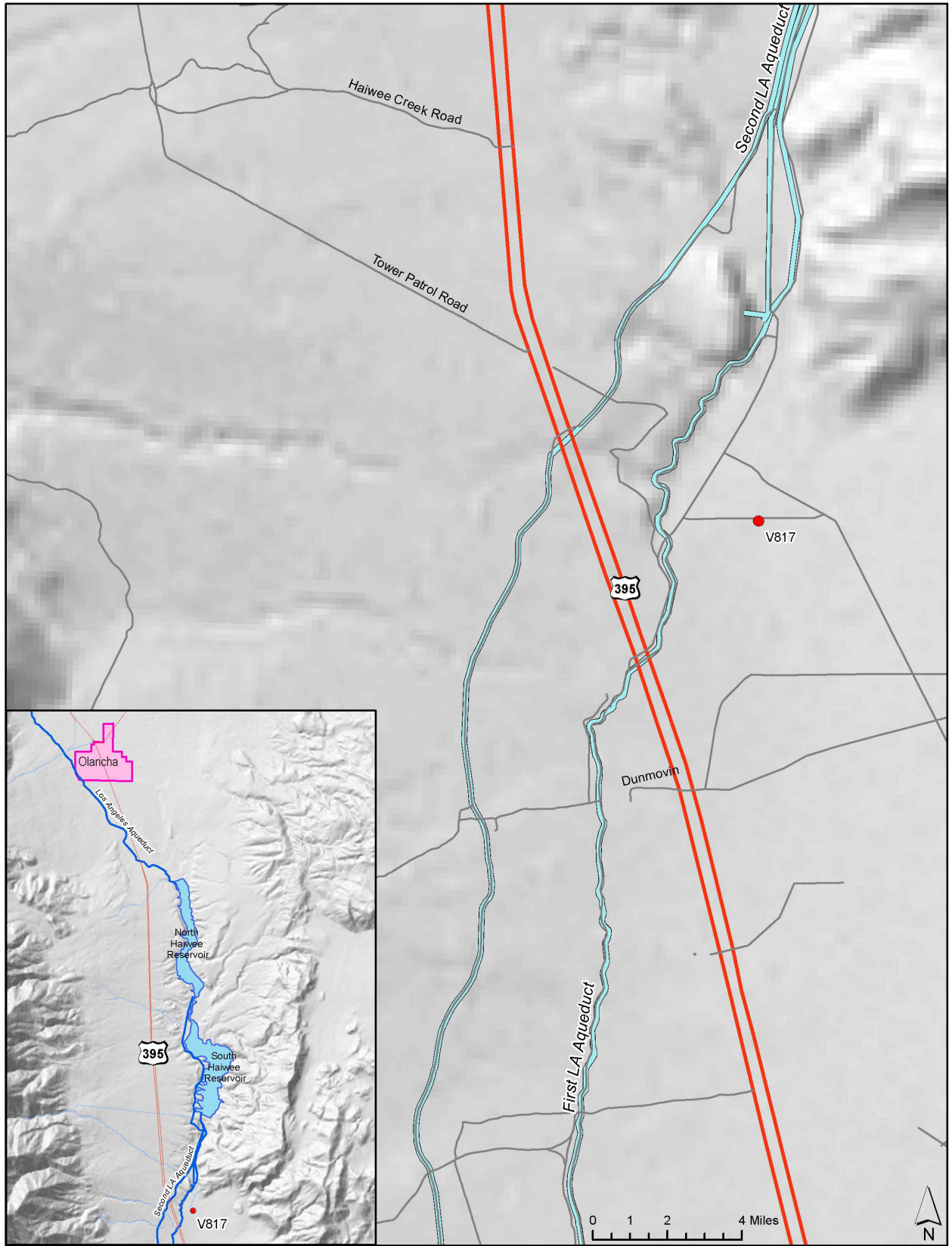
The proposed project is regionally located in the Rose Valley Area of Inyo County as shown in **Figure 1**. Inyo County is bounded by Mono County to the north, Nevada State to the east, San Bernardino County to the south, Kern County to the southeast, and Tulare and Fresno Counties to the west. Inyo County encompasses 10,140 square miles and is the second largest county in California; it is bounded by the Sierra Nevada Mountains on the west and on the east by the White Mountains and the Inyo Mountains. Inyo County is also characterized by its natural environment including the Badwater Basin, Death Valley National Park, Mount Whitney, and Owens Valley. Rose Valley is a small valley located between Indian Wells Valley and Owens Valley, and contains Little Lake, Red Hill, and Haiwee Reservoirs (Schweich, 2012).

As shown in **Figure 1**, the proposed project area is located east of Highway 395 and south of South Haiwee Reservoir in the Rose Valley area of Inyo County. The project site is located within Township 21S, Range 37E, Section 23. As shown in **Figure 2**, the 8-inch water pipeline will have a length of 1,542 feet and would traverse an abandoned agricultural field that was in operation for a few years until the late 1980s. The field is now covered with sparse vegetation. The LAA1 runs along the west side of the proposed project area; V817 is one of two inoperative wells (V816 is the other) that are located within the project area.

The proposed project includes groundwater pumping from Well V817 located in Rose Valley, which is situated in the southeastern California desert. The project area lies within an arid desert region that receives about 6 inches of precipitation per year. Surface water is limited; however, the alluvial valley includes a groundwater aquifer that is recharged from precipitation in various surrounding sources, including the Sierra Nevada Mountains (BLM, 2008). The ground surface of the valley floor slopes gently to the south at a rate of 30 to 35 feet per mile. The alluvial portion of the groundwater basin is approximately 16 miles long from the southern end of the Haiwee Reservoir to just south of Little Lake and has a maximum width of approximately 6 miles at its widest point (BLM, 2008).

Groundwater Occurrence and Flow

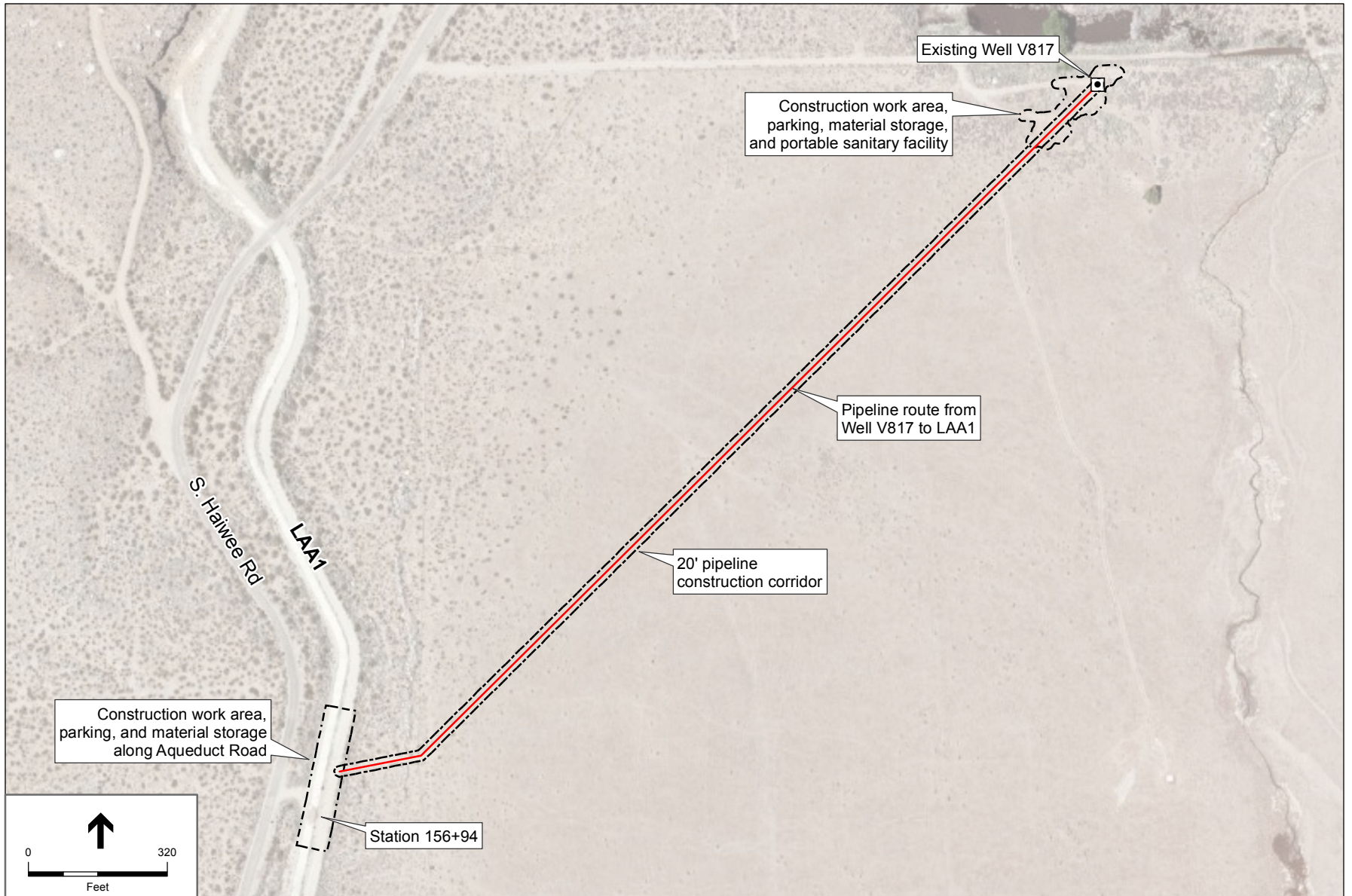
The groundwater table in the Rose Valley project area ranges from 140 to 240 feet below ground surface (bgs) in the northern and central parts of Rose Valley to approximately 40 feet bgs at the northern end of the Little Lake Ranch property, near the southern end of the valley. Groundwater generally flows to the southwest in the valley. Long term groundwater level monitoring indicates that groundwater levels have generally risen 1 to 2 feet throughout Rose Valley over the last 5 years. This is most likely a response to increased precipitation recharge in the mountains in the last few years. There was no significant change in groundwater extraction in Rose Valley or identified groundwater recharge other than precipitation infiltration at higher elevations (BLM, 2008).



SOURCE: ESRI; ESA, 2013

LADWP - Water Pipeline Installation Project . 211490.04

Figure 1
Regional Location



SOURCE: ESA 2012, ESRI

LADWP – Water Pipeline Installation Project . 211490.04

Figure 2
Project Vicinity Map

Groundwater elevations in wells at the northern end of Rose Valley may be influenced by groundwater conditions outside Rose Valley (i.e., by variations in groundwater inflow from Owens Valley or variations in seepage rates from the Haiwee Reservoirs). Groundwater levels in the LADWP wells (V816 and V817) fell from 2002 to mid-2005, rose from mid-2005 until the spring of 2007, and subsequently began falling again. Groundwater levels in the LADWP wells were more variable than in any other wells in the valley. A comparison of water level data tabulated for the Haiwee South Reservoir, 2 miles north of the LADWP wells, to groundwater levels in the LADWP wells indicated no apparent correlation between water levels in the reservoir and groundwater levels between November and December 2007 (BLM, 2008).

Haiwee Reservoir

The South Haiwee Reservoir is located approximately three miles north of the project site and is owned and operated by LADWP as part of the LAA system, which supplies drinking water to the Los Angeles area. The crest of south Haiwee Dam is located at approximately 3,766 feet above mean sea level (amsl). Because of seismic stability concerns, the water level in the reservoir is currently limited to a maximum elevation 3,742 feet amsl. The water level in the reservoir typically rises during the winter rainy season.

1.4 Project Objective

The objectives of the proposed project are to:

- Recover water seepage from Haiwee Reservoir to provide an additional water source for LADWP.
- Construct a new pipeline connection from an existing well to the LAA1.

1.5 Project Background

In late 1980s, LADWP purchased a 120 acre property in northern Rose Valley. The property included two production wells that were used to supply water for irrigation for the now abandoned farming activity. The main purpose for the purchase of the property was to use the property as an aquifer storage and water recovery site, where surplus LAA water would be stored during wet and very wet years and pumped back during the dry and very dry years.

In 2008 the Coso Operating Company filed an application for a special use permit with Inyo County to pump approximately 4,800 acre-feet of groundwater each year from Hay Ranch property, located south of LADWP's property, to export out of Rose Valley for their geothermal project in Coso Range, located east of Rose Valley. The geothermal project was approved by the Inyo County Planning Commission and, on appeal, by the Board of Supervisors. Additional information can be found at: <http://inyoplanning.org/projects/Coso%20Geothermal/index.html>.

As a part of the Environmental Impact Report (EIR) preparation for the geothermal project, Coso Operating Company conducted groundwater modeling studies of flows in Rose Valley that showed that over 900 acre-feet per year of water seeps out of LADWP's South Haiwee Reservoir

into Rose Valley, and travels south through Haiwee Canyon to Rose Valley. This finding prompted LADWP to find a way to recover seepage losses and pump it back into the LAA1.

During the Coso Operating Company's EIR approval process, LADWP entered into a Memorandum of Understanding (MOU) with Coso Operating Company (LADWP, June 2009) that would allow the recovery of seepage losses from South Haiwee Reservoir. Recovery will be accomplished by modifying the existing well V817 for use as a production well and transporting the water via pipeline to LAA1. Changes in groundwater supply from pumping the recovered groundwater seepage is addressed in the MOU; the Coso Operating Company agreed to reduce its groundwater pumping by the same amount recovered in the event that pumping impacts the groundwater basin. Under Coso's Special Use Permit from Inyo County, the operating criteria are based on certain drawdown limits at a number of monitoring wells throughout Rose Valley. If water levels fall below trigger levels, Coso will have to reduce its pumping.

1.6 Project Description

LADWP proposes to recover water seepage from the Haiwee Reservoir by capturing the seeped water by reactivating an existing well previously used for irrigation purposes. Seepage rates are estimated between 900-1,100 AFY. Approximately 1,100 AFY of water would be withdrawn by operation of the well pump. Recovered water would be conveyed to the LAA1 by installing an 8-inch diameter water pipeline along an existing dirt access road across an abandoned agricultural field in the Rose Valley area of Inyo County. The 1,542 linear foot water pipeline would transport pumped water from Well V817 to the LAA1. The pipeline would extend from Well V817 to the LAA1 near a concrete access box at Station 156+94. Well V817 would be equipped to pump approximately 1.5 cfs to the LAA1 with a 100 hp submersible pump and motor.

Two existing 25 feet by 25 feet concrete pads are located onsite. One concrete pad located northwest of the well would be used to upgrade an existing electrical panel and ancillary equipment would be mounted on racks in a fenced enclosure surrounding the pads. The second concrete pad is a well pad where a second abandoned well exists. This well, V816, is currently used as a monitoring well. The existing concrete pads would be used and construction of new pads would not be necessary. The fence enclosure around the concrete pads would be a maximum height of six feet. Electricity for Well V817 would be provided from an existing Southern California Edison (SCE) power line located northwest of the project area via an existing conduit. **Figures 3 and 4** provide views of the project site and locations of proposed improvements.

1.6.1 Project Construction

Construction of the proposed project would involve the installation of an 8-inch diameter water pipeline with a length of 1,542 feet that would transport pumped water from Well V817 to the LAA1. Access to the construction area would be from US Highway 395. All construction activities would occur within a 20-foot wide construction corridor along the project site to minimize disturbance to vegetation. All construction staging would also be located within the construction corridor. Other construction and employee vehicles would park along the existing



Well V817 in its current state.



Well V816 and the adjacent, unused electrical junction box/panels (one is far left). Power to the well pump will be controlled from the upgraded panel components that will be installed at this location.



This is the existing dirt access road that will be excavated to allow placement of the pipeline connecting V817 to the First Los Angeles Aqueduct. Pipeline will deliver the pumped water to a concrete access box (in this picture, marked by barricades along the right side of the road in the distance)



Concrete access box atop the concrete cover for LAA1. Pipeline from well V817 will connect to this access box to deliver pumped well water.

roadways or in turnouts from Highway 395. No vehicle maintenance would be conducted at or near the project site and vehicle fueling would only occur on existing roadways.

Trenching would be required for the installation of the pipeline. Construction vehicles would include a backhoe, flat bed truck, water truck, and accessory vehicles. The construction corridor would provide enough room for a backhoe to excavate the pipeline and stockpile the dirt to one side of the trench. A flat bed truck would be used to bring in the new pipe material, which would be lifted into the trench, and the backhoe would backfill the trench with the excavated soils. Approximately two to three construction truck trips are estimated to deliver material during the construction stage of the project and approximately five to eight construction workers are anticipated to travel to the site each weekday.

The pipe trenches would be excavated to a minimum depth of six inches below the bottom of the 8-inch diameter pipe and six inches on each side of the pipe. The pipe can be placed on sandbags placed adjacent to pipe bells. Alternatively, six inches of sand bedding material may be placed on the trench bottom for support under the pipe. The topsoil would be placed back on the surface of the disturbed areas to allow for vegetation restoration. Approximately 270 cubic yards (cy) of topsoil would be excavated and displaced, and then reused for backfilling after pipeline installation.

Construction of the proposed project would occur for approximately one month and would begin sometime in Spring of 2014. The duration of proposed project construction is based on an 8-hour weekday work day between 6:00 a.m. to 4:30 p.m., Monday through Thursday. No nighttime or weekend construction activities are anticipated.

1.6.2 Project Operation

Operation and maintenance activities for the proposed pipeline project would be minimal. The well would pump approximately 1.5 cfs to the LAA1. Approximately 1,100 AFY of water would be withdrawn from the well and delivered to the aqueduct. The pipeline would be located underground and would connect Well V817 to the LAA1. The pipeline, well, and associated equipment would require minimal maintenance and monitoring that would be related to periodic inspection for possible pipeline leaks. Maintenance activities would occur routinely but infrequently.

1.7 Project Review and Approvals

Approvals and/or permits would be required to implement the proposed project. The CEQA environmental documentation prepared for this proposed project would be used to facilitate compliance with federal and state laws and the granting of permits by the various state and local agencies. Proposed project approval includes the following:

- Approval of the MND

SECTION 2

Environmental Checklist

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

2.1 CEQA Initial Study Form

Project Title	Well V817 Rose Valley Pipeline Installation Project
Lead Agency Name	Los Angeles Department of Water and Power
Lead Agency Address	111 N. Hope Street, Room 1044, Los Angeles, CA 90012
Contact Person	Charles Holloway
Contact Phone Number	(213) 367 – 0285
Project Sponsor	Los Angeles Department of Water and Power
Project Location	Lat:36.10068, Long: -117.956061 Township 21S, Range 37E, Section 23 at Rose Valley in Southern Inyo County
General Plan Designation	Natural Resource (NR)
Zoning	Open Space (OS-40)
Description of Project	Please refer to the Chapter 2, Project Description.
Surrounding Land Uses and Setting	Please refer to the Chapter 2, Project Description.
Responsible/Trustee Agencies	Los Angeles Regional Water Quality Control Board
Reviewing Agencies	City of Los Angeles Department of Planning

2.2 Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

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

2.3 Determination: (To be completed by Lead Agency)

On the basis of this initial study:

- 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 or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Charles C. Holloway
Signature

August 1, 2013
Date

Charles Holloway
Manager of Environmental Assessment and Planning
Los Angeles Department of Water and Power

For

SECTION 3

Environmental Impact Assessment

3.1 Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** The proposed project would be located in the remote area of Rose Valley, Inyo County. The project area and immediate surrounding area is undeveloped and has not been designated as a scenic vista. The proposed project consists of installation of underground water infrastructure, and improvements to existing well pads that would include new electrical panels and ancillary equipment within a fenced enclosure. The fenced enclosure around the concrete pads would be a maximum height of six feet, which would not adversely impact, block, or alter views of any scenic vistas. As a result, no impacts to scenic vistas would occur.
- b) **No Impact.** There are no officially-designated State Scenic Highways in the vicinity of the project site, nor are there any known scenic resources, rock outcroppings, or historic buildings within the project site. The nearest roadway is US Highway 395, which is not designated as scenic and is located 0.5 mile west of the project area. Proposed project construction activities would be short-term and temporary and would not be visible from the highway due to its distance from the project site. Therefore, the proposed project would not impact scenic resources within a designated State Scenic Highway corridor. No impacts would occur.
- c) **Less than Significant.** The existing visual character of the proposed project and surrounding area is characterized as previously disturbed unpaved areas with a generally

flat topography and sparse vegetation. Views in the distance to the west show the Sierra Nevada Mountains and views to the east include the Basin and Range Region (Trans-Sierra), which include high mountain ranges and deep valleys. Construction activities could create an impact to the visual character or visual quality to the site; however, impacts would be short-term and temporary, lasting approximately one month. The well improvements would be confined to the existing well pad and the water pipeline alignment located entirely underground. At the end of construction, the site would be returned to pre-construction conditions, with exception of the new well equipment and new fence by the existing well pad. As a result, the proposed project would not substantially degrade or change the existing visual character or quality of the site and its surroundings. Therefore, impacts to visual character of the site and its surroundings would be less than significant.

- d) **No Impact.** Construction activities would occur during permitted daylight hours between 6:00 a.m. and 4:30 p.m. and no nighttime construction is anticipated. The use of external night lighting would not be required. At the end of construction, the water pipeline would be located entirely underground and the only aboveground structure would be the well pads and existing Well V817, which is of a subdued color and finish that would reduce reflection or glare. Operational inspection and maintenance activities would be minimal and infrequent. No security lighting is proposed for project operation. Therefore, implementation of the proposed project would not result in a substantial new source of light or glare that could affect nighttime views in the area. No impact would occur.

3.2 Agricultural and Forest Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
2. AGRICULTURAL AND FOREST 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. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** The project site has a land use designation of NR (Natural Resources) and is zoned as OS-40 (Open Space, 40-acre minimum lot size), which identifies the area for natural resource and open space uses. The adjoining areas are also designated NR and zoned OS-40. The project area was previously used as agricultural land but agricultural uses were abandoned in the late 1980s. According to the California Resources Agency Farmland Mapping and Monitoring Program, there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Important within or adjacent to the project site.¹ Therefore, no impacts would occur.
- b) **No Impact.** The project site has a land use designation of NR and is zoned OS-40, which identifies the area for natural resource and open space uses. Inyo County does not offer a Williamson Act program. Thus, the project site is not under a Williamson Act contract.

¹ Source: Farmland Mapping and Monitoring Program , <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>. Accessed 8/28/12.

- The proposed project would not conflict with agricultural zoning or a Williamson Act contract and no impact would occur.
- c) **No Impact.** The project site has a land use designation of NR and is zoned as OS-40, which identifies the area for natural resource and open space uses. The project site and adjacent lands are not zoned for forest land, timberland, or timberland zoned for timberland production. Thus, no impacts would occur to lands zoned for forest land.
 - d) **No Impact.** The project area is zoned OS-40, which identifies the area for natural resource and open space uses, and is not zoned as forest land. Furthermore, the proposed project site has sparse vegetation and is not located within or near a forest. The proposed project would install an underground water pipeline and well equipment that would not impact any trees. Thus, no impacts to forest land or forest use would occur.
 - e) **No Impact.** See response 3.2 (a) and (d) above. The proposed project would involve the installation of a water pipeline and well facilities to convey water supplies. The proposed project would not convert potential farmland or forest land to non-agriculture/non-forestry use. Therefore, no impacts would occur to agriculture or forestry resources.
-

3.3 Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
3. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) **Less than Significant Impact with Mitigation Incorporated.** The proposed project is located in the Great Basin Unified Air Pollution Control District (GBUAPCD), which has jurisdiction over the Great Basin Valley's Air Basin. The purpose of GBUAPCD is to enforce federal, state, and local air quality regulations to ensure federal and state air quality standards are met. The proposed project is located within Coso Junction PM₁₀ Planning Area. The Coso Junction Planning area has been designated by the State and the United States Environmental Protection Agency (USEPA) as a non-attainment area of the state 24-hour average particulate matter of 10 microns or less (PM₁₀) standards. In 2010, GBUAPCD prepared the 2010 Coso Junction PM₁₀ Maintenance Plan requesting that the Coso Junction PM₁₀ Planning area be redesignated from nonattainment for the NAAQ Standard for PM₁₀ (federal standard) to attainment. The Coso Junction is designated as an attainment area for PM₁₀ under federal standards (ARB, 2011). The primary PM₁₀ violations in the Owens Valley Planning Area stem from the wind-blown dust from the dry bed of Owens Lake, located north of the project area. The area has been designated as attainment or unclassified for all other ambient air quality standards including ozone. Air quality is considered excellent with the exception of PM₁₀. Pursuant to the Federal Clean Air Act, the GBUAPCD is required to reduce emissions of criteria pollutants for which it is in nonattainment under state standards, which in this case is PM₁₀.

The proposed project would involve short-term construction activities that include trenching, which could generate emissions of particulate matter. However, the proposed project would comply with applicable rules, ordinances, plans, and policies that would

minimize emissions during the short-term construction activities, such as GBUAPCD Rule 401 that requires fugitive dust emission control measures to be implemented to adequately prevent visible dust from leaving the property and to maintain compliance with the PM₁₀ standard from the air quality plan. In addition, Mitigation Measures AQ-1 through AQ-4 would be implemented to reduce impacts to less than significant levels. As a result, implementation of the proposed project would not with or obstruct implementation of the applicable air quality plan.

- b) **Less than Significant Impact with Mitigation Incorporated.** The GBUAPCD has not established numerical air quality significance thresholds to quantitatively evaluate air quality impacts. However, projects located within the jurisdiction of the GBUAPCD have utilized the numerical standards of the Mojave Desert Air Quality Management District (MDAQMD). The air quality and pollutant attainment status in portions of the Mojave Desert Air Basin (MDAB) are similar to those of the Great Basin Valley Air Basin (GBVAB); therefore, the numerical thresholds set for MDAB by the MDAQMD are considered adequate to serve as significance thresholds for the proposed project.

Air Quality Emissions Thresholds

Based on the MDAQMD thresholds, the proposed project construction emissions would result in a significant impact if regional emissions from both direct and indirect sources would exceed any of the following threshold levels:

- 137 pounds per day for nitrogen oxides (NO_x);
- 137 pounds a day for volatile organic compounds (VOC);
- 82 pounds per day for PM₁₀;
- 82 pounds per day PM_{2.5};
- 550 pounds per day for carbon monoxide (CO); and
- 137 pounds per day for sulfur oxides (SO_x).

The proposed project includes recovering Haiwee Reservoir water seepage and installation of a water pipeline from Well V817 to the LAA1. Construction equipment would include a backhoe, flat bed truck, water truck, and accessory vehicles. Construction activities for pipeline and well improvements would create minimal short-term temporary air quality impacts resulting from construction equipment, worker trips, and truck hauling trips. Approximately 10 to 16 vehicle round-trips would occur per day for the duration of the construction. As shown in **Table 1**, projected emissions for vehicles and construction equipment would be substantially below significance thresholds and would therefore not result in a significant impact. In addition, GBUAPCD Rule 401 requires that fugitive dust emission control measures be implemented to adequately prevent visible dust from leaving the property and to maintain compliance with the PM₁₀ standard. LADWP would be required to comply with Rule 401. Implementation of Mitigation Measures **AQ-1** through **AQ-4** would further reduce air quality dust emissions during construction.

TABLE 1
MAXIMUM DAILY EMISSIONS FROM PROJECT CONSTRUCTION
(pounds per day)

Activity	Estimated Emissions (lbs/day)					
	VOC	NO _x	SO ₂	CO	PM ₁₀	PM _{2.5}
Pipeline Trenching	0.93	4.36	0.01	6.2	0.54	0.35
<i>MDAQMD Significance Thresholds</i>	<i>137</i>	<i>137</i>	<i>137</i>	<i>550</i>	<i>82</i>	<i>82</i>
Significant Impact (Yes or No)	No	No	No	No	No	No

Project construction emissions estimates for off-road equipment were calculated using CalEEMod Version 2011.1.1. See **Appendix A** for data emission sheets.

SOURCE: ESA, 2012.

Upon completion of construction activities, operation of the proposed project would not include components that would generate emissions that would impact the air quality of the area. Operations and maintenance activities including pipeline inspection, maintenance, and/or repairs would be minimal resulting in negligible emissions that would not exceed significance thresholds. Therefore, operational impacts related to air quality would be less than significant.

Mitigation Measures

- AQ-1:** Construction areas in unpaved easements and staging areas shall be sprayed with water as necessary during construction to prevent excessive amounts of dust; preferably in the late morning and after work is done for the day.
- AQ-2:** Construction vehicles shall be limited to 15 mph on unpaved roads and construction areas.
- AQ-3:** All dust generating activities (e.g. trenching and excavation) shall cease during periods of high winds (i.e. greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 dust episodes.
- AQ-4:** Construction vehicles shall limit and minimize idling time whenever possible.

Significance after Mitigation: Less Than Significant

- c) **Less than Significant Impact.** The project area is located in the Coso Junction Planning area which is characterized as a non-attainment area for PM₁₀. Proposed project construction would result in dust emissions from trenching activities during the construction and installation of the water pipeline. GBUAPCD Rule 401 requires that fugitive dust emission control measures be implemented to adequately prevent visible dust from leaving the property and to maintain compliance with the PM₁₀ standard. LADWP would be required to comply with Rule 401. As discussed above in 3.3 (b), the proposed project would not significantly increase emissions of PM₁₀. Implementation of Mitigation Measures AQ-1 through AQ-4 would further reduce project-related emissions.

As the proposed project would not exceed the maximum daily emissions of criteria pollutants (Table 1), would comply with all applicable rules and regulation, and implement recommended mitigation measures, the proposed project would not result in a cumulative considerable net increase of any criteria pollutant. Therefore, impacts would be less than significant.

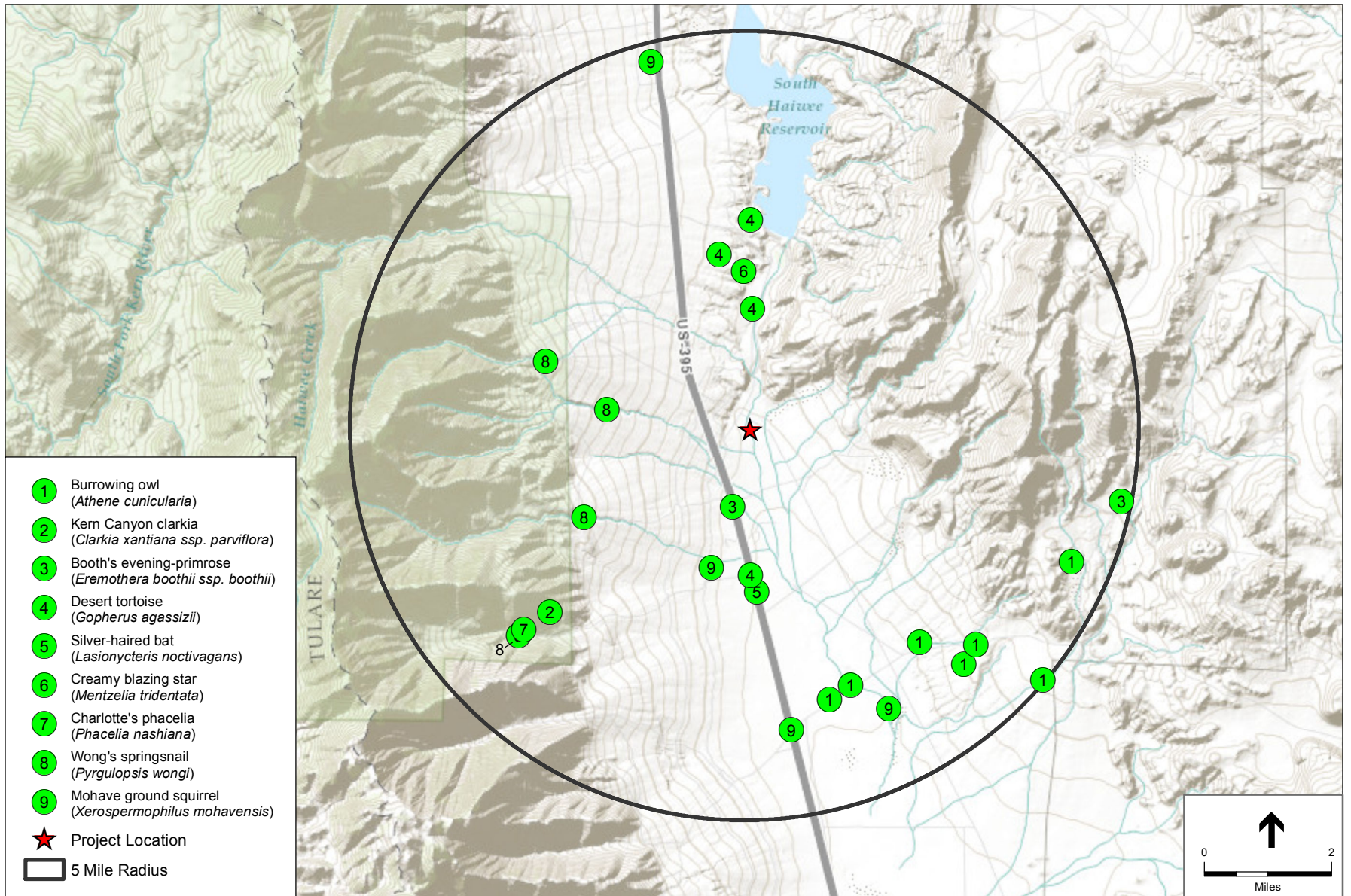
- d) **No Impact.** The proposed project would not emit air pollutants in substantial concentrations that would affect nearby sensitive receptors. As shown in Table 1, projected emissions for vehicles and construction equipment would be substantially below significance thresholds and would therefore not result in a significant impact. No sensitive receptors are located in proximity to the project area. In addition, operational emissions would be negligible. Because no sensitive receptors are located in proximity to the project area and construction emissions would be short-term, temporary, and well below significance thresholds, no impacts would occur.
- e) **Less than Significant Impact.** Project construction could result in construction-related emissions that could generate objectionable odors. However, these odors would be short-term and temporary and no sensitive receptors are located in proximity to the project area. Operation of the proposed project would not emit odors that would affect a substantial number of people. Therefore, the proposed project would not result in significant sources of odor during construction or operation and impacts would be less than significant.
-

3.4 Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4. 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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Less than Significant with Mitigation Incorporation.** To identify potential biological resources in the project area, a query of special-status species that have been recorded in the vicinity (and region) was conducted. This query included the California Natural Diversity Database (CNDDDB), which is maintained by the California Department of Fish and Wildlife (CDFW). The query consisted of a search of nine U.S. Geological Survey (USGS) 7.5-minute quadrangles, including Coso Junction, Haiwee Reservoir, Upper Centennial Flat, Cactus Peak, Volcano Peak, Little Lake, Sacatar Canyon, and Long Canyon and Haiwee Pass. In addition, a query of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants On-line Inventory was conducted, which also included these nine USGS quadrangles. The United States Fish and Wildlife Service (USFWS) special-status species list for Inyo County was also accessed to identify any listed species previously recorded in the region of the project site. The approximate location of special-status species identified in the database searches are provided in **Figure 5** (CDFG 2012a; CNPS 2012; USFWS 2010), which shows all recorded occurrences within a five mile radius of the project area.



SOURCE: ESA 2012, ESRI, CNDDB

LADWP – Water Pipeline Installation Project . 211490.04

Figure 5
 California Natural Diversity Database
 Special-Status Species Occurrences

The special-status plants and wildlife identified in the database search are provided in **Tables 2 and 3**, respectively. These tables identify the protective status of each species, the preferred habitat, and the probability of occurrence in the project area. The “Potential for Occurrence” category is defined as follows:

- **Unlikely:** The project site and/or immediate area does not support suitable habitat for a particular species, and therefore the project is unlikely to impact this species.
- **Low Potential:** The project site and/or immediate area only provides limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- **Medium Potential:** The project site and/or immediate area provides suitable habitat for a particular species, and proposed development may impact this species.
- **High Potential:** The project site and/or immediate area provides ideal habitat conditions for a particular species and/or known populations occur in the immediate area

**TABLE 2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA**

Species	Status (Federal/State/ CRPR List)	Preferred Habitat	Flowering Period	Probability of Occurrence on Project Site
Ripley's aliciella (gilia) (<i>Aliciella ripleyi</i>) (formerly <i>Gilia ripleyi</i>)	-/-/2.3	Perennial herb. Mojave Desert in Inyo and San Bernardino Counties; Nevada. Carbonate soils in Mojavean desert scrub; 305 - 1,900 meters in elevation.	May-Jul	Low. Suitable desert scrub habitat exists within the project site; however, there is a low potential that this species would be present within the 0.23 acre of Mohave scrub that would be temporarily impacted.
Darwin Mesa milk-vetch (<i>Astragalus atratus</i> var. <i>mensanus</i>)	-/-/1B.1	Perennial herb. Desert mountains north and west of Panamint Valley, Inyo County. Volcanic clay or gravelly soils in Great Basin scrub, Joshua tree woodland, pinyon-juniper woodland; 1,340 - 2,315 meters in elevation.	Apr-Jun	None: Project site is outside the range of the species.
Kern Plateau milk-vetch (<i>Astragalus lentiginosus</i> var. <i>kernensis</i>)	-/-/1B.2	Perennial herb. Meadow and seeps and subalpine coniferous forests. From 2,240 - 2,750 meters in elevation.	Jun - Jul	None: Project site is outside the range of the species.

**TABLE 2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA**

Species	Status (Federal/State/ CRPR List)	Preferred Habitat	Flowering Period	Probability of Occurrence on Project Site
common moonwort (<i>Botrychium lunaria</i>)	–/–/2.3	Perennial rhizomatous herb. Meadow and seeps, subalpine coniferous forest, and upper montane coniferous forest. From 1,980 – 3,400 meters in elevation.	Aug	None: Project site is outside the range of the species.
mingan moonwort (<i>Botrychium minganense</i>)	–/–/2.2	Perennial rhizomatous herb. Lower montane coniferous forest. From 1,455 – 2,105 meters in elevation.	Jul - Sep	None: Project site is outside the range of the species.
white pygmy-poppy (<i>Canbya candida</i>)	–/–/4.2	Annual herb. Typically found in Joshua tree woodland. From 600 - 1,460 meters in elevation.	Mar-Jun	Unlikely: No suitable habitat exists within the project site.
Kern Canyon clarkia (<i>Clarkia xantiana</i> ssp. <i>parviflora</i>)	–/–/4.2	Annual herb. Found in chaparral, cismontane woodland, Great Basin scrub, and valley and foothill grassland. From 700 - 3,620 meters in elevation.	May-Jun	Low: No suitable habitat exists within the project site; however one CNDDB occurrence is documented within five miles of the project site. There is a low potential that this species would be present within the 0.23 acre of Mohave scrub that would be temporarily impacted.
<i>Cordylanthus eremicus</i> ssp. <i>kernensis</i> Kern Plateau bird's- beak	–/–/1B.3	Annual herb hemiparasitic. Found in Great Basin scrub, Joshua tree woodland and cismontane woodland. From 1,675 – 3,000 meters in elevation.	Jul-Sep	None: Project site is outside the range of the species.
Ripley's cymopterus (<i>Cymopterus ripleyi</i> var. <i>saniculoides</i>)	–/–/1B.2	Perennial herb. Found in Inyo County and Nevada in Joshua tree woodland, and Mohavean desert scrub on sandy, carbonate soils. From 1,000 – 1,660 meters in elevation.	Apr-Jun	Low. Suitable desert scrub habitat exists within the project site; however, there is a low potential that this species would be present within the 0.23 acre of Mohave scrub that would be temporarily impacted.
Mojave tarplant (<i>Deinandra mohavensis</i>)	–/Endangered/1B.3	Annual herb. Found in chaparral and riparian scrub. From 640 – 1600 meters in elevation.	May - Jan	None: No suitable habitat exists within the project site.

**TABLE 2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA**

Species	Status (Federal/State/ CRPR List)	Preferred Habitat	Flowering Period	Probability of Occurrence on Project Site
Booth's evening-primrose (<i>Eriogonum boothii</i> ssp. <i>boothii</i>)	-/-/2.3	Annual herb. Occurs in Joshua tree woodland and pinon and juniper woodlands. From 900 – 2,400 meters in elevation.	Apr - Sep	Low: No suitable habitat exists within the project site; however two CNDDDB records exist within 5 miles of the project site. There is a low potential that this species would be present within the 0.23 acre of Mohave scrub that would be temporarily impacted.
Pinyon Mesa buckwheat (<i>Eriogonum mensicola</i>)	-/-/1B.3	Perennial herb. Found in Great Basin scrub, pinon and juniper woodlands, and upper montane coniferous forest. From 1,800 – 2,805 meters in elevation.	Jul - Sep	None: Project site is outside the range of the species.
Olancha Peak buckwheat (<i>Eriogonum wrightii</i> var. <i>olanchense</i>)	-/-/1B.3	Perennial herb. Found in alpine, alpine boulder and rock field, and subalpine coniferous forest. From 3,260 – 3,535 meters in elevation.	Jul - Sep	None: Project site is outside the range of the species.
field ivesia (<i>Ivesia campestris</i>)	-/-/1B.2	Perennial herb. Found in meadows and seeps, subalpine coniferous forest, and upper montane coniferous forest. From 1,975 – 3,350 meters in elevation.	Jun - Aug	None: Project site is outside the range of the species.
Father Crowley's lupine (<i>Lupinus padre-crowleyi</i>)	-/Rare/1B.2	Perennial herb. Found in Great Basin scrub, riparian forest, riparian scrub, and upper montane coniferous forest. From 2,200 – 4,000 meters in elevation.	Jul - Aug	None: Project site is outside the range of the species.
creamy blazing star (<i>Mentzelia tridentata</i>)	-/-/1B.3	Annual herb. Occurs in Mohavean desert scrub in rocky, gravelly, or sandy soils. From 700 – 1,160 meters in elevation.	Mar - May	Low. Suitable desert scrub habitat exists within the project site; however, there is a low potential that this species would be present within the 0.23 acre of Mohave scrub that would be temporarily impacted. The CNDDDB indicates that one recorded occurrence is within 5 miles of the project site.

TABLE 2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA

Species	Status (Federal/State/ CRPR List)	Preferred Habitat	Flowering Period	Probability of Occurrence on Project Site
Sweet-smelling monardella (<i>Monardella beneolens</i>)	–/–/1B.3	Perennial rhizomatous herb. Found in Inyo, Kern, and Tulare Counties: known from few occurrences on the eastern Sierran crest. Granitic substrates in alpine boulder and rock field, subalpine and upper montane coniferous forest; 2,500 - 3,500 meters in elevation.	Jul - Sep	None: Project site is outside the range of the species.
Death Valley beardtongue (<i>Penstemon fruticiformis</i> var. <i>amargosae</i>)	–/–/1B.3	Perennial herb. Found in Inyo and San Bernardino Counties and in Nevada. Occurs in Mohavean desert scrub; 850-1,400 meters in elevation.	Apr - Jun	Low. Suitable desert scrub habitat exists within the project site; however, there is a low potential that this species would be present within the 0.23 acre of Mohave scrub that would be temporarily impacted.
Charlotte's phacelia (<i>Phacelia nashiana</i>)	–/–/1B.2	Annual herb. Occurs in Joshua tree woodland, Mohavean desert scrub, and pinon and juniper woodland in granitic and sandy soils. From 600 – 2,200 meters in elevation.	Mar - Jun	Low. Suitable desert scrub habitat exists within the project site; however, there is a low potential that this species would be present within the 0.23 acre of Mohave scrub that would be temporarily impacted. The CNDDDB indicates that one recorded occurrence is within 5 miles of the project site.
Owens Valley checkerbloom (<i>Sidalcea covillei</i>)	–/Endangered/1B.1	Perennial herb. Occurs in Great Basin scrub, limestone, meadows and seeps, and other wetland habitats. From 1,095 – 1,415 meters in elevation.	Apr - Jun	Unlikely: No suitable habitat exists within the project site.
cut-leaf checkerbloom (<i>Sidalcea multifida</i>)	–/–/2.3	Perennial herb. Occurs in Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, meadows and seeps, and pinon and juniper woodlands. From 1,750 – 2,800 meters in elevation.	May – Sep	Unlikely: No suitable habitat exists within the project site.

**TABLE 2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA**

Species	Status (Federal/State/ CRPR List)	Preferred Habitat	Flowering Period	Probability of Occurrence on Project Site
Dedecker's clover (<i>Trifolium dedeckerae</i>) (syn. <i>T. macilentum</i> var. <i>dedeckerae</i>)	-/-/1B.3	Perennial herb. Found in the eastern Sierras in Tulare and Inyo Counties, the White Mountains in Inyo County, south to Spanish Needle area in Kern County. Rocky, gravelly slopes in variety of arid vegetation types including coniferous forest, pinyon-juniper woodland, and sagebrush scrub; 2,100 – 3,500 meters in elevation.	Jun-Jul	None: Project site is outside the range of the species.
grey-leaved violet (<i>Viola pinetorum</i> var. <i>grisea</i>)	-/-/1B.3	Perennial herb. Occurs in subalpine coniferous forest and upper montane coniferous forest. From 1,500 – 3,400 meters in elevation.	Apr - Jul	None: Project site is outside the range of the species.

CNPS California Rare Plant Rank (CRPR) Status

List 1B = Plants Rare, Threatened, Endangered in California and elsewhere

List 2 = Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

Threat ranks

.1 = seriously Endangered in California

.2 = fairly Endangered in California

.3 = Not very threatened in California (low degree/immediacy of threats or no current threats known)

**TABLE 3
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA**

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence on Project Site
Invertebrates			
Wong's spring snail (<i>Pyrgulopsis wongi</i>)	- / -	Found in Great Basin flowing waters and in meadows and seeps.	None: No suitable habitat present.
Fish			
Volcano Creek golden trout (<i>Oncorhynchus mykiss aguabonita</i>)	-/Sp. of Special Concern	Found in aquatic habitats with flowing waters (Sacramento and San Joaquin).	None: No suitable habitat present.
Owens speckled dace (<i>Rhinichthys osculus</i> ssp. 2)	-/Sp. of Special Concern	Found in aquatic habitats with flowing waters in the Great Basin	None: No suitable habitat present.

**TABLE 3
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA**

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence on Project Site
Reptiles			
Desert tortoise (<i>Gopherus agassizii</i>)	Threatened/Threatened	Desert scrub, desert wash, and Joshua tree woodland habitats. Requires friable soil for burrow and nest construction. Prefers creosote bush habitat with large annual wildflower blooms.	Low: Suitable habitat is present and known populations exist within the vicinity of the project site (USFWS 2011). No individuals or sign of recent activity was observed during 2012 field assessments and the potential for desert tortoises to be present within the 1.12 acre project site is low.
Birds			
burrowing owl (<i>Athene cunicularia</i>)	-/Sp. of Special Concern	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, particularly the California ground squirrel	Low: Suitable habitat present; however, no sign of burrowing owls or suitable-size burrows were observed during field assessments conducted in 2012. Borrowing owls could winter within the Mohave scrub on the project site; however, the potential for burrowing owls to be present within the 1.12 acre project site is low.
Swainson's hawk (<i>Buteo swainsoni</i>)	-/Threatened	Stands with few trees, juniper-sage flats, riparian habitat, and oak savannah. Forages in adjacent grasslands and agricultural fields and pastures.	Low. No suitable nesting habitat is present on the project site. Although there is suitable foraging habitat, the potential for Swainson's hawk to be present within the 1.12 acre project site is low.
loggerhead shrike (<i>Lanius ludovicianus</i>)	-/Sp. of Special Concern	Lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, and other perches.	Observed: A loggerhead shrike was observed on a shrub located on the project site. This species is expected to inhabit the area. However, the potential for loggerhead shrikes to be present within the 0.23 acre of Mohave desert scrub that would be temporarily disturbed is low.

**TABLE 3
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA**

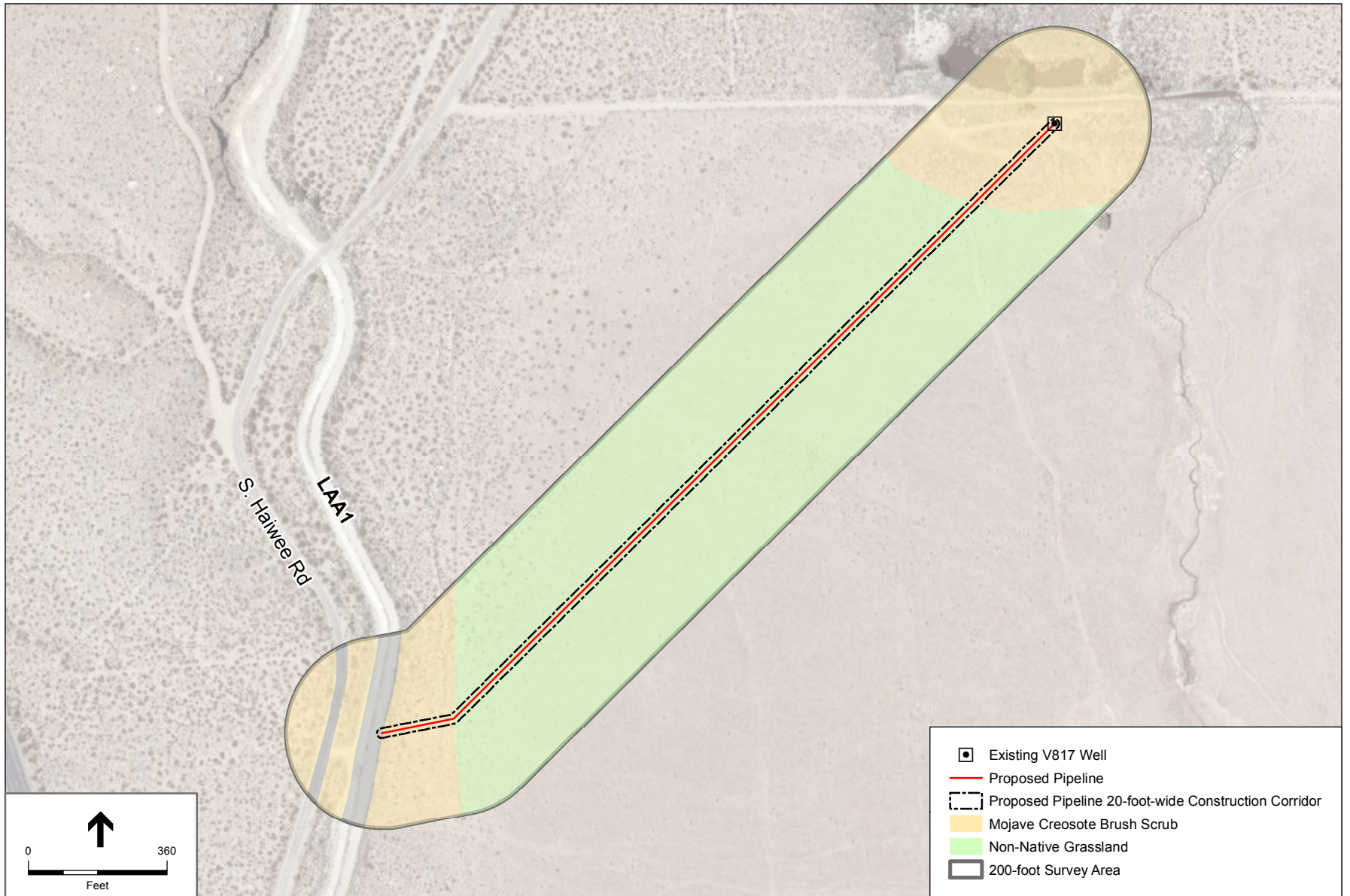
Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence on Project Site
Le Conte's thrasher (<i>Toxostoma lecontei</i>)	-/Sp. of Special Concern	Resident of desert areas, primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Nests in dense, spiny shrub or densely branched cactus, usually 2-8 ft. above ground in desert wash habitat.	Medium: Suitable foraging habitat is present in the scrub habitats on and around the project site; however, no suitable nesting habitat is present.
Mammals			
pallid bat (<i>Antrozous pallidus</i>)	-/Sp. of Special Concern	Occurs throughout California except the high Sierra from Shasta to Kern County and the northwest coast, primarily at lower and mid elevations. Occurs in a variety of habitats from desert to coniferous forest. Most closely associated with oak, yellow pine, redwood, and giant sequoia habitats in northern California and oak woodland, grassland, and desert scrub in southern California. Relies heavily on trees for roosts.	None: No suitable habitat present.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	-/Sp. of Special Concern	Most common in mesic sites throughout California. Roosts in the open, hanging from walls and ceilings.	Low: No suitable roosting habitat present, but foraging habitat is present in project vicinity.
silver-haired bat (<i>Lasionycteris noctivagans</i>)	- / -	Occurs in lower montane coniferous forest and old-growth riparian forests.	None: No suitable habitat present.
Owens Valley vole (<i>Microtus californicus vallicola</i>)	-/Sp. of Special Concern	Typically inhabits meadow and seeps and other wetland habitats.	None: No suitable habitat present.

TABLE 3
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN PROJECT AREA

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence on Project Site
Mohave ground squirrel (<i>Spermophilus mohavensis</i>)	—/Threatened	Open desert scrub, alkali scrub, and Joshua tree woodland. Endemic to the Mojave Desert. Prefers sandy-to-gravelly soils and avoids rocky places. Finds cover and nests in burrows at the base of shrubs.	Low: The open and disturbed non-native grassland along the proposed pipeline alignment does not provide suitable habitat. However, Mohave ground squirrels could use the shrubs located within and adjacent to the perimeter of the site for migrating to the north and south. Known populations occur in the vicinity (Leitner 2008). However, the potential for Mohave ground squirrel to be present within the 0.23 acre of Mohave desert scrub that would be temporarily disturbed is low.

On July 29, 2012, LADWP biologists conducted a habitat assessment of the project alignment and a 200-foot buffer area to evaluate the potential for burrowing owl (*Athene cunicularia*), desert tortoise (*Gopherus agassizii*), Mohave Ground Squirrel (MGS) (*Xerospermophilus mohavensis*), rare plants, and other regionally sensitive species to occur. In addition, ESA's Director of Biological Resources, Greg Ainsworth, conducted a site reconnaissance on March 9, 2012, to characterize on-site and adjacent habitat conditions. The results of the habitat assessment are described below.

The majority of the project site has been disturbed by previous cattle grazing activities. In general, the shrub cover within the project site is sparse. The two plant communities that occur on and adjacent to the project site include Mojave Creosote Bush Scrub and Non-native Grassland. The proposed pipeline alignment is dominated by non-native grasses and Mojave Creosote Bush Scrub around Well V817 and LAA1 Station 156+94 (See **Figure 6**). The dominant shrub species observed on the proposed project site include creosote (*Larrea tridentata*) and allscale (*Atriplex polycarpa*). Other species observed in much lower densities include rayless goldenhead (*Acamptopappus sphaerocephalus*), white bur-sage (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), Cooper's goldenbush (*Ericameria cooperi* var. *cooperi*), fiddleneck (*Amsinckia* spp.), western tansy mustard (*Descurainia pinnata*), Mojave indigo bush (*Psoralethamnus arborescens*), gilia (*Gilia* spp.), cholla (*Cylindropuntia* spp.) and beavertail pricklypear (*Opuntia basilaris*).



SOURCE: ESA 2012, ESRI

LADWP – Water Pipeline Installation Project . 211490.04

Figure 6
Existing Vegetation

Several other common (annual) plant species that were not observed due to the timing of the field visits but may occur onsite because they are known to occur in the vicinity include: coreopsis (*Coreopsis bigelovii*), rosy gilia (*Gilia sinuata*), chick lupine (*Lupinus microcarpus* var. *horizontalis*), white fiesta flower (*Pholistoma membranaceum*) and thistle sage (*Salvia carduacea*) (BioHere 2012).

Wildlife species observed are typical for the region. No habitat for amphibians exists onsite and one reptile species, side-blotched lizard (*Uta stansburiana*), was observed. Bird species observed during the assessment included loggerhead shrike (*Lanius ludovicianus*), Bullock's oriole (*Icterus bullockii*), red-tailed hawk (*Buteo jamaicensis*), and black phoebe (*Sayornis nigricans*). The Loggerhead shrike is a California Species of Special Concern; however, no evidence of breeding or nesting was observed, the observed bird was likely foraging or passing through the site. The only mammal observed was Antelope ground squirrel (*Ammospermophilus leucurus*). This species had many burrows along the project alignment both under shrubs and out in the open.

Common wildlife species not observed but expected to occur in the area include mule deer (*Odocoileus hemionus*), bobcat (*Lynx rufus*), and vagrant shrew (*Sorex vagrans*) (Jameson & Peeters 2004). Additionally, many migratory birds forage and stopover in the area and numerous other birds are known to breed and nest in the vicinity, including chukars (*Alectoris graeca*), Gambel's quail (*Lophortyx gambelii*), mountain quail (*Oreortyx pictus*) and mourning dove (*Zenaidura macroura*). Raptors including golden eagles (*Aquila chrysaetos*), prairie falcon (*Falco mexicanus*), and long-eared owls (*Asio otus*) are also known to forage in the area (BioHere 2012) (Sibley 2003).

Habitat Impacts

Direct impacts as a result of project-related construction activities would include the temporary disturbance of native and non-native plant communities utilized as habitat by both common and rare wildlife, fugitive dust, and increased noise from operation of heavy equipment in these areas. Clearing, grading and trenching (within a 20-foot-wide corridor over the length of the alignment) would temporarily impact 0.18 acre of disturbed Mojave Creosote Bush Scrub and 0.71 acre of non-native grassland along the project alignment. This totals 0.89 acres of temporary ground disturbance impacts to habitat, as listed in **Table 4**.

**TABLE 4
PROJECT IMPACTS TO HABITAT (ACRES)**

Plant Community	Temporary Impacts
Mojave Creosote Bush Scrub	0.18
Non-Native Grassland	0.71
Total	0.89

SOURCE: ESA, 2013

The temporary disturbance from project construction activities would not result in a substantial loss of habitat that would affect the ability of species to disperse and persist throughout the project area and surrounding vicinity. In addition to the direct impacts, indirect temporary impacts to biological resources could include the establishment of non-native and invasive weeds. Operational project activities would include periodic/intermittent human presence for maintenance activities that would not result in significant impacts to onsite habitat. Furthermore, no permanent impacts to existing onsite plant and habitat communities would occur from implementation of the proposed project.

Special-Status Plant Impacts

No special-status plant species were identified on or adjacent to the project site; therefore, the potential for such species to occur is low. The proposed project, however, has potential to result in the removal of some native desert scrub vegetation, including native cacti such as cholla and beavertail pricklypear. The following CNPS “Rare” herbaceous species have a moderate potential to occur within the Mohave scrub community that occurs at the ends of the pipeline alignment (Figure 3): Ripley’s aliciella, Ripley’s cymopterus, creamy blazing star, Death Valley beardtongue, and Charlotte’s phacelia. However, the non-native grassland habitat that exists within the majority of the pipeline alignment does not provide suitable habitat for these species. The likelihood of these rare plants to be present within the 0.18 acre of Mojave Creosote Bush Scrub that would be temporarily impacted is low. If present, the removal of these species would not cause the regional population to drop below self sustaining levels. Impacts to these potentially occurring rare plants would be less than significant with the implementation of Mitigation Measures.

Wildlife and Special-Status Species Impacts

Direct mortality of small mammals and reptiles could occur during construction of the proposed project. Depending on the timing of construction, eggs and nestlings of bird species with small, well-hidden nests could also be subject to loss. Impacts to animals would result primarily during habitat clearing, earth removal, grading, digging, and equipment movement. Mobile species like birds and larger mammals are expected to disperse into nearby habitat areas during construction.

In addition, the use of access roads by construction vehicles could result in accidental mortality to wildlife. Diurnal reptiles and small mammals such as western fence lizards, desert cottontails, and ground squirrels are the most likely to be subject to vehicle-caused mortality. Vehicle collisions with coyote and other large species may also occur, but are unlikely since such species are typically easy to detect. Injury to or mortality of a special-status species during construction would be significant.

Vehicle and equipment travel on access roads during operation and maintenance may also disturb wildlife. Vehicles could cause direct mortality or injury to wildlife that are unable to move out of the way of vehicles. As with construction, injury to or mortality of a

special-status species during operations and maintenance would be significant. However, use of access roads during operations and maintenance would be of low volume. All construction activities would occur within the 20-foot-wide construction corridor to minimize disturbance to adjacent habitats. All construction staging would also be located within the 20-foot-wide construction corridor and/or the staging areas that are shown on Figure 2. Other construction and employee vehicles would park along the existing roadways or in turnouts from State Route 395 and no vehicle maintenance would be conducted at or near the project site. Vehicle fueling would occur on existing roadways. In addition, no nighttime lighting is proposed and vehicle access onto the proposed project site during nighttime hours would be minimal.

Desert Tortoise. Although desert tortoises are known to occur in the region (USFWS 2011), no evidence of desert tortoise was observed on or adjacent to the project site during the site assessment and field reconnaissance. The total project footprint is 0.89 acres and impacts to plants and habitat would be temporary. If a desert tortoise were to migrate through the project site during construction activities, direct impacts or “take” could occur from construction equipment or entrapment in open trenches. However, direct impact to individuals and desert tortoise habitat would be less than significant with implementation of Mitigation Measures.

Mohave Ground Squirrel (MGS). According to *The Current Status of the Mohave Ground Squirrel* (Leitner 2008), there are approximately 11 to 20 known records of MGS in the vicinity of the project site. MGS could migrate through the site within the Mojave Creosote Bush Scrub that occurs near the east and west perimeters. A total of 0.18 acre of Mojave Creosote Bush Scrub would be temporarily disturbed and the potential for MGS to be present within this small area is low. If a MGS were to migrate through the project site during construction activities, direct impacts or “take” could occur from construction equipment or entrapment in open trenches. However, direct impact to individuals and MGS habitat would be less than significant with implementation of Mitigation Measures.

Burrowing Owl, Swainson’s Hawk, Loggerhead Shrike, Le Conte’s Thrasher, and Bats. Burrowing owl, Swainson’s hawk, loggerhead shrike, Le Conte’s thrasher and Townsend’s big-eared bat are known to forage in the region, and a loggerhead shrike was observed on the project site during the site assessment. No burrows suitable for supporting burrowing owls are present within the project site. The potential for these species to forage or winter within the 0.18 acre of Mojave Creosote Bush Scrub that would be temporarily impacted is low, since the affected area is disturbed from previous grazing activity and is small in size. The project site does not support suitable nesting habitat for the aforementioned bird species, nor is suitable roosting habitat present for bats. Moreover, the project site is not a significant foraging area for any of these species. In addition, all of these species are highly mobile; therefore, if present, they are expected to disperse into nearby habitat areas during construction activities and maintenance visits. As a result, impacts to nesting and foraging avian species would be less than significant with implementation of Mitigation Measures.

Nesting Birds. Indirect impacts to nesting birds and seasonal migrants are expected to be low, because of the relatively small area of low quality nesting and foraging habitat that would be temporarily impacted by project activities Mojave Creosote Bush Scrub, as listed in Table 4. The majority of birds observed during field visits, including other passerines and raptors known to occur in the area that otherwise have no special status, are covered by the Migratory Bird Treaty Act (MBTA) and any direct impacts to breeding and nesting birds would be significant. However, impacts would be less than significant with implementation of Mitigation Measure.

Mitigation Measures

- BIO-1:** LADWP shall minimize the removal of native plant species during site preparation and construction activities. Native vegetation within the construction work area, including native cacti, should be flagged for protection. If construction requires removal of native plant species, the plant species shall be salvaged and transplanted in undisturbed areas adjacent to the construction work areas.
- BIO-2:** Exclusionary fencing (i.e., silt fence) shall be installed around the perimeter of the proposed project site. The fencing material shall be buried at least 12 inches below the surface, so that animals cannot burrow under the fence and enter the work area.
- BIO-3:** A qualified biologist with possession of a California Department of Fish and Wildlife Scientific Collection Permit shall conduct a preconstruction survey immediately prior to vegetation removal activities. If a listed or sensitive species is identified (i.e., desert tortoise, Mohave ground squirrel or burrowing owl), the biologist shall document the location of the observance and prepare a letter to LADWP to notify the project manager of the occurrence. If a listed species is identified within the work area, no ground disturbance activities shall be initiated prior to written approval from the United States Fish and Wildlife Service and California Department of Fish and Wildlife.
- BIO-4:** A qualified biological monitor with possession of a California Department of Fish and Wildlife Scientific Collection Permit shall be present during vegetation removal and construction activities. The biological monitor shall inspect the exclusionary fencing daily for animals that may have moved in to the area. Open trenches, or other excavations that could entrap wildlife shall be inspected by the biological monitor a minimum of three times per day and immediately before backfilling, with at least one inspection occurring prior to the onset of construction activities each morning and another conducted at the end of each day. If wildlife is trapped, construction shall not occur until the animal has left the trench or has been removed and relocated by the biological monitor. Any trapped animals shall be removed and relocated outside of the construction limits.

BIO-5: If an injured or dead special-status species is encountered during construction, the construction contractor shall stop work within the immediate vicinity and notify the biologist, who shall subsequently notify the appropriate resource agency (e.g., USFWS or CDFW) before construction is allowed to proceed.

BIO-6: The qualified biologist shall provide environmental training to all personnel that will be working on the site during project construction and operation. The training shall include a review of special-status species known to occur in the project site and measures to avoid inadvertent impacts to all animal species.

BIO-7: Construction vehicles shall be limited to 15 mph on unpaved roads and construction areas. If construction is scheduled to occur during the bird nesting season (February 1–August 31) a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitats within 500 feet of construction activities. Surveys shall be conducted no more than 30 days prior to construction activities. If construction activities are scheduled outside of the nesting season, no preconstruction surveys would be necessary.

If active nests are found, no-disturbance buffers delineated with orange mesh construction fencing (or similar material) at least three feet in height shall be implemented around each nest as follows: a 500-foot buffer shall be created around any confirmed active raptor nest; a 250-foot buffer shall be created around active nests of non-raptor special-status bird species (such as loggerhead shrike); and a 100-foot buffer shall be created around any other nests of bird species protected by the MBTA or Fish and Game Code. The buffers should be implemented until it is determined by a qualified wildlife biologist that young birds have fledged and no additional attempts to utilize the nest are made, or as otherwise authorized by CDFW. If a nest is found in an area where ground disturbance is scheduled to occur, LADWP shall avoid the area either by delaying ground disturbance until a qualified wildlife biologist has determined that the birds have fledged or by re-siting the project component(s) to avoid potential nesting sites.

Significance After Mitigation: Less Than Significant.

- b) **No Impact.** The project area and pipeline easement do not contain riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or the USFWS. Therefore, no impacts would occur.
- c) **No Impact.** The proposed project is not located within or in the vicinity of federally protected wetlands. Therefore, no impact would occur.
- d) **Less than Significant with Mitigation Incorporation.** Direct impact to MGS individuals and MGS habitat would be less than significant with implementation

of Mitigation Measures listed above. Following installation of the new facilities, activities onsite would be limited to intermittent and limited maintenance activities that would not impact wildlife movement corridors.

- e) **No Impact.** The proposed project is located in Inyo County. Inyo County's adopted goals call for maintaining and enhancing biological diversity and healthy ecosystems throughout the County, and maintaining a balanced approach to resource protection and recreational use. In addition, there are no biological/wildlife or tree specific ordinances in the Inyo County Code. Because the proposed project is temporary and would not result in permanent impacts, the biological diversity and ecosystem on the site and in the area would be maintained. Moreover, Mitigation Measures would reduce or avoid potential impacts to biological resources to less-than-significant levels. Therefore, the proposed project would not conflict with any local policies or ordinances protection biological resources.
- f) **No Impact.** The project is included within the West Mojave Habitat Conservation Plan. The project area is not within a BLM-designated Mohave Ground Squirrel Conservation Area or Mohave Ground Squirrel Coso Range-Olancha Population Core Area (Leitner 2008). The project area is also not located within USFWS-designated Critical Habitat or any other conservation areas for desert tortoise. No other adopted Habitat Conservation Plans/Natural Community Conservation Plans (HCP/NCCP), or other approved local, regional, or state HCPs occur within the vicinity of the project site. Implementation of the proposed project would not conflict with the provisions of any adopted conservation plan, and no impacts would occur.
-

3.5 Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The following analysis is based on findings from the following reports: *Draft Report Cultural Resources Survey for LADWP's Water Pipeline Installation from Well V817 to LAAI, Rose Valley, Inyo County, California* (Denardo et al., 2010); *Archaeological Testing and Evaluation of an Archaeological Site along the Option B Corridor and Cultural Resource Survey along the Option C Corridor for LADWP's Water Pipeline Installation from Well V817 to Los Angeles Aqueduct # 1, Rose Valley, Inyo County, California* (Weaver and Denardo, 2011); and *Los Angeles Department of Water and Power Well V817 Rose Valley Pipeline Installation Project: Extended Phase I Cultural Resources Study* (Vader et al., 2012)

a) *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

Less Than Significant With Mitigation Incorporated. A Phase I study (Denardo et al., 2010) and two extended Phase I/ Phase II testing programs (Weaver and Denardo, 2011; Vader et al., 2012) were conducted in the project area in order to identify historical or archaeological resources that could be impacted by the proposed project.

The Phase I study consisted of archival research, Native American contact program, and pedestrian survey (Denardo et al., 2010). A records search conducted at the Eastern Information Center (EIC) revealed that two prehistoric archaeological resources (CA-INY-372, CA-INY-6980/H) and two multi-component archaeological resources (CA-INY-7306 and CA-INY-7307) had been previously recorded within a 0.50 mile radius of the project alignment. Of these four resources, one, CA-INY-6980/H, was originally mapped as being located within the project area. However, further research revealed that this resource had been mis-plotted at the EIC and was in fact located about 500 feet north of the project area. A Sacred Lands File (SLF) search performed by the Native American Heritage Commission (NAHC) did not reveal the presence of any sacred sites within the project area. As a result of contact with Native American representatives, as suggested by

the NAHC, Charlie Cooke of the Tehachapi Indian Tribe and Barbara Durham of the Timbisha Shoshone Tribe expressed interest in the project. Ms. Durham recommended that a Native American monitor be present during project ground-disturbing activities.

A Phase I pedestrian survey of the project area was performed in March of 2010 (Denardo et al., 2010). The survey resulted in the identification of one archaeological resource (temporary designation 1309-15-12-1/H) within the project area. Resource 1309-15-2-1/H consists of a sparse-to-moderate density prehistoric lithic debitage and tool scatter, and a sparse historic refuse scatter.

In 2011, resource 1309-15-2-1/H was subject to Extended Phase I and Phase II testing, in order to delineate the site's boundaries, and to determine whether the site qualified as a historical or unique archaeological resource under CEQA (Weaver and Denardo, 2011). During the testing program, 18 shovel test pits and two test excavation units were excavated. Artifacts recovered during testing included 56 prehistoric lithic artifacts (including 52 flaked debitage and four tools) and 18 historical artifacts (including 1 glass fragment and eight metal objects). The site possessed a very sparse subsurface component, and no prehistoric or historic subsurface features were identified. It was observed that various disturbances have affected portions of the site. Based on the scant deposits, lack of cultural features, and lack of temporally diagnostic artifacts, resource 1309-15-2-1/H was recommended not eligible for listing in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR), does not qualify as a unique archaeological resource, and is not otherwise considered a historical resource under CEQA §15064.5 (Weaver and Denardo, 2011).

Immediately following this testing program, on August 12, 2011, project archaeologists surveyed Option C, a pipeline option that is no longer under consideration (Weaver and Denardo, 2011). As a result of this survey, resource CA-INY-6980/H was relocated and its boundaries significantly expanded. Resource CA-INY-6980/H consists of a 6.9-acre high-density scatter of prehistoric artifacts, including obsidian tools, along with some historic-period artifacts. Although the majority of the site is located outside of the project area, CA-INY-6980/H overlaps a part of the project area and a proposed staging area.

An Extended Phase I surface survey and subsurface testing of the 0.3-acre portion of site CA-INY-6980/H that overlaps part of the project area was conducted on October 31 and November 1, 2012 by ESA archaeologists (Vader et al., 2012). The testing program was designed to sample the broadest extent of the affected portion of site CA-INY-6980/H that overlaps the project area ("XPI investigation area") in order to identify the surficial extent of the site within the project area and to identify whether the site contained a subsurface component. The Extended Phase I investigation commenced with a close interval survey (transects no more than 5 meters apart) of the XPI investigation area. A total of 48 obsidian lithic artifacts, designated Artifacts 1 through 48, were identified as a result of the survey. Identified artifacts included flake tools that exhibit utilization, flake shatter, angular shatter, pressure flakes, and a possible unifacially worked projectile point base.

Following the surface investigation, ESA archaeologists excavated 10 shovel test pits (STPs) (STP 1-10) within the XPI investigation area. Each STP measured approximately 30 centimeters in diameter. All STPs were excavated in 10-centimeter (cm) increments until two culturally sterile soil levels were reached. Soils from each 10-cm level were screened through 1/8-inch hardware mesh and the result of each STP excavation was recorded on an ESA STP form. Nine of the ten STPs (STP 2-10) were negative for cultural materials. A single artifact (Artifact 49), an obsidian flake tool that exhibits utilization, was recovered from the 0-10 cm level of STP 1.

Based on the results of the Extended Phase I Investigation, the portion of CA-INY-6980/H located within the XPI investigation area does not contain adequate data to contribute to the site's eligibility and is not considered eligible for listing in the NRHP or the CRHR under Criterion D/4, nor does it meet the definition of a unique archaeological resource under CEQA. The types of data that would typically contribute to a prehistoric archaeological site's eligibility include the presence subsurface features, the presence of datable materials such as charcoal, and diagnostic artifacts. These types of data should be sufficient to contribute to regional research topics such as paleoenvironmental reconstruction, settlement patterns, technology, and travel and trade. The Extended Phase I investigation did not uncover any features, diagnostic artifacts, or datable materials that would contribute to regional research topics (Vader et al., 2012).

Although the portion of site CA-INY-6980/H tested during the present field effort failed to encounter data sufficient to be recommended eligible for listing in the NRHP or CRHR, the study tested only approximately 4 percent of the site as it is presently defined by surface artifacts. This finding does not preclude the possibility that portions of the site not tested as part of this study may contain eligible components. Therefore, for the purposes of this project, the portion of site CA-INY-6980/H located outside of the project area is assumed eligible for listing in the NRHP and the CRHR under Criterion D/4.

Concurrent with the Extended Phase I testing of site CA-INY-6980/H, the proposed staging area along the LAA1 was surveyed. Approximately 15-18 obsidian flakes were observed during this survey, all of which were found atop the concrete surface of the LAA1 Staging Area. Many of the flakes appeared to be worn and battered with rounded edges. The condition of the flakes in conjunction with their location atop the LAA1 indicates that they most likely represent a secondary deposit, and that the artifacts were likely transported to their current locations as a result of ground disturbance from the construction of the LAA1 or as a result of fluvial activity. Because of the displaced nature of the artifacts, they were not recorded as an archaeological site, and are not considered significant historical resources or unique archaeological resources (Vader et al., 2012).

The Los Angeles Aqueduct (LAA1) may be considered a historical resource under CEQA. Construction of LAA1 began in 1908, and was completed by 1913. Originally, four reservoirs, including Haiwee, Fairmont, Dry Canyon, and San Fernando, were completed as part of LAA1. The aqueduct is historically associated with bringing the first consistent water source to Los Angeles, and is a potentially historic resource due to its

age and historical significance. Construction and operation of the project would not impact the historic integrity of LAA1. The proposed pipeline would connect to LAA1 at a concrete access box (Station 156+94). Station 156+94 is an above ground concrete facility that sits above the aqueduct structure and provides access for operational activities to LAA1. The project would connect the proposed 8-inch pipeline through the station box 156+94. The project would continue the historic uses of LAA1, which are to regulate and provide water supplies as needed. No visible changes would occur to LAA1, and the project would not result in a significant impact to LAA1.

Neither archaeological resource 1309-15-2-1/H nor the portion of archaeological resource CA-INY-6980/H located within the project area are considered to be historical resources. The LAA1, which could be considered a historical resource, would not be significantly impacted by the project.

However, the portion of resource CA-INY-6980/H not located within the project area is considered, for the purpose of this project, to be eligible for listing in the NRHP and CRHR. Impacts to this portion of the site by construction activities and personnel would be a significant impact. However, Mitigation Measures CUL-1 and CUL-2 would mitigate impacts to the portions of resource CA-INY-6980/H that are not located within the project area.

Additionally, if project boundaries are modified, significant impacts to resource CA-INY-6980/H or to other as-yet undocumented sites may occur. Moreover, given the archaeological sensitivity of the project area, previously undocumented subsurface archaeological resources, which may qualify as historical resources per CEQA §15064.5 may be uncovered during project ground disturbance. Implementation of Mitigation Measures CUL-3, -4, and -5 would mitigate impacts to unknown historical resources to a less than significant level.

Mitigation Measures

CUL-1: Construction Worker Cultural Resources Sensitivity Training. A qualified archeologist, or an archeologist working under the direction of a qualified archeologist, shall conduct pre-construction cultural resources worker sensitivity training to inform construction personnel as to the areas to be avoided (the portions of CA-INY-6980/H that are not within the project footprint), the types of cultural resources that may be encountered, and to bring awareness to personnel of actions to be taken in the event of a cultural resources discovery.

CUL-2: Establishment of an Environmentally Sensitive Area. For the purpose of preventing inadvertent impacts to resource CA-INY-6980/H, prior to ground disturbing activities the portions the resource that are not located within the project area shall be delineated by the qualified archeologist and a temporary impenetrable, highly visible protective fence shall be placed and secured around the resource where it is located adjacent to the construction work areas. The ESA shall be avoided during all project construction.

CUL-3: Additional Survey and Cultural Resources Evaluation if Project Boundaries are Modified. In the event that the project boundaries are modified at any time prior to or during ground disturbing activities, and such modifications result in the inclusion of areas not subject to cultural resources survey within the past 5 years, an additional survey and cultural resources evaluation of the modified project areas shall be conducted.

CUL-4: Archaeological and Native American Monitoring. Prior to the start of any ground-disturbing activity, a Native American consultant shall be selected from the NAHC's list of representatives with ties to the area to discuss project specifics and is invited to observe the work as it progresses. An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards shall be retained by the project proponent to monitor ground-disturbing activities including, but not limited to, brush clearance and grubbing, grading, trenching, excavation, and the construction of fencing and access roads. The archaeological monitor shall also observe the boundaries of the Environmentally Sensitive Area defined in Mitigation Measure CUL-2 to make sure that no inadvertent impacts occur. Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historic and prehistoric resources that could be encountered within the project area. The archaeological monitor shall have the authority to re-direct construction activities to assess the significance of discoveries. If ground-disturbing activities occur simultaneous in two or more locations located more than 500 feet apart, additional archaeological monitors may be required.

The archaeological monitor shall keep daily logs. After monitoring has been completed, a monitoring report that details the results of monitoring will be prepared and submitted to LADWP.

CUL-5: Unanticipated Discoveries. In the event of a discovery of historic or archaeological material, the contractor shall immediately cease all work activities in the area (within approximately 100 feet) of the discovery until the materials can be evaluated by a qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. The archaeological monitor and/or Native American monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find until the archaeological monitor and the Native American monitor have evaluated the find, determined whether the find is culturally sensitive, and designed an appropriate short-term and long term treatment plan.

Significance after Mitigation: Less Than Significant.

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

Less than Significant with Mitigation Incorporated. As discussed in 3.5(a), resource 1309-15-2-1/H and the portion of resource CA-INY-6980/H located within the project area were determined not to be unique archaeological resources per the provisions of CEQA Guidelines Section 15064.5.

However, the portion of resource CA-INY-6980/H not located within the project area is considered, for the purpose of this project, to be eligible for listing in the NRHP and CRHR, and may additionally be considered a unique archaeological resource. Impacts to this portion of the resource by construction activities and personnel would be a significant impact. However, Mitigation Measures CUL-1 and CUL-2 would mitigate impacts to the portions of resource CA-INY-6980/H that are not located within the project area.

Additionally, if project boundaries are modified, significant impacts to the significant portion of resource CA-INY-6980/H or other as-yet undocumented sites may occur. Moreover, given the archaeological sensitivity of the project area, previously undocumented subsurface archaeological resources, which may qualify as unique archaeological resources per CEQA §15064.5 may be uncovered during project ground disturbance. Implementation of Mitigation Measures CUL-3, -4, and -5 would mitigate impacts to unknown archaeological resources to a less than significant level.

Mitigation Measures

Implement **Measures CUL-1** through **CUL-5**.

Significance after Mitigation: Less Than Significant.

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

Less than Significant with Mitigation Incorporated. A paleontological records check at the Natural History Museum of Los Angeles County (NHMLA) Vertebrate Paleontology Section was conducted by NHMLA staff member Samuel P. McLeod, Ph.D. on October 11, 2012.

The records search indicated that surficial deposits in the project area consist of younger Quaternary Alluvium of Late Pleistocene and Holocene age that may contain a typical Late Pleistocene to recent faunal assemblage. The uppermost layers of the deposits do not typically contain significant vertebrate fossils. The closest vertebrate fossil locality found in these deposits is LACM 4538, located north of the project area near the dam of the North Haiwee Reservoir, southeast of Olancho. The locality produced a specimen of the

Columbian mammoth, *Mammuthus columbi*, collected by William Mulholland during the construction of the LAA. The next closest cluster of fossil vertebrate localities from these deposits are LACM 7716-7719, located north-northeast of the project area near the old railroad grade on the northeast shore of Owens Lake. These localities produced specimens of bony fish, Teleostei, bird, Aves, jack rabbit, *Lepus*, pocket gopher, *Thomomys*, and even-toed ungulate, Artiodactyla. The next closest locality is LACM 4691, located north of the project area on the south margin of Owens Lake. The locality produced proboscidean remains and a fossil specimen of mountain lion, *Felis concolor*.

Very shallow excavations in the younger Quaternary Alluvium in the proposed project are unlikely to produce significant fossil vertebrate remains in the uppermost layers. However, deeper excavations that extend down into the older Quaternary deposits may encounter significant vertebrate fossils. Implementation of Mitigation Measures CUL-6 and CUL-7 would mitigate impacts to unknown subsurface paleontological resources to a less than significant level.

Mitigation Measures

CUL-6: Paleontological Resource Sensitivity Training. A qualified paleontologist shall conduct pre-construction paleontological Resource worker sensitivity training to inform construction personnel as to the types of paleontological resources that may be encountered, and to bring awareness to personnel of actions to be taken in the event of a paleontological resources discovery. The applicant shall complete training for all construction personnel and retain documentation showing when training of personnel was completed. This training may be conducted concurrently with the cultural resources sensitivity training required under Mitigation Measure CUL-1.

CUL-7: Discovery of Paleontological Resources. If paleontological resources are encountered during the course of construction and monitoring, the project operator shall halt or divert work and notify a qualified paleontologist who shall document the discovery as needed, evaluate the potential resource, assess the significance of the find, and develop an appropriate treatment plan in consultation with LADWP.

Significance after Mitigation: Less Than Significant.

- d) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less than Significant with Mitigation Incorporated. There is no indication that any portion of the project area has been used for human burial purposes in the recent or distant past. Therefore, it is unlikely that human remains would be encountered during construction of the proposed project. However, in the event that human remains were discovered during subsurface activities, Mitigation Measure **CUL-8** would be implemented to reduce impacts to a less than significant level.

Mitigation Measure

CUL-8: If human remains are uncovered during project construction, the project proponent shall immediately halt work within 100 feet of the discovery, contact the Inyo County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). The NAHC shall designate a Most Likely Descendent (MLD) for the remains per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Significance after Mitigation: Less Than Significant.

3.6 Geology, Soils, and Seismicity

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
6. GEOLOGY, SOILS, AND SEISMICITY — 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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a.i) **Less than Significant Impact.** The project area is located within Rose Valley, which is a deep north-south trending basin, located between the Sierra Nevada to the west and the White-Inyo Mountains to the east. Geological formations in the area are of Cenozoic age, chiefly Quaternary. The proposed project is not located on or adjacent to any known or potentially active faults. The nearest fault line is Southern Sierra Nevada fault zone and Owens Valley fault zone located approximately two miles and six miles from the project area, respectively. Several smaller unnamed older faults are also located within proximity of the project area (USGS, 2012) and are not anticipated to create strong seismic activities. Nonetheless, the project area was not identified on an Alquist-Priolo Earthquake Fault Zoning Map or within an established Alquist-Priolo Earthquake Fault Zone.

The proposed project includes recovering Haiwee Reservoir water seepage and installation of an underground water pipeline and aboveground associated well

equipment. No habitable structures would be developed. Implementation of the proposed project would not result in an increase in population on the project site. Construction activities would require up to eight construction workers to access the site for the one month construction duration. Operational activities would be limited to infrequent maintenance activities. Therefore, due to the distance of the project site from an active fault and the infrequency of human presence onsite, the proposed project would not substantially expose people or structures to adverse effects related to ground rupture, and impacts would be less than significant.

- a.ii) **Less than Significant Impact.** As stated above in 3.6(a)(i), the proposed project is not located within an established Alquist-Priolo Earthquake Fault Zone. However, the project site is within a seismically active region and earthquakes in the region could produce strong ground shaking on the project site. Since habitable structures will not be built as part of the proposed project, and onsite activities will be limited to infrequent maintenance, exposure to substantial adverse effects involving seismic ground shaking onsite would be limited.

All infrastructure improvements in the State of California must comply with the seismic design parameters contained in the California Building Code (CBC) seismic requirements. Compliance with the CBC standards in the design and construction of the proposed project would reduce potential damage to the new infrastructure from ground shaking. The proposed project includes wells, pipelines, electrical panels, fences, and associated equipment to provide an additional water supply source to the aqueduct. Potential damage to these facilities from ground shaking could be repaired. Thus, implementation of the proposed project would result in less than significant impacts related to ground shaking.

- a.iii) **No Impact.** Liquefaction occurs in saturated and loose soils in areas where the groundwater table is 50 feet or less below ground surface (bgs). During an earthquake, a sudden increase in high core water pressure can cause soils to lose strength and behave as a liquid. Well V817 is located at an elevation of 3,512 feet MSL and the depth to groundwater is approximately 80 feet bgs; however, annual variations occur. Well V817 was monitored from June 2004 through December 2007, and the depth to groundwater varied from 72.90 to 79.06 feet, respectively. Similarly, the adjacent Well V816 was monitored from May 2003 through December 2007, and the depth to groundwater ranged from 77.08 in 2003 to 80.39 in 2007². Because the depth to groundwater is below 50 feet, the project area is not prone to liquefaction conditions. In addition, all infrastructure improvements in the State of California must comply with the seismic design parameters contained in the CBC seismic requirements. Compliance with the CBC standards in the design and construction of the proposed project would reduce potential damage to the new infrastructure from liquefaction. Therefore, the proposed project would not expose people or structures to potential substantial adverse effects related to liquefaction.

² Source: Coso Operating Company Hay Ranch Water Extraction and Delivery System July 2008 - http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/ridgecrest/ea.Par.34604.File.dat/HayRanchEAAppendix_H-Hydrology.pdf. Downloaded 8/23/12.

a.iv) **No Impact.** Landslides are characterized as deep-seated ground failures, in which a large section of a slope detaches and slides downhill. The proposed project is located approximately four miles from the Sierra Mountain ranges located to the west and more than 0.5 mile from the mountain ranges of the Transierra area. The project area and immediate surrounding vicinity consist of an undeveloped flat land area with no slope, which does not have the potential to be impacted by a landslide. As a result, impacts related to landslides would not occur.

b) **Less than Significant Impact.** The proposed project would include trenching activities within the 20-foot construction corridor. The trench would be approximately two feet wide by two feet deep and approximately 1,800 linear feet long. Approximately 270 cubic yards of dirt and topsoil would be excavated and reused as backfill after the pipeline installation. The proposed project would not contribute to soil erosion or loss of topsoil.

Construction of the proposed project would require compliance with the Construction General Permit and would require preparation of a Stormwater Pollution Prevention Plan (SWPPP) for the construction phase of the proposed project in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges associated with Construction and Land Disturbance Activities. The SWPPP shall list all practicable and applicable BMPs in order to inhibit erosion during construction. Compliance with the NPDES standards will ensure that no substantial adverse construction related erosion impacts would occur, and impacts would be less than significant. As described below in Section 3.9 Hydrology and Water Quality, the proposed project would implement best management practices (BMPs) to minimize the occurrence of soil erosion or loss of topsoil. Therefore impacts related to soil erosion or the loss of topsoil would be less than significant.

c) **Less than Significant Impact.** Refer to discussions in responses 3.6(a)(i) through 32.6(a)(iv). The project site is not located within an area that is subject to landslides or liquefaction. Thus, impacts to landslides, liquefaction and lateral spreading would not occur. Subsidence occurs when a void is located or created underneath the ground surface causing the surface to collapse. Causes can include, tunnels, wells, covered quarries, and caves beneath a surface. In addition, subsidence usually occurs as a result of excessive groundwater pumping or oil extraction. As described in response a.iii, above, the depth to groundwater is approximately 80 feet bgs. Similarly, the depth to groundwater at the adjacent Well V816 is approximately 80 feet bgs. Operation of the proposed project would result in the extraction of approximately 1,100 acre feet per year (AFY) of water seepage from Haiwee Reservoir, which would not lower groundwater levels. In addition, the proposed project would not expose people to seismic-related ground failure because the onsite facilities would be unmanned, and no habitable structures would be built as part of the proposed project. Further, onsite activities would be limited to infrequent maintenance activities, and any seismic damage to the proposed project facilities, such as the pipeline and well equipment could be easily repaired or replaced should a seismic event that damages the infrastructure occur. As previously stated, all infrastructure

- improvements in the State of California must comply with the seismic design parameters contained in the CBC seismic requirements. Compliance with the CBC standards in the design and construction of the proposed project would reduce potential damage to the new infrastructure from on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. As a result, the proposed project would not expose people or structures to potential substantial adverse effects related to unstable soils, and impacts would be less than significant.
- d) **Less than Significant Impact.** Soils mapped within the project area and surrounding vicinity include quaternary alluvial fan, basin-fill, and lacustrine deposits that could contain concentrations of clay. However, as described above, the proposed project would provide unmanned equipment and facilities that could be repaired if soils move, and no habitable structures are proposed as part of the proposed project. All infrastructure improvements in the State of California must comply with the seismic design parameters contained in the CBC seismic requirements. Compliance with the CBC standards in the design and construction of the proposed project would reduce potential damage to the new infrastructure from ground movement, including movement from expansive soils. Therefore, proposed project impacts related to expansive soils are less than significant.
- e) **No Impact.** The proposed project includes recovering Haiwee Reservoir water seepage and installation of a water pipeline and its associated equipment from Well V817 to the LAA1. No septic tanks or alternative wastewater disposal systems are existing or proposed. No impact would occur.
-

3.7 Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Less than Significant Impact.** Greenhouse gas (GHG) impacts are considered exclusively cumulative impacts. Greenhouse gasses include but are not limited to CO₂, CO, NO_x, hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). As discussed above in Section 3.3, emissions related to construction of the proposed project emissions would be well below thresholds, including those for CO and NO_x. In addition, the proposed project would not add any new stationary sources of emissions. Therefore, impacts regarding the generation of GHG emissions would be less than significant.
- b) **No Impact.** The proposed project would not increase emissions of GHGs and is not anticipated to conflict with applicable GHG plans, policies, or regulations. State of California Assembly Bill 32 (AB 32) requires that the California Air Resource Board (CARB), in coordination with state agencies, adopt regulations to require the reporting and verification of statewide GHG emissions and monitor and enforce compliance with the program. State of California Senate Bill 375 (SB 375) requires the reduction of GHG emissions by discouraging sprawl development and dependence on car travel. SB 375 assists in the implementation of AB 32 by integrating land use, regional transportation, and house planning. The proposed project involves recovering Haiwee Reservoir water seepage and consists of a water pipeline installation that would require minimal and infrequent operational activities. In addition, the proposed project would not generate GHG emissions that would significantly impact the environment. The proposed project would not conflict with AB 32 or SB 375 and no impacts would occur.

3.8 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
8. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) **Less than Significant Impact.** The short-term construction activities of the proposed project would require transportation and use of limited quantities of fuel, oil, sealants, and other hazardous materials related to construction. Construction activities would occur for one month and within a 20-foot construction corridor. Thus, the proposed project's use of hazardous materials would be short-term in minimal quantities and within a limited area. Additionally, the use of hazardous materials and substances during construction would be subject to federal, state, and local health and safety requirements for handling, storage, and disposal.

Operation of the pipeline and well equipment would not require the use of chemicals that could create a hazard through routine transport, use, or disposal of hazardous materials. Because the use of hazardous materials would be minimal and temporary, hazards to the

- public or the environment related to the transport, use, or disposal of hazardous materials would be less than significant.
- b) **Less than Significant Impact.** As discussed above in 3.8(a), the use of hazardous materials would be minimal during construction activities that would last approximately one month. However, hazardous materials may accidentally be spilled or otherwise released into the environment. To minimize potential impacts from release of hazardous materials, use of such substances during construction would be subject to federal, state, and local health and safety requirements for handling, storage, and disposal. Furthermore, vehicles would not be fueled or maintained on site and a limited volume of hazardous materials would be stockpiled. Therefore, impacts related to upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.
- c) **No Impact.** The proposed project is located in an undeveloped area within Rose Valley and is not located within one-quarter mile of an existing or proposed school. No impacts would occur.
- d) **No Impact.** The project area was not identified as having permitted underground storage tanks (PUST) or leaking underground storage tanks (LUST), nor is it listed as a hazardous materials site under the State Water Resources Control Board (SWRCB) GeoTracker and Department of Toxic Substances Control (DTSC) EnviroStor databases. Therefore, the proposed project would not create a significant hazard to the public or the environment. No impacts would occur.
- e) **No Impact.** The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public airport is Inyokern County Airport located one mile northwest of Inyokern County in Kern County and approximately 36 miles south of the project area. The nearest private airport to the project site is Porter Ranch Airport located approximately 10 miles west of the project area. Therefore, no airport related hazard impacts would occur.
- f) **No Impact.** The proposed project is not located within the vicinity of a private airstrip. The nearest private airport is Porter Ranch Airport located approximately 10 miles west of the project area. No airstrip related hazard impacts would occur.
- g) **No Impact.** The proposed project is not located within an adopted emergency response plan or emergency evacuation plan. The proposed project would be located in an undeveloped land area that is not near any existing development. Staging areas would be located within the 20-foot construction corridor. Further, the proposed project-related vehicles would not block existing street access to the site. Therefore, no impacts related to an emergency evacuation plan would occur.
- h) **Less than Significant Impact.** The project area is not located within a designated wildland fire area. In addition, the proposed project does not include construction of

habitable structures or onsite operational personnel. The majority of the new infrastructure would be located underground and any aboveground well equipment could be replaced in the event of a wildfire. Therefore, the proposed project is not anticipated to impact people or structures from wildland fires, and impacts would be less than significant.

3.9 Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Less than Significant Impact.** The proposed project would not violate any water quality standards or waste discharge requirements. The proposed project includes the installation of a water pipeline that would transport recovered Haiwee Reservoir water seepage from Well V817 to LAA1. Well V817 would be equipped to pump approximately 1.5 cfs to the LAA1 and approximately 1,100 AFY of recovered Haiwee Reservoir water seepage would be withdrawn.

Construction related soil activities would be limited to trenching, stockpiling, and backfilling the trench after installation of the pipe with the excavated soils. The proposed project would comply with a SWPPP in accordance with the NPDES General Construction Permit. The SWPPP is required to list and implement all practicable BMPs in order to protect water quality during construction. Compliance with the NPDES standards would ensure that no substantial adverse impacts would occur. Therefore, impacts would be less than significant.

- b) **Less than Significant Impact.** The proposed project involves recovering seepage losses from the South Haiwee Reservoir and the installation of a pipeline from Well V817 to transport the recovered water to the LAA1. The seepage recovered from the South Haiwee Reservoir from this project would augment the water supply of LAA1. As described in Section 1.5, Project Background, previous groundwater modeling studies of flows in Rose Valley show that over 900 acre-feet per year of water seeps out of LADWP's South Haiwee Reservoir into Rose Valley.

Proposed pumping from Well V817 would be subject to the *Agreement Between the County of Inyo and the City of Los Angeles and its Department of Water and Power on A Long Term Groundwater Management Plan For Owens Valley And Inyo* (County Inyo County Water Department, 1991). This agreement established the overall goal of managing the water resources within Inyo County to avoid certain decreases and changes in vegetation and to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in Inyo County. This goal will be met by managing annual groundwater pumping so that the total pumping from any well field area over a 20 year period (the then current year plus the 19 previous years) does not exceed the total recharge to the same well field area over the same 20 year period.

In a 2009 MOU, with the LADWP, the Coso Operating Company agreed to subordinate its groundwater pumping rights to LADWP in its effort to recover seepage losses from South Haiwee Reservoir, as would be done by the proposed project. In addition, the MOU provides that the Coso Operating Company would reduce groundwater pumping by the same amount in the event that pumping impacts groundwater supplies. Under Coso's Special Use Permit from Inyo County, the operating criteria are based on certain drawdown limits at a number of monitoring wells throughout Rose Valley. If water levels fall below trigger levels, Coso will have to reduce its pumping to mitigate the effects of pumping on groundwater levels until a time when groundwater in monitoring wells recover to levels above trigger levels. Drawdown tests and operational data indicate that the current Coso drawdown has had no effect on recharge at the specified wells. If the withdrawal of 4,800 acre feet (AF) of water does not trigger reductions in pumping, then aquifer recharge must keep pace with the drawdown from that aquifer, or deficits in recharge will cause reduced baseline flows and trigger reductions.

The Coso Operating Company is currently withdrawing the 4,800 AF of water that its permitted to draw, without approaching drawdown limits in the monitoring wells. The

proposed project would recover groundwater lost by seepage. If the withdrawal of 4,800 AF of water has not had a significant impact on groundwater recharge, then the influence from the withdrawal of a smaller volume (900 AF) of water from an upgradient well should also be less than significant on groundwater recharge.

On its own, the loss of 900 AF from the aquifer would not amount to a significant impact given the conditions. However, the cumulative loss from the pumping of 4,800 AF by the Coso Operating Company and 900 AF from the proposed project may cumulatively affect recharge. This has been addressed in the existing MOU between the Coso Operating Company and LADWP which specifies that if trigger levels are reached, the Coso Operating Company must subordinate to LADWP and reduce its pumping levels, thereby ensuring that groundwater supplies are protected. Since the proposed project is not anticipated to substantially deplete groundwater supplies or interfere substantially with groundwater recharge, impacts would be less than significant.

- c) **Less than Significant.** The proposed project includes recovering Haiwee Reservoir water seepage and the installation of a water pipeline and associated equipment to connect the LAA1 with and recover Haiwee Reservoir water seepage from Well V817. Construction related soil activities are limited to trenching, stockpiling, and backfilling the trench after installation of the pipe with the excavated soils. The proposed infrastructure installation and operation would not alter the existing drainage pattern of the project site. The proposed project would adhere to all NPDES regulations and implement BMPs to ensure that construction does not result in erosion impacts. In addition, there are no streams or rivers within the project area. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area and substantial erosion or siltation would not occur. Impacts would be less than significant.
- d) **No Impact.** The project area is rural, undeveloped and generally covered with pervious soils. The proposed project includes recovering Haiwee Reservoir water seepage and installation of a water pipeline and well equipment that would not generate an increase in impervious surfaces. The proposed project would not alter the existing natural drainage pattern of the project area or alter the course of a stream or river. The proposed project would not increase the rate or amount of surface runoff, and the proposed project would not result in on- or off-site flooding. The proposed project would have no impacts related to flooding hazards.
- e) **Less than Significant Impact.** There are no existing or planned stormwater drainage systems in the project vicinity. The vacant undeveloped project area is generally flat and covered with pervious soils. Stormwater currently infiltrates into the onsite soils. The proposed project would not increase impervious surfaces, would not generate additional runoff, and would not change the course of stormwater runoff. Construction soil activities are limited to trenching and backfilling the pipeline alignment, and the use of hazardous substances during construction would be minimal. The proposed project would adhere to all regulations and implement BMPs pursuant to the SWPPP to ensure that construction does not result in sources of pollution in runoff. As a result, the proposed project would

- not create or contribute to polluted runoff water or runoff that would exceed the existing drainage capacity of the project area, and impacts would be less than significant.
- f) **Less than Significant Impact.** The proposed project would involve short-term construction and minimal maintenance activities that would not substantially degrade water quality. The proposed project would comply with a SWPPP and would implement BMPs to minimize any impacts to water quality. Therefore, impacts related to the degradation of water quality would be less than significant.
- g) **No Impact.** The proposed project is not located within a 100-year flood hazard area as mapped on the Federal Emergency Management Agency (FEMA) 100-year Flood Insurance Rate Map. In addition, the proposed project does not include housing or other habitable structures. Therefore, no impact would occur.
- h) **No Impact.** The proposed project is not located within a 100-year flood hazard area and would include the construction of structures that would impede or redirect flood flows. The proposed project would install an underground water conveyance pipeline and equipment on existing well pad locations that would not impede or redirect flood flows. Therefore, no impact would occur.
- i) **Less than Significant Impact.** The South Haiwee Reservoir is located approximately three miles north of the project site and is owned and operated by LADWP as part of the LAA system. The crest of the South Haiwee Dam is approximately 3,766 feet above mean sea level (AMSL), with a spill elevation of 3,742 feet, though the average water level elevation is 3,723 feet.³ Water levels will generally rise during the rainy season. Regardless, the water level elevation is more than 40 feet below the crest height and approximately 20 feet below its spill elevation. In addition, as previously stated, the proposed project is not located in a 100-year flood zone, and the probability of a flooding event would be nominal. The proposed project would involve installation of an underground water conveyance pipeline and associated equipment on existing well pad locations and would not result in construction of any structures that may be affected in the event of catastrophic failure. In addition, no levees or dams are located on the project site and no off-site levees or dams would be modified as part of the proposed project. As a result, the proposed project would not expose people or structures to a significant risk of loss as a result of the failure of a levee or dam.
- j) **No Impact.** Tsunamis are usually caused by displacement of the ocean floor causing large waves and are typically generated by seismic activity. The project site is located more than 200 miles from the nearest ocean, therefore a tsunami hazard is not present for project site. A seiche is a standing wave in an enclosed or partly enclosed body of water. Seiches are normally caused by earthquake activity, and can affect harbors, bays, lakes, rivers, and canals. The South Haiwee Reservoir is located approximately three miles

³ LADWP, 2012. LA Aqueduct Conditions Report. Accessed:
<http://wsoweb.ladwp.com/Aqueduct/realtime/sorealtime.htm>;
<http://wsoweb.ladwp.com/Aqueduct/operations/southowens.htm>, 12 Sept 2012.

north of the project site, which is too far to be impacted by a seiche event at the reservoir. Lastly, mudflow is a mixture of soil and water that runs like a river of mud down a hillside and is usually generated by heavy rainfall. As described in responses 3.6(a.iv) and 3.9(e), the proposed project is located well away from the mountain fronts surrounding the valley in which it lies. The project area and surrounding vicinity consists of undeveloped flat land with no slope, which does not have the potential to be impacted by mudflows. As a result, impacts related to mudflows would not occur.

3.10 Land Use and Land Use Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10. LAND USE AND LAND USE PLANNING — Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** The proposed project involves recovering Haiwee Reservoir water seepage and the installation of a water pipeline from Well V817 to the LAA1. The project area is located within a completely uninhabited, undeveloped, vacant area that is surrounded by open space. Project construction activities would be short-term (approximately one month), require a maximum of eight construction workers, and be located within the 20-foot construction corridor. The pipeline would be located underground, with fenced well equipment located at the existing Well V817. No communities are located in proximity to the project site. No changes to land uses would occur with the proposed project, and the proposed project would not physically divide an established community. No impacts would occur.
- b) **No Impact.** The project site has a land use designation of NR (Natural Resource) and is zoned as OS-40 (Open Space, 40-acre minimum lot size). The adjoining areas are also designated NR and zoned OS-40. The proposed water pipeline would be located underground and would not constrain or change the existing vacant undeveloped lands within the project area. The new aboveground well equipment would be located on the existing well pad, and would also not conflict with the existing land uses and OS zoning of the project area. As a result, no impacts related to conflict with applicable land use plans, policies, or regulations related to avoiding or mitigating an environmental effect would occur.
- c) **No Impact.** The project area is not located within an adopted HCP/NCCP. Therefore, no impacts would occur.

3.11 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
11. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** According to the United States Geological Survey (USGS), the project site is not identified as a known mineral resource area and does not have a history of mineral extraction uses. In addition, according to the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, no oil well exists on the project site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource and no impacts would occur.
- b) **No Impact.** The project area is not used for mineral extraction and is not known as a locally important mineral resource recovery site. Further, the project area is not delineated on any plan for mineral resource recovery uses, and no impacts would occur.

3.12 Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
12. NOISE — Would the project:				
a) Result in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Less than Significant Impact.** Construction activities within 500 feet of existing noise sensitive uses located in Inyo County are limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. Construction of the proposed project would include the use of a backhoe to excavate the pipeline trench, a flat bed truck to transport the new pipe material, a water truck, and accessory vehicles (i.e., pick-up trucks) to take the construction crew to and from the project site. Construction activities would occur 6:00 a.m. to 4:30 p.m., Monday through Thursday for a duration of approximately one month. There are no sensitive receptors located within 500 feet of the project site. Additionally, construction-related noise would be short-term (approximately one month) and temporary and would not expose sensitive receptors to noise. Noise generated by truck travel to and from the project area would also be short-term and temporary and would not produce substantial increases in traffic that could result in a significant increase in noise levels. Operation of the proposed water pipeline and well equipment would generate minimal noise. The onsite facilities would be unmanned with exception of infrequent maintenance activities on the equipment that would not exceed noise standards. As a result, the proposed project would not generate noise levels in excess of adopted standards and noise impacts would be less than significant.
- b) **Less than Significant Impact.** Proposed project construction would not include the use of construction equipment that would generate excessive groundborne vibration or

- groundborne noise levels. Construction equipment includes a backhoe, flat bed truck, a water truck, and accessory vehicles that would not generate substantial groundborne vibration from activities on the soil surface of the project area. In addition, there are no sensitive receptors in proximity to the project area. Furthermore, operation of the proposed water pipeline and well equipment would not generate groundborne vibrations or groundborne noise levels. The onsite facilities would be unmanned with exception of infrequent maintenance activities on the equipment that are not anticipated to generate vibration. Therefore, impacts related to groundborne vibration and noise would be less than significant.
- c) **No Impact.** Construction noise would be short-term and temporary and would not result in a permanent increase in ambient noise levels. At the end of construction, the water pipeline would be located underground and would not create an increase in ambient noise levels. The above ground well equipment would also not generate a permanent increase in ambient noise levels. The onsite facilities would be unmanned with exception of infrequent maintenance activities on the equipment that would not create a permanent increase in ambient noise levels. Therefore, no impacts related to permanent increases in noise would occur from the proposed project.
- d) **Less than Significant Impact.** See responses 12. a through c above. Construction noise would be short-term (approximately one month) and would result in a temporary increase in ambient noise levels. However, the project area is undeveloped and vacant, There are no sensitive receptors located in proximity to the project site that could be affected by the temporary construction noise increase. Thus, construction-related noise is not considered to be substantial. Operation of the pipeline and well equipment would be unmanned with exception of infrequent maintenance events, and would not result in a substantial increase in ambient noise. Therefore, impacts related to substantial temporary or periodic increases in ambient noise levels would be less than significant.
- e) **No Impact.** The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport that would expose people residing or working in the area to experience noise levels. The nearest public airport is Inyokern County Airport located approximately 36 miles south of the project area. The nearest private airport is Porter Ranch Airport located approximately 10 miles west of the project area. Therefore, noise impacts related to airport uses would not occur.
- f) **No Impact.** The proposed project is not located within the vicinity of a private airstrip. The nearest private airport is Porter Ranch Airport located approximately 10 miles west of the project area. As a result, noise impacts related to private airstrip uses would not occur.
-

3.13 Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
13. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Less than Significant Impact.** The proposed project does not include housing or commercial development that would directly affect the number of residents or employees in the area and would not contribute to the creation of additional housing or jobs in the Rose Valley area of Inyo County. Instead, the proposed project would provide an additional source of water to the LAA1 to meet the existing demands of water use by LADWP customers. The proposed project would not directly or indirectly induce growth or remove an obstacle to growth as the proposed project would be implemented to meet demands of the existing population that would occur based on the City’s approved build-out and growth control policies. The proposed project’s potential to induce population growth is considered to be less than significant.
- b) **No Impact.** The project area is undeveloped and vacant. The proposed project does not involve the construction or demolition of housing. Therefore, the proposed project would not displace people or housing, and there would be no impact.
- c) **No Impact.** The proposed project includes the installation of a water pipeline and associated well facilities. The project area is undeveloped and vacant. No housing is located in proximity to the project area and the proposed project would not displace people or require the construction of replacement housing. No impact would occur.

3.14 Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the 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 following public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a.i) **No Impact.** The proposed project involves recovering Haiwee Reservoir water seepage and the installation of a water pipeline and associated well equipment to convey water from an existing well to an existing aqueduct. Construction activities would be short-term and limited to a maximum of eight personnel. The proposed project would operate as an unmanned facility and would not introduce inhabitants or visitors to the project area that would require additional fire protective services. Therefore, no impacts to fire services would occur.
- a.ii) **No Impact.** The proposed project involves recovering Haiwee Reservoir water seepage and the installation of a water pipeline and associated well equipment to convey water from an existing well to an existing aqueduct. Construction activities would be short-term and limited to a maximum of eight personnel. The proposed project would operate as an unmanned facility and would not introduce inhabitants or visitors to the project area. In addition, the new well equipment would be enclosed within a six foot fence to secure the equipment. As a result, the proposed project is not anticipated to require additional police protective services, and no impacts would occur.
- a.iii) **No Impact.** The proposed project involves the installation of unmanned water facilities and would not introduce inhabitants to the project area that would require additional schools. No impacts would occur.
- a.iv) **No Impact.** The proposed project involves the installation of unmanned water facilities and would not introduce inhabitants to the project area that would require construction of parks. No impacts would occur.

- a.v) **No Impact.** The proposed project involves the installation of unmanned water facilities and would not introduce inhabitants to the project area that would require additional public facilities. No impacts would occur.
-

3.15 Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
15. 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 facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** The proposed project involves recovering Haiwee Reservoir water seepage and the installation of an underground water pipeline and associated aboveground well equipment to convey water from an existing well to an existing aqueduct. The project would be an unmanned facility and would not introduce inhabitants or visitors that would use recreational facilities. Other than the open space that the project area lies within there are no known recreation facilities within the vicinity of the proposed project. The proposed project would not result in physical deterioration of the open space area or any recreation facilities, and no impacts would occur.
- b) **No Impact.** The proposed project does not involve or require the construction or expansion of recreational facilities. No impacts would occur.

3.16 Transportation and Traffic

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
16. TRANSPORTATION AND TRAFFIC —				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a) **Less than Significant Impact.** Construction of the proposed project would temporarily increase local traffic due to the transport and delivery of construction equipment and materials as well as from daily worker trips. Construction activities would result in a up to three construction trips to deliver construction material to the project site. Approximately five to eight daily construction workers are anticipated to be needed, which would result in 10 to 16 roundtrip daily worker trips. Construction access would be via US Highway 395, Haiwee Creek Road, and a private adjacent roadway. All construction activities would occur within the 20-foot construction corridor, and no roadway or lane closures are anticipated. Because proposed project construction trips would be minimal and short-term (approximately one month), they are not anticipated to impact the existing circulation system performance. As a result, traffic impacts to the roadway system from construction would be less than significant.

Traffic related to operation of the unmanned water conveyance equipment would be minimal and limited to inspection, maintenance, and/or repair activities that would occur infrequently. Therefore, the operation of the proposed project would not result in significant operational traffic increases.

- b) **No Impact.** Inyo County does not have a congestion management plan, and no other congestion management plans are applicable to the project area. As a result, impacts to applicable congestion management plans would not occur.
- c) **No Impact.** The proposed project is not located in the immediate vicinity of an airport or private airstrip. The nearest public airport is Inyo County Airport located approximately 36 miles south of the project area. The nearest private airport is Porter Ranch Airport located approximately 10 miles west of the project area. Project activities would be on and under the ground surface. No project activities would alter the existing air traffic patterns, levels, or locations that result in safety risks. No impact would occur.
- d) **No Impact.** The proposed project would install water conveyance infrastructure that is not within any public roadway right-of-way. The proposed project would not alter existing roadways nor include any hazardous design features such as sharp curves or dangerous intersections. No incompatible uses such as farm equipment are proposed. As such, no impacts would occur.
- e) **Less than Significant.** Access to the project area is from U.S. Highway 395, Haiwee Creek Road, and a private road adjacent to the project area. Construction activities would be located within a 20-foot construction corridor within the project area and would not impact any access roads adjacent to the project site. Construction activities would be outside of the roadways and within the project site construction corridor, and are not anticipated to interfere with traffic flow or emergency response access to the project area. Onsite operational activities involve minimal and infrequent maintenance operations and would not result in interference with emergency response access. Impacts would be less than significant.
- f) **No Impact.** No policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities are developed within the project area. The proposed project would install water conveyance facilities (most of which are underground) and would not propose any activities that would conflict with any policies, plans, or programs support alternative transportation. No impacts would occur.
-

3.17 Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
17. UTILITIES AND SERVICE SYSTEMS —				
Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** The proposed project involves installing water conveyance infrastructure from a well to an existing aqueduct. The proposed project would not produce wastewater and would not require a discharge permit from the Regional Water Quality Board (RWQCB). No Impact would occur.
- b) **No Impact.** The proposed project involves installing water conveyance infrastructure from an existing well to an existing aqueduct, and would not require or result in the need for water or wastewater treatment facilities. The proposed project does not involve construction of wastewater infrastructure; and the proposed project would not generate wastewater. Therefore, environmental impacts related to the construction of treatment facilities would not occur.
- c) **No Impact.** The proposed project is located in an undeveloped vacant area with no existing stormwater drainage infrastructure. The proposed project would install new water conveyance infrastructure, much of which is located underground, and would not affect stormwater drainage in the project area. The vacant undeveloped project area is generally flat and covered with pervious soils. Stormwater currently infiltrates into the onsite soils. The proposed project would not increase impervious surfaces, would not

- generate additional runoff. As a result, no new stormwater drainage infrastructure would be required from implementation of the proposed project. Thus, no impacts would occur.
- d) **Less than Significant Impact.** The proposed project involves recovering seepage losses from the South Haiwee Reservoir and the installation of a pipeline from Well V817 to transport the recovered water to the LAA1. The seepage recovered from the South Haiwee Reservoir from this project would augment the water supply of LAA1. As described in Section 1.5, Project Background, previous groundwater modeling studies of flows in Rose Valley show that over 900 acre-feet per year of water seeps out of LADWP's South Haiwee Reservoir into Rose Valley. LADWP has an MOU with Coso Operating Company that allows LADWP to recover the seepage losses from South Haiwee Reservoir, which would be done by the proposed project. In addition, the MOU provides that the Coso Operating Company would reduce groundwater pumping in the event that pumping impacts groundwater supplies. As a result, the project would recover lost groundwater and the existing MOU would ensure that groundwater supplies are protected. As the overall objective of the project is to recover water supplies (instead of utilizing water supply), the proposed project would not result in the need for additional water resources or expanded entitlements. Impacts related to water supply are less than significant.
- e) **No Impact.** The proposed project involves installing water conveyance infrastructure from an existing but currently unused well to an existing aqueduct. The proposed project would not produce wastewater and would not receive wastewater service. Thus, no impacts to wastewater treatment capacity would occur.
- f) **Less than Significant.** Construction of the proposed project would result in excavation activities to prepare a trench. The trench would be approximately two feet wide by two feet deep and approximately 1,800 linear feet long. Approximately 270 cy of dirt and topsoil would be excavated and set aside to be used as backfill over the new pipeline. No excavated soils would be hauled offsite to a local landfill. The Lone Pine Landfill is the closest existing landfill facility to the site, and is permitted to accept 22 tons of solid waste per day. The amount of solid waste generated from the one-month construction activities would not be substantial and would not place a great demand on landfills. Operation of the facility would be unmanned with the exception of infrequent maintenance activities, which would not generate substantial volumes of solid waste. Therefore, impacts to solid waste facilities would be less than significant.
- g) **No Impact.** Construction and operation of the proposed project would result in minimal solid waste that would be hauled offsite to a local landfill in compliance with federal, state, and local statutes related to solid waste. No impacts would occur.
-

3.18 Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) **Less than Significant Impact with Mitigation Incorporation.** The proposed project involves recovering Haiwee Reservoir water seepage and installation of a water pipeline that would extend from Well V817 to the LAA1 and is not anticipated to 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. The proposed project would incorporate mitigation measures related to air quality, biological resource, and cultural resources as described in this IS/MND to reduce impacts related to the proposed project. Therefore, impacts would be less than significant with the incorporation of mitigation measures.
- b) **Less than Significant Impact.** The potential project specific impacts of the proposed project (as described throughout this IS/MND) would occur during project construction, which is anticipated to last approximately one month. There are no other known construction projects planned for the project vicinity that could result in significant cumulative impacts during construction. Therefore impacts would be less than significant.
- c) **Less Than Significant with Mitigation Incorporation.** Based on the analysis above, the proposed project would have potentially significant environmental effects on air quality, biological resources, and cultural resources that could cause substantial adverse effects on human beings, either directly or indirectly. However, implementation of mitigation

measures as provided within each of these resource topic sections of this environmental checklist would reduce project-related potentially significant impacts to a less than significant level. Therefore, after implementation of mitigation measures, the proposed project would result in a less than significant environmental impact to human beings.

SECTION 4

References, Acronyms, and Report Preparers

4.1 Document References

- Bureau of Land Management, 2008. *Hay Ranch Water Extraction and Delivery System Environmental Assessment, Appendix H: Coso Operating Company Hay Ranch Water Extraction and Delivery System/ Conditional Use Permit #2007-3 Draft EIR, Hydrology*. Retrieved from http://www.blm.gov/ca/st/en/fo/ridgecrest/coso_-_hay_ranch_water.html.
- BioHere. 2012. Inyo County Natural Areas and Species Lists. Sand Canyon ACEC & Fossil Falls Natural Area. Website accessed: September 21, 2012.
http://biohere.com/natural_areas/california/Inyo_County/index.php
- California Air Resources Board, 2011. *Area Designations Maps / State and National* Retrieved from <http://www.arb.ca.gov/desig/adm/adm.htm>.
- California Air Resources Board (CARB), 2012. *California Assembly Bill 32: Global Warming Solutions Act*. Retrieved from <http://www.arb.ca.gov/cc/ab32/ab32.htm>.
- California Air Resources Board (CARB), 2012. *California Senate Bill 375*. Retrieved from http://www.leginfo.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_bill_20080930_chaptered.pdf.
- California Department of Conservation, 2007. *California Geological Survey Alquist-Priolo Earthquake Fault Zones*. Retrieved from <http://www.consrv.ca.gov/cgs/rghm/ap/Pages/index.aspx>.
- California Department of Conservation, 2007. *Farmland Mapping and Monitoring Program*. Retrieved from <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.
- California Department of Toxic Substances Control, 2007. EnviroStor. Retrieved from <http://www.envirostor.dtsc.ca.gov/public>.
- California Scenic Highway Mapping System, 2007. *Scenic Route*. Retrieved from http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm.
- California State Water Resources Control Board, 2012. Geotracker. Retrieved from <http://geotracker.waterboards.ca.gov>.
- CDFG. 2012a California Natural Diversity Database 3.1.0 Inyo County and the following USGS 7.5-minute topographic quadrangles: Coso Junction, Haiwee Reservoir, Upper Centennial Flat, Cactus Peak, Volcano Peak, Little Lake, Sacatar Canyon, Long Canyon, and Haiwee Pass.

- CDFG. 2012b. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resources Agency. March 7, 2012.
- California Native Plant Society (CNPS). 2012. Inventory of Rare and Endangered Plants (online edition, v7-09b). California Native Plant Society. Sacramento, CA. Accessed on Tue, September 4, 2012 from <http://www.cnps.org/inventory>.
- Denardo, Carole, Rachael Greenlee, and Henry Davis. 2010. *Draft Report Cultural Resources Survey for LADWP's Water Pipeline Installation from Well V817 to LAA1, Rose Valley, Inyo County, California*, prepared for LADWP.
- Federal Emergency Management Agency (FEMA), 2012. *100-year Flood Insurance Rate Map*.
- Garcia and Associates (GANDA), 2011. *Archaeological Testing and Evaluation of an Archaeological Site along the Option B Corridor and Cultural Resource Survey along the Option C Corridor for LADWP's Water Pipeline Installation from Well V817 to Los Angeles Aqueduct # 1, Rose Valley, Inyo County, California*.
- Great Basin Unified Air Pollution Control District, 2010. *Final 2010 PM₁₀ Maintenance Plan and Redesignation Request for the Coso Junction Planning Area*.
- Great Basin Unified Air Pollution Control District. *GBUAPCD 401 Fugitive Dust Rule 401*. Retrieved from <http://www.arb.ca.gov/drdb/gbu/suphtml/r401.htm>.
- Great Basin Unified Air Pollution Control District. *Overview of Great Basin Air Pollution Control District Air Quality Plans: Coso Junction PM₁₀ Planning Area State Implementation Plan*. Retrieved from <http://www.gbuapcd.org/airqualityplans.htm>.
- Hickman, James C. ed. 1993. *The Jepson Manual*. University of California Press, Berkeley and Los Angeles, California.
- Holland, Robert F. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Wildlife, Natural Heritage Division, Sacramento, CA 1986.
- Inyo County, 2001. *Goals and Policies Report for the Inyo County General Plan*.
- Inyo County, 2002. *Inyo County General Plan Land Use and Conservation/Open Space Elements Index* (Land Use Diagrams). Retrieved from http://www.inyoplanning.org/general_plan/landuse.htm.
- Inyo County, 2001. Inyo County Website. Retrieved from <http://www.inyocounty.us>.
- Inyo County, 2007. Inyo County Parcel Information System. Retrieved from <http://gis.mono.ca.gov/Inyo>.
- Inyo County Water Department, 1991. *Inyo/LA Long Term Water Agreement*. Retrieved from http://www.inyowater.org/water_resources/water_agreement/default.html.
- Inyokern Airport, No Date. Inyokern Airport Website. Retrieved from <http://www.inyokernairport.com>.

- Jameson, E.W. and Peeters, H.J. 2004. *Mammals of California*. University of California Press, Berkeley and Los Angeles, California.
- Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptiles species of special concern in California. California Department of Fish and Wildlife, Inland Fisheries Division, Rancho Cordova, California.
- Leitner, P. 2008. "Current Status of the Mohave Ground Squirrel." *Transactions of the Western Section of the Wildlife Society*. 44:11-29.
- Los Angeles Department of Water and Power, 2012. *Los Angeles Aqueduct Conditions Report*. Retrieved from <http://wsoweb.ladwp.com/Aqueduct/realtime/sorealtime.htm>; <http://wsoweb.ladwp.com/Aqueduct/operations/southowens.htm>.
- Los Angeles Department of Water and Power, 2009. *Memorandum of Understanding (MOU) by and between Coso Operating Company ("Coso") and the City of Los Angeles Department of Water and Power ("LADWP")*. June 5, 2009.
- Michaelsen, Joel. *Basin and Range (Transierra) Region Physical Geography*. Retrieved from http://www.geog.ucsb.edu/~joel/g148_f09/readings/basin_range/basin_range.html.
- Mojave Desert Air Quality Management District, 2009. *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*. Retrieved from <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>.
- South Coast Air Quality Management District, 2011. California Emissions Estimator Model (CalEEMod).
- Sawyer, John O. and Keeler-Wolf, Todd. 2009. *A Manual of California Vegetation, 2nd Edition*. California Native Plant Society. United States of America.
- Sibley, D. 2003. *The Sibley Field Guide to Birds of Western North America*. Alfred A. Knopf, New York.
- Stebbens, Robert. 1985. *Western Reptiles and Amphibians*. Houghton Mifflin Company, New York.
- United States Geological Survey, 2012. Quaternary Fault and Fold GIS Database.
- U.S. Fish and Wildlife Service. 2010. *Federally Listed Threatened & Endangered Species Which May Occur in Inyo County, CA*. Ventura Fish and Wildlife Office. Last updated: May 6, 2010.
- U.S. Fish and Wildlife Service. 2011. Revised recovery plan for the Mojave population of the desert tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. 222 pp.
- Vader, Michael, Madeleine Bray, and Robert Ramirez, *Los Angeles Department of Water and Power Well V817 Rose Valley Pipeline Installation Project: Extended Phase I Cultural Resources Study*, Prepared by ESA for LADWP, November, 2012.

Weaver, Craig A. and Carole Denardo. 2011. *Archaeological Testing and Evaluation of an Archaeological Site along the Option B Corridor and Cultural Resources Survey of the Option C Corridor for LADWP's Water Pipeline Installation from Well V817 to Los Angeles Aqueduct #1, Rose Valley, Inyo County, California*, prepared for MWH.

4.2 Acronyms

AF	acre-feet
AFY	acre feet per year
AB32	State of California Assembly Bill 32
BMPs	best management practices
CARB	California Air Resources Control Board
CBC	California Building Code
CDFG	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
cfs	cubic feet per second
the City	City of Los Angeles
CO	carbon monoxide
CRHR	California Register of Historical Resources
cy	cubic yards
DTSC	Department of Toxic Substances Control
EIC	Eastern Information Center
FEMA	Federal Emergency Management Agency
GBUAPCD	Great Basin Unified Air Pollution Control District
GBWAB	Great Basin Valley Air Basin
GHG	greenhouse gas emissions
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
hp	Horsepower
IS	Initial Study
kW	kilowatts

LAA1	First Los Angeles Aqueduct
LADWP	Los Angeles Department of Water and Power
LUST	leaking underground storage tanks
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MND	Mitigated Negative Declaration
OS-40	Open Space, 40-acre minimum lot size
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NO _x	Nitrous oxides
NPDES	National Pollutant Discharge Elimination System
NR	Natural Resource
NRHP	National Register of Historic Places
OS-40	Open Space, 40-acre minimum lot size
PFC	perfluorocarbons
PM _{2.5}	particulate matter of 2.5 microns or less
PM ₁₀	particulate matter of 10 microns or less
PUST	permitted underground storage tanks
RWQCB	Regional Water Quality Board
SB375	California Senate Bill 375
SCE	Southern California Edison
SF6	sulfur hexafluoride
SO _x	sulfur oxides
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

USGS United States Geological Survey
VOC volatile organic compounds

4.3 Report Preparers

LEAD AGENCY

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

Charles Holloway, Manager of Environmental Planning and Assessment
Michael Mercado, Environmental Specialist, Project Manager

PREPARED BY

Environmental Science Associates (ESA)
626 Wilshire Boulevard, Suite 1100
Los Angeles, CA 90017

Tom Barnes, Project Director
Laura Rocha, Project Manager
Paige Anderson, Project Analyst
Allyson Dong, Project Analyst
Renee Escario, Senior Project Analyst
Greg Ainsworth, Biological Resources Director
Dallas Pugh, Biological Analyst
Monica Strauss, Cultural Resources Director
Madeleine Bray, Cultural Resources Analyst
Terrance Wong, Air Quality and Noise Analyst
Jason Nielsen, GIS Specialist
Jason Ricks, Quality Assurance and Quality Control