NORTH LOS ANGELES/KERN COUNTY REGIONAL RECYCLED WATER PROJECT

Findings of Fact
Statement of Overriding Considerations
Mitigation Monitoring and Reporting Program
SCH No. 2007101125

Prepared for:
Los Angeles County
Waterworks District 40,
Antelope Valley

November 2008

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CHAPTER 1
Introduction

The California Environmental Quality Act (CEQA), (PRC §21080) and the CEQA Guidelines (14 CCR §15063) state that if it has been determined that a project may or will have significant impacts on the environment then an Environmental Impact Report (EIR) must be prepared. Accordingly, an EIR has been prepared by the Los Angeles County Waterworks District 40, Antelope Valley to evaluate potential environmental effects that may result from the proposed North Los Angeles/Kern County Regional Recycled Water Project. The EIR has been prepared in accordance with the California Environmental Quality Act of 1970, as amended (PRC, §21000 et seq.), and implementing State CEQA Guidelines (CCR, Title 14, §15000 et seq.).

1.1 Certification

In accordance with CEQA Guidelines Section 15090, the Los Angeles County Waterworks District 40, Antelope Valley (LACWWD40), as Lead Agency for the Project in consultation with the following partner agencies: the City of Lancaster, the City of Palmdale, the Rosamond Community Service District (RCSD), the County Sanitation Districts Nos. 14 and 20 of Los Angeles County (LACSD Nos. 14 and 20), Palmdale Water District (PWD), Antelope Valley-East Kern Water Agency (AVEK), and Quartz Hill Water District (QHWD), certifies that:

(a) The Final PEIR for the Project has been completed and processed in compliance with the requirements of CEQA;

(b) The Final PEIR was presented to the County Board of Supervisors, and the County Board of Supervisors, as the decision making body for LACWWD40, reviewed and considered the information contained in the Final PEIR prior to approving the Project; and

(c) The Final PEIR reflects LACWWD40's independent judgment and analysis.

LACWWD40 has exercised independent judgment in accordance with Public Resources Code Section 21082.1(c) in retaining its own environmental consultant directing the consultant in preparation of the PEIR as well as reviewing, analyzing, and revising material prepared by the consultant.

These Findings of Fact (Findings) and Statement of Overriding Considerations have been prepared in accordance with CEQA and the CEQA Guidelines. The purpose of these Findings is to satisfy the requirements of Public Resources Code Section 21081 and Sections 15090, 15091,

15092, 15093, and 15097 of the CEQA Guidelines, in connection with the approval of the North Los Angeles/Kern County Recycled Water Project.

Before project approval, an EIR must be certified pursuant to Section 15090 of the CEQA Guidelines. Prior to approving a project for which an EIR has been certified, and for which the EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, accompanied by a brief explanation of the rationale, pursuant to Public Resources Code Section 21081 and Section 15091 of the CEQA Guidelines, for each identified significant impact:

(1) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final PEIR.

LACWWD40 has made one or more of the specific written findings above regarding each significant impact associated with the Project. Those findings are presented here, along with a presentation of facts in support of the findings. Concurrent with the adoption of these findings, the Board of Supervisors adopts the Mitigation Monitoring and Reporting Program as presented in Chapter 9 of these Findings.

Section 15092 of the CEQA Guidelines states that after consideration of an EIR, and in conjunction with the Section 15091 findings identified above, the lead agency may decide whether or how to approve or carry out the project. The lead agency may approve a project with unavoidable adverse environmental effects only when it finds that specific economic, legal, social, technological, or other benefits of the proposed project outweigh those effects. Section 15093 requires the lead agency to document and substantiate any such determination in a "statement of overriding considerations" as a part of the record.

LACWWD40's Statement of Overriding Considerations is presented in Chapter 8 of these Findings. As required by CEQA, the County expressly finds that the Final PEIR for the North Los Angeles/Kern County Recycled Water Project reflects LACWWD40's independent review and judgment. In accordance with the provisions of CEQA and the CEQA Guidelines, LACWWD40 adopts these Findings and Statement of Overriding Considerations as part of its certification of the Final PEIR. A brief explanation of the rationale for each finding is provided in Chapters 4, 5, 6 and 7.

1.2 Organization of CEQA Findings of Fact

The content and format of these CEQA Findings are designed to meet the latest CEQA Statutes and Guidelines. The Findings are organized into the following sections:

Chapter 1, Introduction outlines the organization of this document and identifies the location and custodian of the record of proceedings.

Chapter 2, Project Description describes the location, project overview, project objectives, and the required permits and approvals for the project.

Chapter 3, CEQA Review and Public Outreach describes the steps LACWWD40 has undertaken to comply with the CEQA Guidelines as they relate to public input, review, and participation during the preparation of the Draft and Final PEIRs.

Chapter 4, Impacts Determined to be Less than Significant provides a summary of those environmental issue areas where no reasonably foreseeable impacts would occur and those impacts determined to be below the threshold of significance without the incorporation of mitigation measures.

Chapter 5, Less Than Significant Environmental Impacts with Mitigation provides a summary of significant environmental impacts for which implementation of identified feasible mitigation measures would avoid or substantially reduce the environmental impacts to less than significant levels. This section also provides specific written findings regarding each potentially significant impact associated with the project.

Chapter 6, Significant Environmental Impacts provides a summary of significant environmental impacts for which no feasible mitigation measures are identified or for which implementation of identified feasible mitigation measures would not avoid or substantially reduce the environmental effects to less than significant levels. This section also provides specific written findings regarding each significant impact associated with the project.

Chapter 7, Findings Regarding Project Alternatives provides a summary of the alternatives considered for the project.

Chapter 8, Statement of Overriding Considerations provides a summary of all of the project's significant unavoidable adverse impacts. In addition, this section identifies the project's substantial benefits that outweigh and override the project's significant unavoidable impacts, such that the impacts are considered acceptable.

Chapter 9, Findings on Mitigation Monitoring and Reporting Program provides a brief discussion of the project's compliance with the CEQA Guidelines regarding the adoption of a program for reporting and monitoring.

Chapter 10, Certification of PEIR and Project Approval provides a statement that the Final PEIR fully complies with CEQA and that the Los Angeles County Board of Supervisors has considered the information in the PEIR and that it reflects the County's independent judgment and analysis.

1.3 Record of Proceedings

The documents and other materials that constitute the record of proceedings upon which LACWWD40 project approval is based are located at 900 South Fremont Avenue, Alhambra, CA 91803. The LACWWD40 is the custodian of such documents and other materials that constitute the record of proceedings. The record of proceedings is provided in compliance with Public Resources Code §21081.6(a)(2) and California Code of Regulations Title 14, §15091(e).

1.4 Program and Project Level Analysis

In accordance with CEQA, a PEIR can be prepared on a series of related actions characterized as one large project or program (CEQA Guidelines §15168(a)). Prior to implementation, each action in the program must be evaluated to determine if additional environmental documentation is required (CEQA Guidelines §15168(c)). If the environmental effects resulting from an action are fully covered by the analysis in the PEIR and no new mitigation measures are required, then the action is within the scope of the PEIR and no additional environmental documentation is necessary (CEQA Guidelines §15168(c)(2)). If an action would result in environmental effects not included in the PEIR then additional environmental documentation, such as a Negative Declaration or EIR, would be required (CEQA Guidelines §15168(c)(1)). The mitigation measures developed in a PEIR may be incorporated into subsequent environmental documents (CEQA Guidelines §15168(c)(3)).

The Final PEIR for the proposed project provides an analysis of potential impacts of all construction and operational actions reasonably foreseeable with implementation of the proposed project. The Final PEIR provides **project-level** assessments of the following components of the proposed project. The analysis of these components is conducted at a sufficient level of detail such that additional environmental documentation is not necessary. In other words, the following project components are evaluated at a level of detail that is typically provided in a project EIR (CEQA Guidelines §15161).

- Construction and operation of proposed recycled water pipelines; and
- Application of recycled water for municipal and industrial (M&I) end uses (e.g., landscape irrigation) as identified in Table 1-2 of the Final PEIR (FEIR p. 1-16).[1]

The Final PEIR provides **program-level** assessments of the following components of the proposed project. Prior to implementation of these components, additional analysis is required to determine the need for subsequent environmental documentation:

[1] Municipal and industrial (M&I) end uses do not include residential land uses. The Final PEIR does not include coverage of residential landscape irrigation.

- Construction and operation of the proposed pump stations and storage reservoirs; and
- Application of recycled water for agricultural irrigation, power plant cooling water, and groundwater recharge.

CHAPTER 2
Project Description

2.1 Environmental Setting

2.1.1 Existing Setting

The proposed project would be located in the Antelope Valley, which encompasses approximately 2,400 square miles in northern Los Angeles County, southern Kern County, and western San Bernardino County. The area is bordered on the southwest by the San Gabriel Mountains, on the northwest by the Tehachapi Mountains, and on the east by a series of hills and buttes that generally follow the San Bernardino county line. The proposed project would be located within several cities including the City of Palmdale, the City of Lancaster, the Town of Rosamond, and portions of unincorporated Los Angeles County including Quartz Hill.

2.1.2 Surrounding Land Uses

The majority of the proposed project would be located in the cities of Palmdale and Lancaster, with the exception of the northernmost and southernmost portions, which would be located within unincorporated county regions. Land uses within Los Angeles County include the rural areas north and south of the City of Palmdale and the Palmdale Regional Airport. A small parcel of land located on Sierra Highway between Avenues P and Q is also designated as unincorporated Los Angeles County. Land uses within Kern County are designated as non-jurisdictional land by the County's General Plan.

Land uses within the City of Palmdale include open space, residential, commercial, airport, industrial, public, and other jurisdictional. Palmdale Regional Airport is located within the City of Palmdale on land leased by Los Angeles County (i.e., LAWA) from the U.S. Air Force. Land uses within the City of Lancaster include residential, industrial, public, and commercial.

Components of the proposed project are located within two miles of public airports and within airport influence areas (AIA) designated by Airport Land Use Compatibility Plans (ALUCPs). The Palmdale Regional Airport (PMD) is within 1.0 mile of East Avenue M and 50th Street East and adjacent to Sierra Highway. General William J. Fox Airfield Airport (Fox Airfield) is approximately 1.5 miles north of West Avenue H. Rosamond Skypark Airport is approximately 1.0 mile east of Mojave Tropico Road. Two private aviation facilities, Bohunk's Airpark and

Little Butte's Antique Airfield, are also located within five miles of proposed project components. These private facilities are not regulated by ALUC policies and procedures.

2.2 Project Overview

The proposed project would include the following components: recycled water conveyance pipelines, four storage reservoirs, two distribution pump stations, and two booster pump stations. Figure 1 identifies proposed pipeline routes and facility locations. The proposed project would provide the primary backbone system for distribution of recycled water to end users in the Antelope Valley. The end users would include but would not be limited to the following:

- Municipal and industrial (M&I) applications;
- Agricultural irrigation;[2]
- Cooling water for power plants; and
- Groundwater recharge.

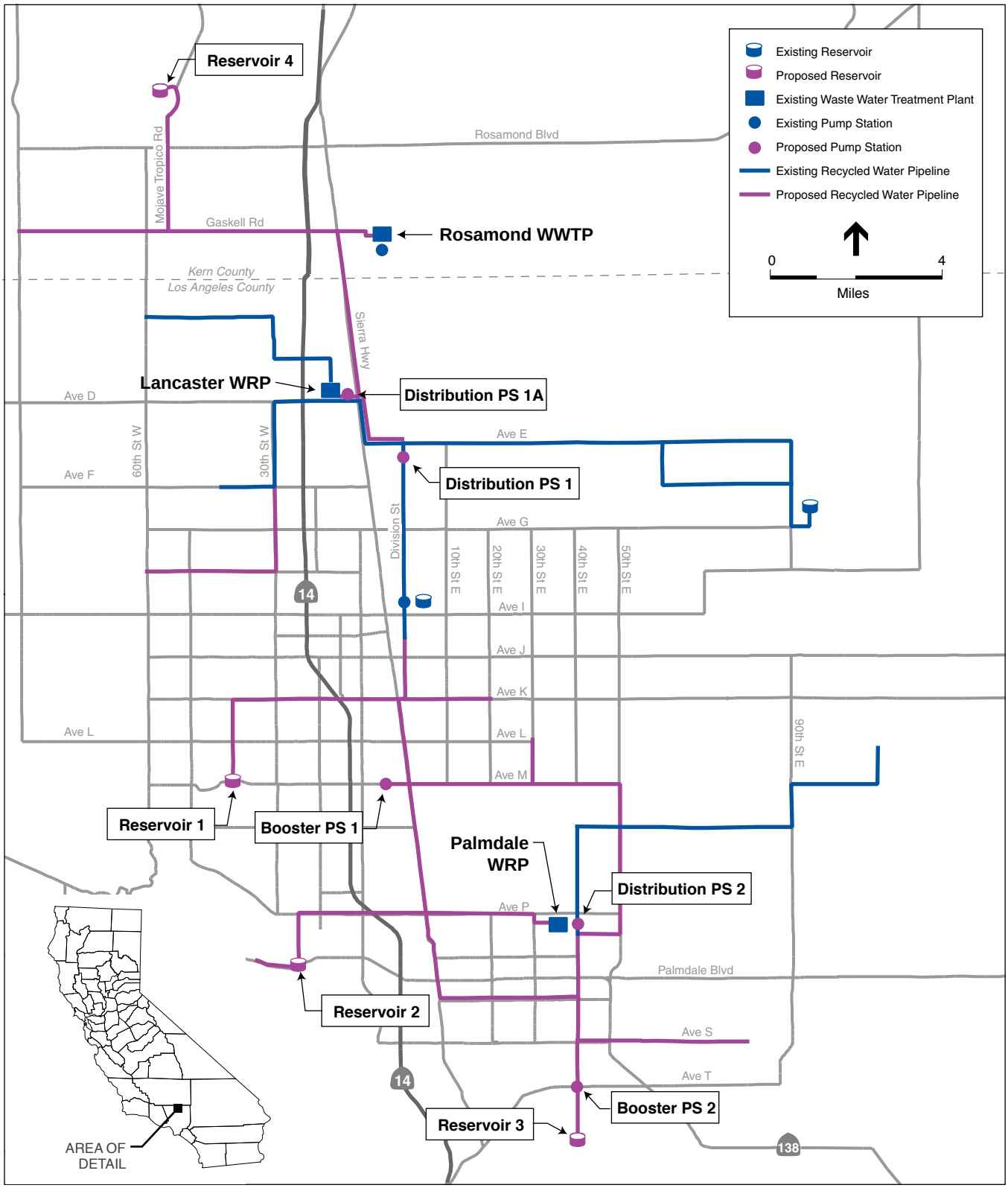
For existing and future end users identified to-date, the annual demand for recycled water in the Antelope Valley is estimated at a minimum of 21,210 afy at buildout. The system capacity of the proposed project would be designed to meet this demand. This demand includes 17,491 afy for M&I end uses in Los Angeles County as estimated in the Final Facilities Planning Report (Kennedy/Jenks, 2006), plus 1,119 afy for M&I end uses in the RCSD service area in Kern County (Seal, 2008), and 2,600 afy for use as cooling water at the planned Palmdale Hybrid Power Plant.

Recycled water use would comply with the California Department of Public Health (CDPH) recycled water regulations contained in Title 22 of the CCR. In addition, the proposed project would be subject to conditions imposed by the Regional Water Quality Control Board (RWQCB) pursuant to Water Recycling Requirements (WRRs). The proposed project would be constructed in phases, subject to funding and the identification of recycled water users. Each component described below would be constructed by LACWWD40 or one of the Responsible Agencies as part of the regional backbone distribution system.

2.2.1 Pipelines

The proposed recycled water pipelines would distribute water from the three water reclamation plants to the surrounding area within the Antelope Valley. The project would consist of approximately 70 miles of 14 to 36-inch pipelines. The pipes would be colored purple or wrapped

[2] The Facilities Plans for the PWRP and LWRP include agricultural effluent management sites for application of recycled water produced at both reclamation plants (LACSD No. 14, 2004; LACSD No. 20, 2005). The environmental effects of using recycled water for agricultural irrigation at these effluent management sites have been evaluated pursuant to CEQA in previous environmental documents (see Chapter 1, Section 1.5.2). This proposed project does not include these agricultural effluent management areas.



North LA/Kern County Regional Recycled Water Project . 206359

SOURCE: Kennedy/Jenks Consultants; ESA

Figure 1
Existing and Proposed Facilities

with purple tape, in accordance with the California Health and Safety Code requirements for recycled water pipelines (Division 104, Part 12, Chapter 5, Article 2, §116815). All pipelines would be aligned within the right-of-way of roadways. Air-relief valves would be installed at peak elevations, pump stations, and as needed between valves to accommodate pipeline dewatering or system charging. The valves would typically be installed within sidewalk right-of-ways. Pipelines larger than 24 inches in diameter require that all valves be housed in vaults. The underground vaults would typically be constructed of concrete, with access hatches at ground surface either within the street or beneath the sidewalk.

2.2.2 Storage Reservoirs

The proposed project involves the construction of four storage reservoirs. The proposed locations and capacities of the storage reservoirs are identified in Table 1. No land acquisition is required for Reservoirs 1, 2, and 4, because all parcels are owned by either LACWWD40 or one of the Responsible Agencies. Private land acquisition may be required for Reservoir 3 at the corner of 40th Street East and Barrel Springs Road. The aboveground steel reservoirs would be between 24–32 feet in height. Fencing and outside lighting would be installed around the reservoirs.

TABLE 1
PROPOSED STORAGE RESERVOIRS

Reservoir	Location	Capacity (MG)	Figure
Reservoir 1	40th Street West and Avenue M	3.0	Figure 2-4
Reservoir 2	25th Street West and Palmdale Blvd/ Elizabeth Lake Road	4.4	Figure 2-5
Reservoir 3	40th Street East and Barrel Springs Road	2.1	Figure 2-6
Reservoir 4	North of 60th Street West and Mojave-Tropico Road	2.0	Figure 2-7

2.2.3 Pump Stations

The proposed project would include two distribution pump stations and two booster pump stations. The proposed pump stations, together with other existing and planned pump stations, would pump recycled water from the LWRP, PWRP, and RWWTP through the backbone system pipelines to the storage reservoirs. The proposed booster pump stations would maintain sufficient water pressure to transport recycled water through the backbone system pipelines.

The proposed locations and pumping capacities are identified in Table 2. Land acquisition may be required to implement Distribution Pump Station 1 and Booster Pump Station 2 because the proposed parcels are privately owned. An alternative site for Distribution Pump Station 1 is the LWRP (indicated as Distribution Pump Station 1A in Figure 1 and Table 2), which would eliminate the need to acquire property for this pump station. Each distribution pump station structure would have an approximate footprint of 50 feet by 50 feet and be approximately 20 feet tall. Each booster pump station structure would have an approximate footprint of 20 feet by 20 feet and be approximately 20 feet tall. It is anticipated that portable generators, outside lighting,

and fencing would be installed for each pump station. Each pump station must have stand-by capabilities in the event that a pump must be taken off-line.

TABLE 2
PROPOSED PUMP STATIONS

Pump Station	Location	Pumping Capability (gpm)	Figure
Distribution Pump Station 1	Ave E-8 and Division Street	20,833	Figure 2-8
Distribution Pump Station 1A	Avenue D and Sierra Highway (LWRP)	20,833	Figure 2-1
Distribution Pump Station 2	Ave P-8 and 30th St East (PWRP)	15,555	Figure 2-9
Booster Pump Station 1	Avenue M and 7th St West	8,460	Figure 2-10
Booster Pump Station 2	40th Street East and Ave T / Pearblossom Highway	1,725	Figure 2-11

2.2.4 Construction Activities

The project would be constructed in phases to accommodate developing demands. Each Responsible Agency would implement the system components in its service area as needed to meet demands. Construction of the first phase could begin in 2009 and the last phase in 2015. The actual construction schedule would be determined as funds become available and as recycled water users are identified. Construction for pipelines would proceed at 50 to 100 feet per day with entire phases taking up to a year to complete. Storage reservoirs and pump stations would require eight to nine months to complete.

2.3 Project Objectives

The objectives of the proposed project are as follows:

- Provide recycled water conveyance backbone infrastructure sufficient to accommodate planned regional recycled water demands;
- Integrate regional recycled water production, distribution, and re-use capabilities in the Antelope Valley;
- Provide conveyance, storage, and pumping capacity sufficient to accommodate peak future demands;
- Reduce the region's dependency on imported water;
- Augment local water supplies;
- Promote the State's policies for beneficial reuse of recycled water to replace potable water where possible.

2.4 Discretionary Actions

An EIR is a public document used by a public agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid environmental damage (CCR, Title 14, §15121). As an informational document, an EIR does not recommend for or against approval of a project. The main purpose of an EIR is to inform governmental decision makers and the public about the potential environmental impacts of a proposed project. As the lead agency under CEQA, this EIR will be used by LACWWD40 and the Responsible Agencies in making decisions with regard to the construction and operation of the proposed project. Responsible Agencies having discretionary approval over components of the project include the City of Lancaster, the City of Palmdale, RCSD, LACSD Nos. 14 and 20, PWD, AVEK, and QHWD. LACWWD40 and the Responsible Agencies would use the analysis contained within this PEIR to support the acquisition of the following regulatory permits or approvals:

- Regional Water Quality Control Board (RWQCB): WDR/WRR/Master Reclamation Permit for water reuse;
- California Department of Public Health (CDPH): Approval to operate recycled water system;
- California Department of Transportation (Caltrans): Roadway Encroachment Permit / Easement;
- Union Pacific Railroad: Encroachment Permit
- California Department of Water Resources (DWR): Encroachment Permit
- County of Los Angeles: Roadway Encroachment Permit / Easement;
- County of Kern: Roadway Encroachment Permit / Easement;
- County of Los Angeles, Department of Public Works, Flood Control District: Easement;
- City of Lancaster: Roadway Encroachment Permit / Easement;
- City of Palmdale: Roadway Encroachment Permit / Easement.

CHAPTER 3
CEQA Review and Public Outreach

LACWWD40 has complied with CEQA and the CEQA Guidelines during the preparation of the PEIR for the project. The Draft PEIR, dated August 2008, was prepared after soliciting input from the public, responsible agencies, and affected agencies through the PEIR scoping process. In accordance with Sections 15063 and 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was circulated to local, state, and federal agencies, and to other interested parties in October 2007. The NOP was posted in the Los Angeles and Kern County Clerk offices for 30 days. The NOP was also submitted to the State Clearinghouse to officially solicit participation in determining the scope of the PEIR.

In response to the NOP, written comment letters were received from the City of Palmdale Planning Department, County Sanitation Districts of Los Angeles County, Department of Water Resources, Southern California Association of Governments, and the Native American Heritage Commission. The comment letters are included in Appendix B of the Final PEIR. A public scoping meeting was held on November 6, 2007 at Larry Chimbole Cultural Center in Palmdale to allow agency consultation and public involvement for the Draft PEIR. Verbal comments were received from the cities of Palmdale and Lancaster during the scoping meeting and are included in the scoping report in Appendix B.

The Draft PEIR was circulated for public review and comment on August 4, 2008, initiating a 60-day public review period pursuant to CEQA and its implementing guidelines. The document and Notice of Completion (NOC) was distributed to the California Office of Planning and Research, State Clearinghouse. Relevant agencies also received copies of the document. A Notice of Availability (NOA) was distributed to interested parties and adjacent property owners and residents, which informed them of where they could view the document and how to comment. The purpose of the 60-day review period was to provide interested public agencies, groups and individuals the opportunity to comment on the contents and accuracy of the document. The document was available to the public at the Palmdale City Library, at the Lancaster Regional Library, and on LACWWD40's website. The LACWWD40 and Responsible Agencies hosted an informational public workshop on September 11, 2008 at the City of Lancaster Council Chambers in Lancaster to give interested parties the opportunity to learn about the proposed project and ask questions. The public hearing for the Draft PEIR was held on September 18, 2008 at the City of Lancaster Council Chambers in Lancaster to give interested parties the opportunity to comment on the Draft PEIR.

A Final PEIR has been completed and includes written comments received by mail and electronic mail on the Draft PEIR, verbal comments received at the public hearings, written responses to the written and verbal comments, and changes to the Draft PEIR.

CHAPTER 4
Impacts Determined to be Less than Significant

The following potential environmental impacts of the project are less than significant and therefore do not require the imposition of mitigation measures.

4.1 Air Quality

Operation of the pipelines would result in minimal emissions of criteria air pollutants. Operational impacts would be limited to periodic inspections of the pipeline alignments and would therefore result in a less than significant impact to air quality. (PEIR p. 3.2-16.)

Odor impacts would be less than significant as operation of the pipelines would not create objectionable odors that would affect a substantial number of people. (PEIR p. 3.2-17.)

The proposed project would be inherently energy efficient and would reduce relative future CO_2 emissions for every acre-foot of water provided to end users in the Antelope Valley. In addition, the proposed project would not conflict with AB32 state goals for reducing greenhouse gas emissions. Therefore, impacts to greenhouse gas emissions and global climate change would be less than significant (PEIR pp. 3.2-17-18.)

Operation of the reservoirs and pump stations would result in minimal operational emissions of criteria air pollutants. Impacts would be less than significant. (PEIR p. 3.2-20.)

4.2 Biological Resources

A portion of the proposed recycled water pipeline would be constructed within the boundaries of the proposed Antelope Valley Significant Ecological Area (SEA). In addition, future facilities associated with the proposed project could be located within the proposed or existing Antelope Valley SEA, such as groundwater recharge basins. With issuance of the SEA-Conditional Use Permit, no conflicts with the County Significant Ecological Area land use policies would be anticipated for construction of any project component. Therefore, impacts would be less than significant. (PEIR p. 3.3-19 and p. 3.3-24.)

4.3 Land Use

The proposed pipeline would traverse private property and property owned by other agencies including local cities, the County, and the Department of Water Resources. With the acquisition of easements and encroachment permits, impacts to land uses would be less than significant. (PEIR p. 3.8-23).

4.4 Environmental Justice

Based on census data, the proposed project would not have a disproportionate affect on minority or low income populations. Impacts would be less than significant. (FEIR p. 3.10-6).

4.5 Transportation and Traffic

The increase in parking demand during construction of the proposed pipeline would be planned in advance and would be temporary. Therefore, impacts would be less than significant. (FEIR p. 3.11-8.)

4.6 Utilities and Service Systems

The proposed project's impact to storm water drainage facilities would be less than significant and it would not require the construction or expansion of storm water drainage facilities. (FEIR p. 3.12-6.)

CHAPTER 5
Less than Significant Environmental Impacts with Mitigation

Pursuant to CEQA Guidelines Section 15091, the following are the impacts of the proposed project for which mitigation measures have been identified in the Draft PEIR which will avoid or substantially lessen the following potentially significant environmental impacts to a less than significant level:

5.1 Aesthetics

5.1.1 Project-Level Impacts

Significant Impact 3.1-1: The Final PEIR concludes in Impact 3.1-1 that construction of the proposed pipeline would directly affect scenic vistas as viewed from scenic highways designated by the Palmdale General Plan. (FEIR p. 3.1-5)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.1-1 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.1-1:** Following construction activities, the implementing agencies shall restore disturbed areas by reestablishing pre-existing conditions including topography, repaving roadways, replanting trees, and/or reseeding with a native seed mix typical of the immediate surrounding area. The implementing agencies shall be responsible for monitoring the replanted areas to ensure that revegetation is successful.

Rational/Supporting Explanation: During construction, excavated areas, stockpiled soils, and other materials within the construction easement and staging areas would constitute negative aesthetic elements in the visual landscape which would directly affect scenic vistas. However, construction would be temporary and Mitigation Measure 3.1-1 would require that disturbed areas be restored to preconstruction conditions. Construction impacts would be reduced to less than significant level by this mitigation measure. (FEIR p. 3.1-5)

5.1.2 Program-Level Impacts

Significant Impact 3.1-2: The Final PEIR concludes in Impact 3.1-2 that construction and operation of the proposed storage reservoirs and pump stations would result in impacts to aesthetic resources. (FEIR p. 3.1-6)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.1-2a through 3.1-2c would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.1-2a:** The implementing agencies shall attempt to locate pump stations and reservoirs in areas that are compatible with existing views and vistas.
>
> **Mitigation Measure 3.1-2b:** During project design, the implementing agencies shall prepare a landscape plan for each aboveground project component. The landscape plan shall include measures to restore disturbed areas by reestablishing existing topography, including replanting trees and/or reseeding with a native seed mix typical of the immediately surrounding area. The landscape plan shall include a required seed mix and plant palate. Vegetation screening shall be included in the landscape plan in order to shield proposed aboveground facilities from public view. The landscape plan shall include a monitoring plan to ensure that the site restoration and the establishment of vegetation is successful.
>
> **Mitigation Measure 3.1-2c:** The implementing agencies shall ensure that storage reservoir designs include non-glare exterior coatings that are colored an earth tone to blend in with the surrounding landscape.

Rational/Supporting Explanation: Construction of the proposed storage reservoirs and pump stations would result in short-term impacts to aesthetic resources. However, these impacts would be temporary during project construction and would not significantly impact the long-term visual character of the area. Operation of the storage reservoirs and pump stations would cause permanent long-term impacts to aesthetic resources. The structures would contrast with the surrounding landscape and potentially would be incompatible with the existing views and vistas within the project area. Mitigation Measures 3.1-2a through 3.2-1c would reduce impacts to less than significant levels by requiring implementation of landscaping and design elements to minimize the visual contrast of the reservoirs and pump stations and blend these facilities into the surrounding landscape. Operational impacts would be reduced to less than significant levels by these mitigation measures. (FEIR p. 3.1-6)

Significant Impact 3.1-3: The Final PEIR concludes in Impact 3.1-3 that exterior lighting would be installed at the proposed storage reservoirs and pump stations and would introduce a new source of light and glare. (FEIR p. 3.1-7)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as

identified in the Final PEIR. Specifically, Mitigation Measure 3.1-3 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.1-3:** The exterior lighting installed around the storage reservoirs and pump stations shall be of a minimum standard required to ensure safe visibility. Lighting shall be shielded and directed downward, away from neighboring land uses to minimize impacts of light and glare.

Rational/Supporting Explanation: Mitigation Measure 3.1-3 would ensure that the exterior lighting installed around the storage reservoirs and pump stations is shielded and directed downward, away from neighboring land uses to minimize impacts of light and glare. This impact would be considered less than significant with implementation of Mitigation Measure 3.1-3. (FEIR p. 3.1-7)

Significant Impact 3.1-4: The Final PEIR concludes in Impact 3.1-4 that construction of recharge basins, depending on the locations selected, would introduce a new contrasting element into the landscape. (FEIR p. 3.1-7)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.1-2b would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Construction of recharge basins would involve recontouring of site soils to form earthern berms which could be as tall as six feet above ground level. The constructed berms could degrade the existing visual character or quality of the site and its surroundings. Mitigation Measure 3.1-2b would reduce impacts to visual character by requiring implementing agencies to develop landscape plans during the design phase of future groundwater recharge reuse projects. This impact would be considered less than significant with implementation of Mitigation Measure 3.1-2b. (FEIR p. 3.1-7-8).

5.2 Air Quality

5.2.1 Project-Level Impacts

Significant Impact 3.2-1: The Final PEIR concludes in Impact 3.2-1 that the proposed project would result in temporary emissions from construction that would contribute to air pollution in the basin and could therefore exceed Antelope Valley Air Quality Management District (AVAQMD) or Kern County Air Pollution Control District (KCAPCD) significance thresholds. (FEIR p. 3.2-13)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.2-1a through 3.2-1f would reduce the significant impact to a less than significant level.

Mitigation Measure 3.2-1a: The implementing agencies shall include in contractor specifications the implementation of a fugitive dust control program pursuant to the provisions of AVAQMD Rule 403 or KCAPCD Rule 402.

Mitigation Measure 3.2-1b: All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.

Mitigation Measure 3.2-1c: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues shall turn their engines off when not in use to reduce vehicle emissions. Construction emissions shall be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.

Mitigation Measure 3.2-1d: Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.

Mitigation Measure 3.2-1e: All construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site.

Mitigation Measure 3.2-1f: The project applicant shall utilize coatings and solvents that are consistent with applicable AVAQMD or KCAPCD rules and regulations**.**

Rational/Supporting Explanation: Construction of the proposed project would result in temporary emissions. Compliance with the rules established by AVAQMD and KCAPCD to reduce construction emissions, including fugitive dust control measures and vehicle maintenance measures, would ensure that project construction would not conflict with the current air quality management plan. Mitigation Measures 3.2-1a through 3.2-1f, which are required by AVAQMD, would reduce construction emissions below significant levels. The proposed project is consistent with the current General Plan and would therefore not conflict with the current air quality attainment plan. This impact would be considered less than significant with implementation of Mitigation Measures 3.2-1a through 3.2-1f. (FEIR p. 3.2-13-14)

Significant Impact 3.2-2: The Final PEIR concludes in Impact 3.2-2 that construction of the proposed pipeline would generate substantial amounts of dust (including PM10) and other criteria pollutant emissions. (FEIR p. 3.2-15)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.2-1a through 3.2-1f would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Construction of the proposed pipeline would generate substantial amounts of dust (including PM10) primarily from fugitive sources and lesser amounts of criteria air pollutants primarily from operation of heavy equipment, construction machinery, and construction worker commute trips. At any one location along the pipeline segments, the duration of air quality impacts would be relatively brief. The emissions analysis based on calculations using URBEMIS 2007 found emissions from pipeline construction to be less than

significant. To avoid unnecessary emissions from construction, the project would comply with local rules related to construction and Mitigation Measures 3.2-1a through 3.2-1f. The proposed project would not result in a long-term substantial source of TAC emissions as construction would be temporary. This impact would be considered less than significant with implementation of Mitigation Measure 3.2-1a through 3.2-1f. (FEIR p. 3.2-15)

5.2.2 Program-Level Impacts

Significant Impact 3.2-6: The Final PEIR concludes in Impact 3.2-6 that construction of the reservoirs and pump stations would generate substantial amounts of dust (including PM10) and other criteria pollutant emissions. (FEIR p. 3.2-18)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.2-1a through 3.2-1f would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Construction of the proposed reservoirs and pump stations would generate substantial amounts of dust (including PM10) primarily from fugitive sources and lesser amounts of criteria air pollutants primarily from operation of heavy equipment, construction machinery, and construction worker commute trips. Construction of the pump stations is expected to take eight months and construction of the reservoirs is expected to take nine months. The emissions analysis based on calculations using URBEMIS 2007 found emissions from reservoir and pump station construction to be less than significant. To avoid unnecessary emissions from construction, the project would comply with local rules related to construction and Mitigation Measures 3.2-1a through 3.2-1f. The proposed project would not result in a long-term substantial source of TAC emissions as construction would be temporary. This impact would be considered less than significant with implementation of Mitigation Measure 3.2-1a through 3.2-1f. (FEIR p. 3.2-18-19)

5.3 Biological Resources

5.3.1 Project-Level Impacts

Significant Impact 3.3-1: The Final PEIR concludes that the proposed project could have a substantial adverse effect on listed, candidate, or special-status ground dwelling wildlife species including the California red-legged frog and Mohave ground squirrel. (FEIR p. 3.3-13)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-1a through 3.3-1e would reduce the significant impact to a less than significant level.

Mitigation Measure 3.3-1a: The implementing agencies shall have a qualified biologist conduct a pre-construction field reconnaissance survey for special-status ground-dwelling species within the construction right-of-way. If potential for special-status ground-dwelling species is identified then presence/absence protocol surveys shall be conducted. If protocol surveys identify the presence of special-status ground-dwelling species, the implementing agencies shall consult with CDFG to determine further required mitigation.

Mitigation Measure 3.3-1b: The implementing agencies shall avoid impacts on California red-legged frog by eliminating construction activities within areas where the species may occur. Implementing agencies shall employ tunneling or jack and bore construction methods under drainages that may support California red-legged frog in order to avoid impacting the species.

Mitigation Measure 3.3-1c: The implementing agencies shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project near areas that may support California red-legged frogs as determined by a qualified biologist.

Mitigation Measure 3.3-1d: The implementing agencies shall install a silt fence or some other impermeable barrier to exclude small wildlife species from entering the active work areas. Exclusion fencing can be limited to areas of documented occurrences of special-status wildlife as determined during pre-construction surveys by a qualified biologist.

Mitigation Measure 3.3-1e: Prior to project implementation, a habitat assessment shall be conducted by a qualified biologist to determine the potential for the Mohave ground squirrel to occur within construction zones. If the habitat assessment determines that potential habitat for the Mohave ground squirrel is present in the impact zone or within 300 feet of the construction zone, then the implementing agencies have two options: 1) assume the Mohave ground squirrel is present and either take the steps necessary to avoid any potential direct or indirect impacts (i.e., construction noise and dust) that may be incurred by the Mohave ground squirrel or 2) arrange for a qualified biologist with the necessary permits to implement a trapping program in accordance with CDFG's trapping protocol to determine the presence or absence of the Mohave ground squirrel. If Mohave ground squirrel is identified as present or assumed present, implementing agencies shall obtain an incidental take permit from CDFG pursuant to Section 2081 of the California Fish and Game Code and provide compensation at a ratio determined by CDFG.

Mitigation Measure 3.3-1f: Prior to project implementation, a burrowing owl presence/absence survey shall be conducted by a qualified biologist in accordance with CDFG's *1995 Staff Report on Burrowing Owl Mitigation* and the *Burrowing Owl Consortium's 1992 Burrowing Owl Protocol and Mitigation Guidelines* to determine the potential for the burrowing owl to occur within impacted areas and construction zones. If the survey results in discovery of burrowing owl, sign, or potential burrow sites in the impact zone, then additional surveys shall be performed during the breeding season (April 15 to July 15) in accordance with the *1992 Guidelines* to determine use of the site by burrowing owl. Following this survey, the implementing agencies shall consult with CDFG to determine avoidance or mitigation measure to minimize project impacts to burrowing owl.

Rational/Supporting Explanation: U.S. Fish and Wildlife Services Critical Habitat for the California red-legged frog is located at least partially within the proposed project area along Amargosa Creek. There is potential for indirect impacts such as noise and dust during construction of the proposed project components in Amargosa Creek. Implementation of Mitigation Measure 3.3-1a through 3.3-1d would ensure that the California red-legged frog would not be affected by indirect impacts and would reduce impacts to less than significant. The Mohave ground squirrel has potential to occur in the native habitats of the proposed project area. Implementation of Mitigation Measure 3.3-1e would reduce these impacts to less than significant. The burrowing owl also has potential to occur in the project area. Implementation of Mitigation Measure 3.3-1f would reduce these impacts to less than significant levels. (FEIR p. 3.3-13-14)

Significant Impact 3.3-2: The Final PEIR concludes that construction of the pipeline could have a substantial adverse effect on listed, candidate, or special-status bat and avian species including the Swainson's hawk, American peregrine falcon, southwestern willow flycatcher, and least Bell's vireo. The proposed project also could have a substantial adverse effect on the burrowing owl and raptor nests. (FEIR p. 3.3-15)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-2a through 3.3-2g would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.3-2a:** Prior to any ground-disturbing activities, the implementing agencies shall have a qualified biologist conduct a pre-construction spring/summer active season reconnaissance survey for nesting/roosting special-status mobile bird and bat species, and other nesting birds within 300 feet (500 feet for raptors) of the construction limits of each project element to determine and map the location and extent of special-status species occurrence(s) that could be affected by the project.
>
> **Mitigation Measure 3.3-2b:** The implementing agencies shall avoid direct impacts on any nesting birds located within the limits of construction. This could be accomplished by establishing the construction right of way and removal of plant material outside of the typical breeding season (February 1 through August 31).
>
> **Mitigation Measure 3.3-2c:** If construction and vegetation removal is proposed for the bird nesting period February 1 through August 31, then preconstruction surveys for nesting/roosting bird and bats species shall begin 30 days prior to construction disturbance with subsequent weekly surveys, the last one being no more than three days prior to work initiation. The surveys shall include habitat within 300 feet (500 feet for raptors) of the construction limits. Active nest sites located during the pre-construction surveys shall be avoided and a non-disturbance buffer zone established dependent on the species and in consultation with the USFWS and CDFG. This buffer zone shall be delineated in the field with flagging, stakes or construction fencing. Nest sites shall be avoided with approved non-disturbance buffer zones until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist. For species with high site fidelity, such as Swainson's hawk, if direct take of nests outside of the breeding seasons is required, the implementing agency shall contact CDFG to determine appropriate mitigation measures.

Mitigation Measure 3.3-2d: If a natal bat roost site is located within the limits of construction during pre-construction surveys, it shall be avoided with non-disturbance buffer zone established by a qualified biologist in consultation with the USFWS and CDFG until the site is abandoned.

Mitigation Measure 3.3-2e: The implementing agencies shall minimize impacts on documented locations of special-status species and any nesting birds to the extent feasible and practicable by reducing the construction right-of-way through areas of occurrences to either avoid the occurrence or reduce impacts to the minimum necessary to complete the project.

Mitigation Measure 3.3-2f: The implementing agencies shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project that also would avoid and minimize impacts on special-status avian and bat species.

Mitigation Measure 3.3-2g: The implementing agencies shall instruct construction personnel on the importance of buffer zones and sensitivity of the delineated areas.

Rational/Supporting Explanation: Although rare in the project area, there is potential for the Swainson's hawk to nest in the vicinity of the proposed project wherever there are clumps of trees adjacent to open space habitats. Implementation of Mitigation Measure 3.3-2a through 3.3-2c, 3.3-2e, and 3.3-2f would reduce impacts to Swainson's hawk to less than significant levels. The American peregrine falcon is expected to occur as a rare migrant and not expected to nest in the project area. Potential project impacts on this species would not be considered significant and no mitigation would be required. Willow riparian habitats along Amargosa Creek provide potentially suitable habitat for the southwestern willow flycatcher and least Bell's vireo and both species have the potential to occur. Implementation of Mitigation Measure 3.3-2a through 3.3-2c and 3.3-2g would reduce impacts on the southwestern willow flycatcher and least Bell's vireo to less than significant levels. Potential impacts on the burrowing owl would meet the significance criteria in Section 15380 of the CEQA Guidelines. Impacts on the burrowing owl would be reduced by Mitigation Measures 3.3-2a through 3.3-2c, 3.3-2e, and 3.3-2f. Mitigation Measures 3.3-2a through 3.3-2f would ensure that implementing agencies avoid impacts on raptor nests and bat roost sites, resulting in a less than significant impact. (FEIR p. 3.3-15-16)

Significant Impact 3.3-3: The Final PEIR concludes in Impact 3.3-3 that construction of the pipeline could have a substantial adverse effect on special-status plant species and habitat types. (FEIR p. 3.3-17)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-3a through 3.3-3e would reduce the significant impact to a less than significant level.

Mitigation Measure 3.3-3a: The implementing agencies shall have a qualified biologist conduct a pre-construction spring/summer floristic inventory and rare plant survey of the proposed project areas in accordance with CDFG's *Guidelines for Assessing the Effects of*

Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities, (revised May 8, 2000) to determine and map the location and extent of special-status plant species populations within the construction right-of-way. The survey shall be conducted during the appropriate flowering time for target plant species.

Mitigation Measure 3.3-3b: If not possible to avoid, the implementing agencies shall minimize impacts on special-status plant species by reducing the construction right-of-way through areas with potential occurrences of special-status plant species. For unavoidable direct impacts to special-status species, consultation with CDFG shall be required to determine the impact area and further mitigation, which could include acquisition of habitat of equal or superior value at a ratio of at least 2:1.

Mitigation Measure 3.3-3c: The implementing agencies shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project that also would avoid and minimize impacts on special-status plant species.

Mitigation Measure 3.3-3d: The implementing agencies shall restore all disturbed areas back to pre-construction conditions and a restoration plan shall be developed and implemented that contains the following items: responsibilities and qualifications of the personnel to implement and supervise the plan; site preparation and planting implementation; schedule; maintenance plan/guidelines; and monitoring plan..

Mitigation Measure 3.3-3e: Earth-moving equipment will avoid maneuvering in areas outside the identified limits of construction in order to avoid disturbing open space areas that will remain undeveloped. Prior to construction, the natural open space limits will be marked by the construction supervisor and a qualified biologist. These limits will be identified on the construction drawings. The implementing agencies will submit a letter to the appropriate agencies verifying that construction limits have been flagged and clearly delineated in the field. No earth-moving equipment will be allowed outside demarcated construction zones.

Rational/Supporting Explanation: Most pipeline impacts are expected to occur within areas along existing roadways that do not support native vegetation; however some soil removal would be necessary and the proposed pipeline construction could impact minor amounts of native desert scrub vegetation adjacent to the roadways. Impacts on special status vegetation types would be reduced to less than significant with implementation of Mitigation Measures 3.3-3a through 3.3-3e. (FEIR p. 3.3-17)

Significant Impact 3.3-4: The Final PEIR concludes in Impact 3.3-4 that construction of the pipeline could conflict with the Joshua Tree and Native Desert Vegetation Preservation Ordinance. (FEIR p. 3.3-18)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-4a through 3.3-4c would reduce the significant impact to a less than significant level.

Mitigation Measure 3.3-4a: The implementing agencies shall attempt to place all project components in areas exhibiting absence or a low density of Joshua trees and other native desert vegetation.

Mitigation Measure 3.3-4b: Prior to the commencement of grading activities for any component of the proposed project, within the City of Palmdale, a qualified biologist/arborist shall be consulted to determine the biological/aesthetic value of potentially impacted trees under the jurisdiction of the Palmdale Native Desert Vegetation Ordinance. For protected vegetation located within the final impact areas, a proposal application would be necessary, including a desert vegetation preservation plan which depicts the location of each Joshua tree and California juniper, details tree age and health, and describes which can be saved and maintained on the site or relocated. A permit must be obtained from the City of Palmdale's landscape architect prior to removal of protected vegetation in Los Angeles County, which may require mitigation in the form of replacement plantings of all impacted vegetation. Prior to the removal of protected vegetation in Kern County, the Kern County Environmental Health Services shall be contacted.

Mitigation Measure 3.3-4c: If avoidance of Joshua tree woodlands or other special-status vegetative community is not feasible, the implementing agencies shall acquire off-site habitat of equal or superior quality at a no less than a 2:1 ratio within remaining habitat in the Antelope Valley. Location, terms and conditions for habitat acquisition, protection, and maintenance shall be determined through consultation with resource agencies, including CDFG.

Rational/Supporting Explanation: Removal of Joshua trees for construction of the proposed pipeline within the City of Palmdale is subject to provisions of the Palmdale Native Desert Vegetation Ordinance, which prohibits removal of desert vegetation (Joshua and juniper trees). Adherence to, and implementation of, Mitigation Measures 3.3-4a through 3.3-4c would reduce this impact to a less than significant level. (FEIR p. 3.3-18)

Significant Impact 3.3-6: The Final PEIR concludes in Impact 3.3-6 that construction of the pipeline could have a substantial adverse effect on wetlands considered waters of the state. (FEIR p. 3.3-20)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.3-6 would reduce the significant impact to a less than significant level.

Mitigation Measure 3.3-6: Prior to construction, the implementing agencies shall retain a qualified biologist to survey proposed construction zones including staging areas and access roads. If wetlands would be affected by construction, the qualified biologist would prepare a report outlining mitigation and compensation requirements to be implemented prior to construction. The mitigation requirements shall include the following at a minimum:

- Implementing agencies shall avoid impacting previously undisturbed areas where possible. This would include employing tunneling or jack and bore methods under drainages.

- If avoidance is not feasible for engineering or cost reasons, the implementing agencies shall conduct jurisdictional delineation of wetland features.

- Implementing agencies shall obtain WDRs from the RWQCB for impacts to waters of the state including wetland areas.

Rational/Supporting Explanation: The U.S. Army Corps of Engineers has determined that Amargosa Creek is not defined as a water of the United States because it flows to a closed internal dry lake basin (Rosamond Dry Lake), which is wholly within the State of California. For similar reasons, the Lahontan RWQCB has determined that other dry washes in the Antelope Valley (e.g., Big Rock Creek and Little Rock Creek) are not defined as waters of the United States (Lahontan RWQCB, 2004). Implementation of Mitigation Measure 3.3-6 would ensure compliance with state and federal regulations. (FEIR p. 3.3-20)

5.3.2 Program-Level Impacts

Significant Impact 3.3-7: The Final PEIR concludes in Impact 3.3-7 that construction of the pump stations and reservoirs could have a substantial effect on special-status wildlife species including the California red-legged frog and Mohave ground squirrel. (FEIR p. 3.3-21)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-1a through 3.3-1e would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: U.S. Fish and Wildlife Services Critical Habitat for the California red-legged frog is located at least partially within the proposed project area along Amargosa Creek. There is potential for indirect impacts such as noise and dust during construction of the proposed project components in Amargosa. Implementation of Mitigation Measure 3.3-1a through 3.3-1d would ensure that the California red-legged frog would not be affected by indirect impacts and would reduce impacts to less than significant. The Mohave ground squirrel has potential to occur in the native habitats of the proposed project area. Implementation of Mitigation Measure 3.3-1e would reduce these impacts to less than significant. The burrowing owl also has potential to occur in the project area. Implementation of Mitigation Measure 3.3-1f would reduce these impacts to less than significant levels. (FEIR p. 3.3-21)

Significant Impact 3.3-8: The Final PEIR concludes in Impact 3.3-8 that construction of the pump stations and reservoirs could have a substantial effect on special-status bat and avian species including the Swainson's hawk, American peregrine falcon, southwestern willow flycatcher, and least Bell's vireo. (FEIR p. 3.3-22)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-2a through 3.3-2f would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: There is potential for the Swainson's hawk, American peregrine falcon, southwestern willow flycatcher, and least Bell's vireo to occur within the vicinity of the proposed project. Implementation of Mitigation Measures 3.3-2a through 3.3-2f would reduce such impacts to a less than significant level. Construction of the above ground structures would result in the permanent loss of potential foraging habitat for 13 raptor species. Implementation of Mitigation Measures 3.3-2a through 3.3-2f would reduce these impacts to a less than significant level. (FEIR p. 3.3-22)

Significant Impact 3.3-9: The Final PEIR concludes in Impact 3.3-9 that construction of the pump stations and reservoirs could have a substantial effect on special-status plant species. (FEIR p. 3.3-22)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-3a through 3.3-3e would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Based on general information regarding the special-status vegetation occurring in the region and the general location of proposed project components, it is assumed that special-status vegetation types (i.e., Joshua tree woodlands) may be impacted. Impacts on special-status vegetation types would be reduced to less than significant with implementation of Mitigation Measures 3.3-3a through 3.3-3e. The effects of the proposed pump stations and reservoirs on special-status plants has not been determined because the final footprint for these proposed facilities within the identified parcels have not been identified. Based on existing information, many special-status plant species have the potential to be impacted. Impacts to these species would be reduced to less than significant with implementation of Mitigation Measure 3.3-3a through 3.3-3e. (FEIR p. 3.3-22-23)

Significant Impact 3.3-10: The Final PEIR concludes in Impact 3.3-10 that construction of the pump stations and reservoirs could conflict with the Joshua Tree and Native Desert Vegetation Preservation Ordinance. (FEIR p. 3.3-23)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-4a through 3.3-4b would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Any Joshua trees and California junipers located within the City of Palmdale which would be impacted by the construction of the proposed pump stations and reservoirs are under the jurisdiction of the Palmdale Native Desert Vegetation Ordinance.

Implementation of Mitigation Measures 3.3-4a and 3.3-4b would reduce impacts to Joshua trees and native vegetation within the City of Palmdale to less than significant. (FEIR p. 3.3-23)

Significant Impact 3.3-12: The Final PEIR concludes in Impact 3.3-12 that construction of the pump stations and reservoirs could have a substantial adverse effect on wetlands considered waters of the state. (FEIR p. 3.3-24)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.3-6 would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: The Corps has determined that Amargosa Creek is not defined as a water of the US because it flows to a closed internal dry lake basin (Rosamond Dry Lake), which is wholly within the State of California. For similar reasons, the Lahontan RWQCB has determined that other dry washes in the Antelope Valley (e.g., Big Rock Creek and Little Rock Creek) are not defined as waters of the United States (Lahontan RWQCB, 2004). Implementation of Mitigation Measure 3.3-6 would ensure compliance with state and federal regulations. (FEIR p. 3.3-24-25)

5.4 Cultural Resources

5.4.1 Project-Level Impacts

Significant Impact 3.4-1: The Final PEIR concludes in Impact 3.4-1 that ground-disturbing activities during pipeline installation could unearth, or disturb archaeological, historical, or Native American resources. (FEIR p. 3.4-25)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.4-1a and 3.4-1b would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.4-1a:** Prior to initial construction of pipelines, the implementing agency shall retain the services of a qualified archaeologist to prepare a Cultural Resources Monitoring and Mitigation Plan (CMMP) and a Treatment Plan (TP) in accordance with CEQA Guidelines Sections 15064.5 and 15126.4. The CMMP shall set forth criteria for evaluating the significance of resources discovered during construction and identify appropriate data recovery methods and procedures to mitigate project impacts on significant resources. At a minimum, the CMMP shall include a summary of available information on known sites and sensitive locations in the project area; a historical context for the evaluation of resources that may be encountered during construction; a research design outlining important historical themes and research questions relevant to the known sites in the study area; data requirements and the appropriate field and laboratory methods to be used to acquire data needed for significance evaluation and impact mitigation. The

CMMP will also identify specific pipeline segments where cultural resources monitors would be required during construction. The TP will identify reporting and curating requirements for artifacts uncovered during construction.

All project activities within or adjacent to the *Historical area of Old Palmdale and Old Lancaster* and *Old Rosamond and Tropico Mine* area shall be monitored by a professional archaeologist as there is a high probability for subsurface feature discovery, which includes (though is not limited to) foundations, cisterns, wells, cesspools, basements, or associated elements of the *Old Palmdale roundhouse spur of the Southern Pacific Railroad.*

Mitigation Measure 3.4-1b: A Phase I cultural resources survey shall be conducted for the segments of pipeline not already assessed in the Phase I Assessment conducted for the proposed project. Following completion of the Phase I cultural resource survey, the CMMP and TP shall be updated to include these segments.

Rational/Supporting Explanation: Some of the recorded historic period sites and the recorded prehistoric period sites are adjacent to the backbone corridor for the pipeline, but appear unaffected by the project given the use of the roadbed as the location for the backbone pipeline construction. With respect to the placement of the backbone pipeline within existing roadbed, it is unknown what lies beneath in terms of prehistoric, historical, or Native American resources. Mitigation Measure 3.4-1a would minimize potential impacts to previously unknown cultural resources. The pipeline segment connecting Booster Pump Station 1 with the proposed pipeline along Sierra Highway was not included in the APE evaluated in the Phase I Assessment by APRMI. Mitigation Measures 3.4-1b would ensure that this segment of pipeline is surveyed and evaluated appropriately for cultural resources prior to construction. (FEIR p. 3.4-25-26)

Significant Impact 3.4-2: The Final PEIR concludes in Impact 3.4-2 that ground-disturbing activities during pipeline installation could unearth, expose, or disturb human remains. (FEIR p. 3.4-26)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.4-2 would reduce the significant impact to a less than significant level.

Mitigation Measure 3.4-2: If human skeletal remains are uncovered during project construction, the implementing agency shall immediately halt work, contact the Kern County or the Los Angeles County coroner, depending upon the location of the find, 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 implementing agency shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity 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 most likely descendents regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Rational/Supporting Explanation: Prehistoric sites and cemeteries are reported west of the Tropico Mine, an area likely utilized by the Kitanemuk. Since the nature of the proposed project would involve ground-disturbing activities, it is possible that such actions could unearth, expose, or disturb previously unknown human remains. With implementation of Mitigation Measure 3.4-2, the proposed project would have less than significant impacts associated with the disturbance of human remains. (FEIR p. 3.4-26-27)

Significant Impact 3.4-3: The Final PEIR concludes in Impact 3.4-3 that installation of the pipeline could potentially unearth, expose, or disturb paleontologic resources including fossil remains, localities, or known fossil-bearing geologic horizons. (FEIR p. 3.4-27)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.4-3 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.4-3:** The implementing agencies shall develop and implement a Paleontological Resource Monitoring and Mitigation Plan (PRMMP) prior to the onset of construction-related earth moving activities in order to either avoid or mitigate to a less-than-significant level the effects on paleontological resources. During earth-moving construction-related activities, additional previously-unknown fossil sites may be uncovered. The PRMMP must include mitigation protocol for discoveries as well. The PRMMP shall include provisions for the following: special consideration shall be made to collect sediment samples for potential fossiliferous locations as per the Society of Vertebrate Paleontology standards; stratigraphic cross-sections shall be recorded, mapping of the geologic units graphed, and fossil remains, cleaned, analyzed, and catalogued to be accepted for curation at a legal repository; all work must be conducted by a qualified Paleontologist and a final Report of Findings must be submitted upon completion of laboratory analysis.

Rational/Supporting Explanation: More than a dozen significant fossil localities are within, or close to, the proposed pipeline and proposed reservoirs and pump station properties. These sites range in size and type from the identification of a single microfaunal remain, to a stratigraphic bed or lens of specimens such as with the Anaverde Formation leaf deposits, to multiple species found together as recorded Rancholabrean megafauna localities. Many of these fossil sites are on, or close to, the San Andreas Rift Zone. With implementation of Mitigation Measure 3.4-3, the proposed project would have less than significant impacts associated with the disturbance of paleontologic resources. (FEIR p. 3.4-27)

5.4.2 Program-Level Impacts

Significant Impact 3.4-4: The Final PEIR concludes in Impact 3.4-4 that the proposed ground-disturbing activities for the storage reservoirs, pump stations and groundwater recharge facilities could unearth, expose, or disturb archaeological, historical, or Native American resources. (FEIR p. 3.4-28)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.4-4a through 3.4-4g would reduce the significant impact to a less than significant level.

Mitigation Measure 3.4-4a: Prior to initial construction of storage reservoirs, pump stations, and recharge facilities, the implementing agency shall retain the services of a qualified archaeologist to prepare a Cultural Resources Monitoring and Mitigation Plan (CMMP) and a Treatment Plan (TP) in accordance with CEQA Guidelines Sections 15064.5 and 15126.4. The CMMP shall set forth criteria for evaluating the significance of resources discovered during construction and identify appropriate data recovery methods and procedures to mitigate project impacts on significant resources. At a minimum, the CMMP shall include a summary of available information on known sites and sensitive locations in the project area; a historical context for the evaluation of resources that may be encountered during construction; a research design outlining important historical themes and research questions relevant to the known sites in the study area; data requirements and the appropriate field and laboratory methods to be used to acquire data needed for significance evaluation and impact mitigation. The CMMP will also identify specific locations where cultural resources monitors would be required during construction. The TP will identify reporting and curating requirements for artifacts uncovered during construction.

Mitigation Measure 3.4-4b: *DPS1-Hist1* and *BPS1-Hist1* would be adversely impacted by the proposed construction activities and, therefore, shall be subjected to Phase II testing and evaluation for significance under CEQA and NHPA (see Section 3.4.2).

Mitigation Measure 3.4-4c: A Phase I cultural resources survey shall be conducted within areas affected by storage reservoir, pump stations, and recharge facilities not already assessed in the Phase I Assessment conducted for the proposed project.

Mitigation Measure 3.4-4d: Following completion of additional Phase I cultural resource surveys for sites not already surveyed, the CMMP and TP shall be updated to include these additional sites.

Mitigation Measure 3.4-4e: All project activities within or adjacent to the *Historical area of Old Palmdale and Old Lancaster* and *Old Rosamond and Tropico Mine area* shall be monitored by a professional archaeologist as there is a high probability for subsurface feature discovery, which includes (though is not limited to) foundations, cisterns, wells, cesspools, basements, or associated elements of the *Old Palmdale roundhouse spur of the Southern Pacific Railroad*. If these elements are identified, mitigation measures shall be employed that include in-field evaluation by a professional archaeologist (per Secretary of the Interior Standards) and possible data recovery, as needed, per a mitigation treatment plan.

Mitigation Measure 3.4-4f: If a prehistoric site is encountered in the vicinity of the concentration of isolated prehistoric artifacts within the northern portion of the western parcel of Proposed Reservoir 3, mitigation measures shall be employed that include in-field evaluation by a professional archaeologist (per Secretary of the Interior Standards) and possible data recovery, as needed, per a mitigation treatment plan.

Mitigation Measure 3.4-4g: If human skeletal remains are uncovered during project construction, the implementing agency shall immediately halt work, contact the Kern County or the Los Angeles coroner, depending upon the location of the find, 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 implementing agency shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity 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 most likely descendents regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Rational/Supporting Explanation: Mitigation Measure 3.4-4c and 3.4-4d would ensure that Distribution Pump Station 1A, Booster Pump Station 1, and Reservoir 4 are surveyed and evaluated appropriately for cultural resources prior to construction as they were not included in the APE evaluated in the Phase I Assessment. Historic period sites are located within the project areas. With implementation of Mitigation Measures 3.4-4a through 3.4-4g, the proposed project would have less than significant impacts regarding the disturbance of archaeological, historical or Native American resources. (FEIR p. 3.4-28)

Significant Impact 3.4-5: The Final PEIR concludes in Impact 3.4-5 that construction of the storage reservoirs, pump stations, and recharge facilities could potentially unearth, expose, or disturb paleontologic resources including fossil remains, localities, or known fossil-bearing geologic horizons. (FEIR p. 3.4-30)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.4-5 would reduce the significant impact to a less than significant level.

Mitigation Measure 3.4-5: The implementing agencies shall develop and implement a Paleontological Resource Monitoring and Mitigation Plan (PRMMP) prior to the onset of construction-related earth moving activities in order to either avoid or mitigate to a less-than-significant level the effects on paleontological resources. During earth-moving construction-related activities, additional previously-unknown fossil sites may be uncovered. The PRMMP must include mitigation protocol for discoveries as well. The PRMMP shall include provisions for the following: special consideration shall be made to collect sediment samples for potential fossiliferous locations as per the Society of Vertebrate Paleontology standards; stratigraphic cross-sections shall be recorded, mapping of the geologic units graphed, and fossil remains, cleaned, analyzed, and catalogued to be accepted for curation at a legal repository; all work must be conducted by a qualified Paleontologist and a final Report of Findings must be submitted upon completion of laboratory analysis.

Rational/Supporting Explanation: Implementation of the proposed project could result in significant impacts to paleontological resources. More than a dozen significant fossil localities are within, or close to, the proposed pipeline and proposed reservoirs and pump station properties.

These sites range in size and type from the identification of a single microfaunal remain, to a stratigraphic bed or lens of specimens such as with the Anaverde Formation leaf deposits, to multiple species found together as recorded Rancholabrean megafauna localities. Many of these fossil sites are on, or close to, the San Andreas Rift Zone. With implementation of Mitigation Measure 3.4-5, the proposed project would have less than significant impacts associated with the disturbance of paleontologic resources. (FEIR p. 3.4-30)

5.5 Geology and Soils

5.5.1 Project-Level Impacts

Significant Impact 3.5-1: The Final PEIR concludes in Impact 3.5-1 that in the event of a major earthquake in the region, underground pipelines would be subject to seismic hazards including surface rupture, liquefaction, landslide and ground shaking capable of causing localized collapse or damage of engineered fills, structural damage, or pipeline rupture. (FEIR p. 3.5-11)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.5-1would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.5-1:** Prior to the approval of construction plans for the project, a design-level geotechnical investigation, including collection of site specific subsurface data shall be completed by the implementing agency. The geotechnical evaluation shall identify density profiles, approximate maximum shallow groundwater levels, a characterization of the vertical and lateral extent of the saturated sand/silt layers that could undergo liquefaction during strong ground shaking, and development of site-specific design criteria to mitigate potential risks. Recommendations made as a result of these investigations to protect new structures from seismic hazards shall become part of the proposed project.

Rational/Supporting Explanation: Two areas of the project are located in Alquist-Priolo Earthquake Fault Zones and the project is located in potential liquefaction zones in four places. The project is not located in an area that is subject to earthquake-induced landslide. A segment of pipeline traverses an Alquist-Priolo Zone south of Palmdale along the San Andreas Fault Zone. Rupture along the Alquist-Priolo Zone would subject the pipeline to ground motion, and under extreme conditions, could cause material failure or connection failure leading to rupture and release of recycled water, which would be a significant impact. Mitigation Measure 3.5-1 would require a geotechnical investigation for pipeline segments within seismic hazard zones and would reduce impacts to a less than significant level. (FEIR p. 3.5-11-12)

Significant Impact 3.5-2: The Final PEIR concludes in Impact 3.5-2 that construction of the proposed pipeline would result in substantial soil erosion or loss of topsoil. (FEIR p. 3.5-13)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as

identified in the Final PEIR. Specifically, Mitigation Measure 3.5-2 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.5-2:** To control water and wind erosion during construction of the project, the implementing agencies shall ensure that contractors implement Best Management Practices (BMPs) to control wind and water erosion during and shortly after construction of the project and permanent BMPs to control erosion and sedimentation once construction is complete. The BMPs could include, but would not be limited to, sediment barriers and traps, silt basins, and silt fences.

Rational/Supporting Explanation: The proposed project would not contribute to the loss of topsoil, and the impact is considered less than significant. However, soils in the region are highly susceptible to water or wind erosion or both. Therefore, if any construction-related grading activities are required for installation of the recycled water pipelines, short-term losses of topsoil and subsoil due to wind and water erosion could be substantial. Implementation of Mitigation Measure 3.5-2 would ensure water and wind erosion of soils would be minimized to less than significant levels. (FEIR p. 3.5-13)

Significant Impact 3.5-3: The Final PEIR concludes in Impact 3.5-3 that the presence of local expansive soils in the project area would result in structural damage to the recycled water pipelines. (FEIR p. 3.5-13)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.5-3 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.5-3:** The implementing agencies shall require the preparation of site specific geotechnical investigations along the proposed pipeline alignments. These investigations shall identify appropriate engineering considerations, as recommended by a certified engineering geologist or registered geotechnical engineer for planned facilities, including engineering considerations to mitigate the effects of expansive soils. Recommendations made as a result of these investigations to protect new structures from expansive soils shall become part of the proposed project.

Rational/Supporting Explanation: None of the soils in the project area are classified as expansive according to Table 18-1B of the Uniform Building Code. However, if local areas with expansive soils are encountered, engineered project facilities would be designed according to the Uniform Building Code to prevent structural damage from soil expansion and contraction. Implementation of Mitigation Measure 3.5-3 would reduce impacts to project facilities due to expansive soils to less than significant levels. (FEIR p. 3.5-13)

5.5.2 Program-Level Impacts

Significant Impact 3.5-4: The Final PEIR concludes in Impact 3.5-4 that construction of the proposed reservoirs and pump stations would result in substantial erosion or loss of topsoil. (FEIR p. 3.5-14)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.5-2 would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: The proposed project would not contribute to the loss of topsoil, and the impact is considered less than significant. However, soils in the region are highly susceptible to water or wind erosion or both. Therefore, for any construction-related grading activities, short-term losses of topsoil and subsoil due to wind and water erosion could be substantial. Implementation of Mitigation Measure 3.5-2 would ensure water and wind erosion of soils would be minimized to less than significant levels. (FEIR p. 3.5-14)

Significant Impact 3.5-5: The Final PEIR concludes in Impact 3.5-5 that in the event of a major earthquake within the region, storage reservoirs and pump stations could be subject to seismic hazards including surface rupture, liquefaction, landslide, and ground shaking capable of causing localized collapse or damage of engineered fills or structural damage. (FEIR p. 3.5-14)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.5-1 through 3.5-3 would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Storage Reservoir 3 and Pump Station 2 would be located within the San Andreas Alquist-Priolo Zone. Surface rupture and intense ground shaking in this area could significantly affect the proposed structures, resulting in damage to the facilities or structural failure. The project would be designed in accordance with the recommendations of a site-specific geotechnical investigation, in compliance with the CBC and Special Publication 117. With implementation of Mitigation Measures 3.5-1 through 3.5-3, impacts would be reduced to less-than-significant levels. (FEIR p. 3.5-14)

Significant Impact 3.5-6: The Final PEIR concludes in Impact 3.5-6 that ground shaking, expansive soils, liquefaction, settlement, erosion and corrosive soils would damage facilities related to recycled water end uses, including the power plant cooling water system and the groundwater recharge basins and appurtenant facilities. (FEIR p. 3.5-15)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.5-1 through 3.5-3 would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Facilities related to end uses of recycled water for power plant cooling and groundwater recharge could be located in areas subject o seismic and geologic hazards, including ground shaking, expansive soils, liquefaction, settlement, erosion and corrosive soils. Mitigation Measure 3.5-1 and 3.5-2 would require site-specific geotechnical investigation to identify site-specific design criteria to mitigate potential risks. Design criteria will be incorporated into project design. To mitigate erosion due to wind and water, Mitigation Measure 3.5-2 requires BMPs to be implemented during construction. With implementation of Mitigation Measures 3.5-1 through 3.5-3, impacts would be less than significant. (FEIR p. 3.5-15)

5.6 Hazards and Hazardous Materials

5.6.1 Project-Level Impacts

Significant Impact 3.6-1: The Final PEIR concludes in Impact 3.6-1 that during construction of the pipeline, contaminated soils could be encountered during excavation activities, causing a risk of exposure to hazardous materials. (FEIR p. 3.6-7)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.6-1 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.6-1:** In the event that evidence of potential soil contamination, including soil discoloration, noxious odors, debris, or buried storage containers are encountered during construction, the implementing agencies shall require the construction contractor(s) to have a contingency plan for sampling and analysis of potentially hazardous substances and coordination with the appropriate regulatory agencies, if necessary. The required handling, storage, and disposal methods shall depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remedial actions shall comply with applicable laws.

Rational/Supporting Explanation: A total of 21 sites were identified in the EDR database report that are within 0.25 mile of the project and represent potential sources of soil contamination that could be encountered during excavation. If contaminated soils are encountered during excavation activities, implementation of Mitigation Measure 3.6-1 would reduce impacts to a less-than-significant level. (FEIR p. 3.6-8)

Significant Impact 3.6-2: The Final PEIR concludes in Impact 3.6-2 that accidental upset of hazardous materials used during pipeline construction would increase the risk of exposure to the environment, workers, and the public. (FEIR p. 3.6-8)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.6-2a through 3.6-2f would reduce the significant impact to a less than significant level.

Mitigation Measure 3.6-2a: Construction contractor(s) shall be required to implement best management practices (BMPs) for handling hazardous materials during the project. The use of the construction BMPs shall minimize negative effects on groundwater and soils, and will include, without limitation, the following:

- Follow manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction.
- Avoid overtopping construction equipment fuel tanks.
- During routine maintenance of construction equipment, properly contain and remove grease and oils.
- Properly dispose of discarded containers of fuels and other chemicals.

Mitigation Measure 3.6-2b: The implementing agencies shall require the construction contractor(s) to implement safety measures in accordance with General Industry Safety Orders for Spill and Overflow Control (CCR Title 8, §s 5163-5167) to protect the project area from contamination due to accidental release of hazardous materials. The safety measures shall include, but not be limited to, the following:

- Spills and overflows of hazardous materials shall be neutralized and disposed of promptly.
- Hazardous materials shall be stored in containers that are chemically inert to and appropriate for the type and quantity of the hazardous substance.
- Containers shall not be stored where they are exposed to heat sufficient enough to rupture the containers or cause leakage.
- Specific information shall be provided regarding safe procedures and other precautions before cleaning or subsequent use or disposal of hazardous materials containers.

Disposal of all hazardous materials shall be in compliance with applicable California hazardous waste disposal laws. The construction contractor shall contact the local fire agency and the County Department of Public Health, Environmental Health Division, for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

Mitigation Measure 3.6-2c: In the event of an accidental release of hazardous materials during construction, containment and clean up shall occur in accordance with applicable regulatory requirements.

Mitigation Measure 3.6-2d: Oil and other solvents used during maintenance of construction equipment shall be recycled or disposed of in accordance with applicable regulatory requirements. All hazardous materials shall be transported, handled, and disposed of in accordance with applicable regulatory requirements.

Mitigation Measure 3.6-2e: The implementing agencies shall require the construction contractor(s) to prepare a Site Safety Plan in accordance with applicable regulatory requirements.

> **Mitigation Measure 3.6-2f:** The implementing agencies shall require the construction contractor(s) to prepare and implement a Safety Program to ensure the health and safety of construction workers and the public during project construction. The Safety Program shall include an injury and illness prevention program, as site-specific safety plan, and information on the appropriate personal protective equipment to be used during construction.

Rational/Supporting Explanation: Construction of the pipeline would require equipment that utilizes hazardous materials such as petroleum fuels and oil. During construction activities, such hazardous materials could accidentally be spilled or otherwise released into the environment exposing construction workers, the public and/or the environment to potentially hazardous conditions. Mitigation Measures 3.6-2a through 3.6-2f would reduce the significant impact to a less than significant level. (FEIR p. 3.6-8)

Significant Impact 3.6-3: The Final PEIR concludes in Impact 3.6-3 that the proposed project would result in a safety hazard for people residing or working in portions of the project area that are in the vicinity of airports. (FEIR p. 3.6-10)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.6-3 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.6-3:** The implementing agencies shall coordinate with appropriate airport agencies (such as LAWA, Caltrans, and FAA) and staff to ensure a safety program is developed and implemented during construction of the proposed project.

Rational/Supporting Explanation: Components of the proposed project are within two miles of airports, including the Palmdale Regional Airport, General William J. Fox Airport, and Rosamond Skypark Airport. The proposed project would not construct any wildlife hazard attractants that would jeopardize the safety of aircraft operations. However, construction of the proposed project along roadways near airport facilities could introduce safety hazards for both workers at the construction sites and at the airports. Mitigation Measure 3.6-3 would require coordination with airport agencies and staff to ensure proper protections measures are integrated into a construction safety program and implemented by the construction contractor. (FEIR p. 3.6-10)

Significant Impact 3.6-4: The Final PEIR concludes in Impact 3.6-4 that the proposed project would interfere with emergency response and evacuation plans. (FEIR p. 3.6-10)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.11-1a would reduce the significant impact to a less-than-significant level.

Rational/Supporting Explanation: Project construction would not result in complete roadway closures but would result in lane closures, which would affect traffic flows. Implementation of a

Traffic Control/Traffic Management Plan, as described in Mitigation Measure 3.11-1a in Chapter 3.11, Transportation and Traffic, of the Final PEIR (see below) would ensure there would be no interference with emergency response and evacuation plans. The Traffic Control/Traffic Management Plan would ensure that all roads remain passable to emergency service vehicles at all times and would reduce impacts to a less-than-significant level. (FEIR p. 3.6-10)

Significant Impact 3.6-5: The Final PEIR concludes in Impact 3.6-5 that construction activities in grassland areas would have the potential to expose people or equipment to risk of loss, injury, or death involving wildland fires. (FEIR p. 3.6-11)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.6-5a and 3.6-5b would reduce the significant impact to a less than significant level.

> **Mitigation Measures 3.6-5a:** The implementing agencies shall coordinate with local fire agencies to develop a fire safety plan, which describes various potential scenarios and action plans in the event of a fire.
>
> **Mitigation Measures 3.6-5b:** During construction, all staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other material that could ignite. Any construction equipment that includes a spark arrestor shall be equipped with a spark arrestor in good working order. During the construction of the recycled water backbone, contractors shall require all vehicles and crews working at the project site to have access to functional fire extinguishers at all times. In addition, construction crews shall have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.

Rational/Supporting Explanation: Portions of the pipeline are located in areas that may be susceptible to wildland fires as construction of the proposed project requires equipment and activities that use petroleum fuels and oils and could result in accidental spills leading to fire-related hazards. Implementation of Mitigation Measures 3.6-5a and 3.6-5b would reduce impacts to a less than significant level. (FEIR p. 3.6-11)

5.6.2 Program-Level Impacts

Significant Impact 3.6-6: The Final PEIR concludes in Impact 3.6-6 that accidental upset of hazardous materials used during construction of the storage reservoirs and pump stations would increase the risk of exposure to the environment, workers, and the public. (FEIR p. 3.6-11)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.6-2a and 3.6-2f would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Construction of the pump stations and reservoirs would require equipment that utilizes hazardous materials such as petroleum fuels and oil. During construction activities, such hazardous materials could accidentally be spilled or otherwise released into the environment exposing construction workers, the public and/or the environment to potentially hazardous conditions. Mitigation Measures 3.6-2a through 3.6-2f would reduce the significant impact to a less than significant level. (FEIR p. 3.6-11-12)

5.7 Hydrology and Water Quality

5.7.1 Project-Level Impacts

Significant Impact 3.7-1: The Final PEIR concludes in Impact 3.7-1 that operation of the proposed pipelines could result in cross contamination of potable water pipelines, which could result in reduced water quality and potential public health concerns. (FEIR p. 3.7-19)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.7-1a through 3.7-1e would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-1a:** Applicable backflow prevention devices, as outlined in Title 17 and the Purple Book, shall be incorporated into pipeline design to avoid potential for cross contamination.
>
> **Mitigation Measure 3.7-1b:** Applicable minimum pipeline separation standards for potable and non-potable water pipelines, as outlined in Title 22, shall be incorporated into pipeline design to avoid potential for cross contamination.
>
> **Mitigation Measure 3.7-1c:** All recycled water pipelines shall be painted purple or marked distinctly with purple tape.
>
> **Mitigation Measure 3.7-1d**: Los Angeles County Department of Public Health (DPH), Cross Connection Control Program for Los Angeles County and the Kern County Department of Public Health in Bakersfield for Kern County shall be advised of each new site where recycled water is to be used prior to placing the site into service.
>
> **Mitigation Measure 3.7-1e:** All recycled water sites shall be inspected and tested for possible cross connections with the potable water system, in accordance with Sections 60314(3) and 60316(a), Title 22, California Code of Regulations.

Rational/Supporting Explanation: To avoid cross-contamination of potable water with recycled water, backflow prevention devices will be required to be incorporated in accordance with Mitigation Measures 3.7-1a through 3.7-1e. In addition, all pipes would be colored purple or wrapped in purple tape and would have at least 10 foot horizontal separation and one foot vertical separation from any parallel potable water mains. Implementation of Mitigation Measures 3.7-1a through 3.7-1e would reduce impacts to a less than significant level. (FEIR p. 3.7-19)

Significant Impact 3.7-2: The Final PEIR concludes in Impact 3.7-2 that construction of the proposed pipelines could result in increased soil erosion or accidental release of fuels and other hazardous materials during construction that could degrade water quality. (FEIR p. 3.7-20)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.7-2 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-2:** The implementing agencies shall develop and implement BMPs to minimize erosion and sedimentation. The implementing agencies shall include in contractor specifications that the contractor is responsible for developing and implementing the BMPs. The BMPs shall be maintained at the site for the entire duration of construction.
>
> The objectives of the BMPs are to identify pollutant sources that may affect the quality of storm water discharge and to implement measures to reduce pollutants in storm water discharges. The BMPs for the proposed project shall include, but not be limited to, the implementation of the following elements:
>
> - Identification of all pollutant sources, including sources of sediment that may affect the quality of storm water discharges associated with construction activity from the construction site;
> - Identification of non-storm water discharges;
> - Estimate of the construction area and impervious surface area;
> - Preparation of a site map and maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs);
> - Identification of all applicable erosion and sedimentation control measures, waste management practices, and spill prevention and control measures;
> - Maintenance and training practices; and,
> - A sampling and analysis strategy and sampling schedule for discharges from construction activities.

Rational/Supporting Explanation: Mitigation Measure 3.7-2 would require that the implementing agencies require construction contractors to develop and implement Best Management Practices (BMPs) to ensure pipeline construction activities would not degrade surface or groundwater quality. Implementation of Mitigation Measure 3.7-2 would reduce the impact to a less than significant level. (FEIR p. 3.7-20-21)

Significant Impact 3.7-3: The Final PEIR concludes in Impact 3.7-3 that pipeline construction could result in the dewatering of shallow groundwater resources and contamination of surface water. (FEIR p. 3.7-22)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as

identified in the Final PEIR. Specifically, Mitigation Measure 3.7-3 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-3:** The implementing agencies shall obtain and comply with the requirements of dewatering permits issued by the Lahontan RWQCB for dewatering activities. Provisions of the permit may include treatment of flows prior to discharge.

Rational/Supporting Explanation: If shallow groundwater is met, dewatering would be required. Discharge water could potentially degrade surface water quality with materials used during typical construction activities, such as silt, fuel, grease, or other chemicals. Implementation of Mitigation Measure 3.7-3 would reduce impacts to a less than significant level. (FEIR p. 3.7-22)

Significant Impact 3.7-4: The Final PEIR concludes in Impact 3.7-4 that pipeline construction could temporarily alter drainage patterns at the construction site, which could cause localized flooding. (FEIR p. 3.7-23)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.7-4 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-4:** The implementing agencies shall include in contractor specifications that all disturbed areas are to be restored back to pre-construction conditions.

Rational/Supporting Explanation: The proposed project would not alter the drainage patterns of any stream or river. However, Mitigation Measure 3.7-4 would ensure that no new permanent impervious surfaces are created that could alter drainage patterns and potentially result in localized flooding impacts. Implementation of Mitigation Measure 3.7-4 would reduce impacts to a less than significant level. (FEIR p. 3.7-23)

Significant Impact 3.7-5: The Final PEIR concludes in Impact 3.7-5 that the use of recycled water for municipal and industrial (M&I) applications could affect surface and groundwater quality. (FEIR p. 3.7-23)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.7-5a and 3.7-5b would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-5a:** The implementing agencies shall require the development and implementation of Recycled Water User Agreements with each recycled water end user. The Agreements shall include provisions that prohibit over-application of recycled water and fertilizer, such as requiring irrigation at agronomic rates to reduce the potential for runoff and increased nutrients into the groundwater basin.

> **Mitigation Measure 3.7-5b**: The implementing agencies, in consultation with the Lahontan RWQCB, shall develop and implement a salt management plan, if needed in the future, to reduce the potential for salt and nutrient loading and minimize impacts to water quality in the Antelope Valley groundwater basin.

Rational/Supporting Explanation: To address water quality concerns, the State Water Resources Control Board (SWRCB) is currently developing a statewide general permit for landscape irrigation uses of recycled water, pursuant to AB 1481. In the interim, SWRCB has stated in its latest draft Recycled Water Policy statement that the discharge of salts and nutrients to groundwater can be reasonably controlled by applying water at agronomic rates for recycled water landscape irrigation projects. Mitigation Measures 3.7-5a requires M&I end users to apply water and fertilizer to landscapes at agronomic rates. In addition, the SWRCB is currently developing a Recycled Water Policy that would require Salt Management Plans for all recycled water projects. If needed in the future, Mitigation Measure 3.7-5b requires the implementing agencies to consult with the Lahontan RWQCB to develop and implement a Salt Management Plan to reduce potential salt and nutrient loading to groundwater. Implementation of Mitigation Measure 3.7-5a and 3.7-5b would reduce impacts to a less than significant level. (FEIR p. 3.7-23-24)

Significant Impact 3.7-6: The Final PEIR concludes in Impact 3.7-6 that the use of recycled water by new M&I end users would result in increased runoff during storm events resulting in localized flooding. (FEIR p. 3.7-25)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.7-6 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-6:** The implementing agencies shall require recycled water end users to cease all irrigation activities during rain events, thereby minimizing off-site runoff.

Rational/Supporting Explanation: Irrigation activities of recycled water end users must be adjusted to prevent saturation of soils onsite and mitigate the potential for localized flooding. Implementation of Mitigation Measure 3.7-6 would reduce impacts to a less than significant level. (FEIR p. 3.7-25)

5.7.2 Program-Level Impacts

Significant Impact 3.7-7: The Final PEIR concludes in Impact 3.7-7 that construction of the proposed pump stations and reservoirs could result in increased soil erosion or accidental release of fuels and other hazardous materials during construction that could degrade water quality. (FEIR p. 3.7-25)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as

identified in the Final PEIR. Specifically, Mitigation Measure 3.7-2 would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Mitigation Measure 3.7-2 would require that the implementing agencies require construction contractors to develop and implement Best Management Practices (BMPs) to ensure pump station and reservoir construction activities would not degrade surface or groundwater quality. Implementation of Mitigation Measure 3.7-2 would reduce the impact to a less than significant level. (FEIR p. 3.7-26)

Significant Impact 3.7-8: The Final PEIR concludes in Impact 3.7-8 that construction of the proposed storage reservoirs and pump stations would increase the amount of impervious surfaces at each site, altering the drainage patterns at each site and potentially resulting in increased local storm water runoff. (FEIR p. 3.7-26)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.7-7 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-7:** The implementing agencies shall ensure adequately sized and located storm water capture facilities are incorporated into the final design for each storage reservoir and pump station facility.

Rational/Supporting Explanation: Estimated run-on and runoff calculations demonstrate a low potential for substantial long-term drainage and localized flooding impacts at each reservoir and pump station site. Implementation of Mitigation Measure 3.7-7 would reduce impacts to a less than significant level. (FEIR p. 3.7-26-27)

Significant Impact 3.7-9: The Final PEIR concludes in Impact 3.7-9 that placement of storage reservoirs and pump stations within a 100-year flood zone could expose people or property to risk related to flooding. (FEIR p. 3.7-28)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.7-8 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-8:** The implementing agencies shall require flood diversion facilities to be incorporated into each storage reservoir and pump station site and facility design that would not increase flood risk in other areas.

Rational/Supporting Explanation: Distribution Pump Station 2 is located at the PWRP, an already developed site that is in a designated Flood Zone B. Zone B is a zone between 100-year and 500-year flood zone limits. Implementation of Mitigation Measure 3.7-8 would reduce flood impacts to less than significant levels. (FEIR p. 3.7-28)

Distribution Pump Station 1, Distribution Pump Station 1A, Booster Pump Station 2, Reservoir 2 and Reservoir 4 are located in or near 100-year flood zone areas (Figure 3.7-4, PEIR p. 3.7-10). The pump stations and storage reservoirs would be developed in accordance with the applicable municipal codes[3] regarding construction in flood zones. It is expected that LACWWD 40, or its partner agencies, would be required to obtain a development permit for the above-ground reservoirs prior to construction within any special flood hazard areas. With adherence to the permit requirements, the proposed facilities would not expose people or structures to the risk of loss due to flooding. In addition, implementation of Mitigation Measure 3.7-8 would reduce impacts to people and structures due to flooding to less than significant levels. (FEIR p. 3.7-28)

Significant Impact 3.7-10: The Final PEIR concludes in Impact 3.7-10 that the use of recycled water for agricultural irrigation could potentially affect surface and groundwater quality. (FEIR p. 3.7-28)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.7-5a and 3.7-5b would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Localized and regional water quality impacts could result from the higher levels of TDS, nitrogen, and other nutrients in the recycled water applied at potential agricultural irrigation sites when switching from potable water to recycled water. Implementation of Recycled Water User Agreements as required by Mitigation Measure 3.7-5a would ensure minimal impacts to water quality due to the use of recycled water at agricultural reuse sites. Implementation of Mitigation Measure 3.7-5b would ensure minimal impacts to water quality due to the use of recycled water for all end uses, once the SWRCB adopts its Recycled Water Policy requiring implementation of Salt Management Plans. (FEIR p. 3.7-28-29)

Significant Impact 3.7-11: The Final PEIR concludes in Impact 3.7-11 that the use of recycled water for groundwater recharge could result in significant water quality impacts if the native groundwater is degraded below existing or acceptable conditions. (FEIR p. 3.7-29)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.7-9a through 3.7-9c would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.7-9a:** The implementing agencies shall operate recharge projects in compliance with CDPH Title 22 regulations as well as in coordination with the RWQCB. The recharge water shall be a blend of recycled water and diluent water at a ratio consistent with Title 22 regulations and CDPH criteria.

[3] Applicable Municipal Codes include the City of Lancaster's §15.52.010, the City of Palmdale's §110.1.1 and §110.1.2, the 2008 Los Angeles County Building Code (Title 216), and the Kern County Floodplain Management Building Code (Chapter 17.48).

Mitigation Measure 3.7-9b: The implementing agencies shall develop and implement a monitoring program of the proposed recharge area in compliance with Title 22 regulations and CDPH criteria. As part of this program, some monitoring wells shall be placed between the proposed recharge area and down gradient drinking water supply wells.

Mitigation Measure 3.7-9c: The implementing agencies shall require recharged recycled water via surface spreading to remain in groundwater storage for the minimum time period stipulated by CDPH Title 22 Water Recycling Criteria prior to extraction.

Rational/Supporting Explanation: Any potential groundwater recharge project using recycled water (GRRP) would be subject to strict regulatory reviews and additional, in-depth environmental assessment and documentation in accordance with CEQA prior to initiation of recharge activities. This PEIR generally describes the impacts associated with a GRRP and does not attempt to describe or evaluate any site-specific or known recharge areas. Accordingly, Mitigation Measures 3.7-9a, 3.7-9b and 3.7-9c are the minimum requirements for future potential GRRPs in the project area and would reduce impacts to a less than significant level. (FEIR p. 3.7-29-31)

5.8 Land Use and Agriculture

5.8.1 Project-Level Impacts

Significant Impact 3.8-2: The Final PEIR concludes in Impact 3.8-2 that several project components would be constructed within the airport influence area (AIA) for the Palmdale Regional Airport, General William J. Fox Airfield, and Rosamond Skypark Airport. (FEIR p. 3.8-23)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.8-1a through 3.8-1d would reduce the significant impact to a less than significant level.

Mitigation Measure 3.8-1a: For project components occurring within an AIA, the implementing agencies shall submit their proposed project plans to the Los Angeles County ALUC for review and comment prior to final design.

Mitigation Measure 3.8-1b: Prior to conducting construction activities within an AIA, the implementing agencies shall prepare an airport construction safety plan that would identify best management practices. The plan would include, at a minimum, construction timeframes and hours, lighting and flagging requirements, air traffic control communication requirements, access and egress restrictions, equipment staging area requirements, and personal safety equipment requirements for construction workers, and appropriate notification to aviators. The plan would be reviewed and approved by airport staff and implemented by both the airport and project construction staff and FAA.

Mitigation Measure 3.8-1c: Prior to final design of project components within an AIA, the implementing agencies shall identify the ground elevation associated with each project component and submit their project plans to airport staff for review and comment. Working with airport staff, the implementing agencies shall submit their design plans for airspace analysis (FAA Part 7460 review) to determine whether any of the proposed project components or proposed construction equipment would protrude into protected airspace. If such objects are identified, the implementing agencies, airport staff, and FAA will identify appropriate steps to adjust project plans or include appropriate markings to identify hazards to aviators pursuant to FAA Part 7460.

Mitigation Measure 3.8-1d: To prevent the creation of wildlife attractants, the implementing agency should coordinate with construction contractors to ensure that neither project design nor construction plans create temporary or permanent sources of open water, inappropriate seed mixtures, or inappropriate landscaping designs. Notes should be incorporated on construction plans to warn against the creation of potential wildlife hazards.

Rational/Supporting Explanation: To prevent potential intrusions to navigable airspace, the implementing agency would notify the airport of proposed construction activities in advance and work with the airport to complete project review through the FAA's 7460 airspace review process, which would ensure that construction equipment, such as cranes and flashing lights, would not pose hazards to aviation. In addition to FAA airspace review, ongoing coordination with the airport would be required to ensure that proposed construction activities do not disrupt airport operations and to ensure that appropriate notice is provided to aviators using the airport. Implementation of Mitigation Measures 3.8-1a through 3.8-1d would reduce impacts to a less than significant level. (FEIR p. 3.8-23)

Significant Impact 3.8-3: The Final PEIR concludes in Impact 3.8-3 that the proposed project would occur within the Airport Operations Area of Palmdale Regional Airport, Fox Airfield, and Rosamond Skypark. (FEIR p. 3.8-24)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.8-1c would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: To prevent potential intrusions to navigable airspace within the project vicinity, the implementing agency would notify the airport of proposed construction activities in advance and participate in the FAA's 7460 process to ensure that the proposed construction equipment would not pose hazards to aviation. In addition to FAA airspace review, ongoing coordination with the airport would be required to ensure that proposed construction activities do not disrupt airport operations and to ensure that appropriate notice is issued to aviators. Implementation of Mitigation Measure 3.8-1c will reduce the potential hazards of construction activities within the navigable airspace of an airport to less than significant levels. (FEIR p. 3.8-24-25)

5.8.2 Program-Level Impacts

Significant Impact 3.8-4: The Final PEIR concludes in Impact 3.8-4 that construction and operation of the proposed storage reservoirs and pump stations would result in short-term disturbance to some adjacent land uses and result in long-term effects to existing land uses. (FEIR p. 3.8-25)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.2-1a through 3.2-1f, 3.8-2, and 3.11-1a would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.8-2:** The implementing agencies shall obtain conditional use permits and complete site plan reviews from the appropriate jurisdiction, as necessary, prior to construction of project facilities. The implementing agencies shall also coordinate with FAA regarding the locations and design of proposed reservoirs and pump stations.

Rational/Supporting Explanation: Short-term effects to adjacent land uses resulting from construction emissions and vehicle traffic would be temporary and would be reduced to a less than significant level with implementation of Mitigation Measures 3.2-1a through 3.2-1f, and 3.11-1a. Some facilities may be incompatible with General Plan land use designations and would require either a site plan review or a conditional use permit. Implementation of Mitigation Measure 3.8-2 would reduce the long-term effects to a less than significant level. (FEIR p. 3.8-25-26)

Significant Impact 3.8-5: The Final PEIR concludes in Impact 3.8-5 that construction and operation of the proposed groundwater recharge basins would result in short-term disturbance to some adjacent land uses and result in long-term effects to existing land uses. (FEIR p. 3.8-27)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.2-1a through 3.2-1f, 3.8-3, and 3.11-1a would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.8-3:** The implementing agencies shall obtain a conditional use permit or a general plan amendment if necessary from the appropriate jurisdiction prior to construction of groundwater recharge facilities. The implementing agencies shall also coordinate with FAA regarding the locations and design of future recharge basins.

Rational/Supporting Explanation: Short-term effects to adjacent land uses resulting from construction emissions and vehicle traffic would be temporary and would be reduced to a less than significant level with implementation of Mitigation Measures 3.2-1a through 3.2-1f, and 3.11-1a. Some facilities may be incompatible with land use designations and would require either a site plan review or a conditional use permit. Implementation of Mitigation Measure 3.8-3 would reduce the long-term effects to a less than significant level. (FEIR p. 3.8-27-28)

5.9 Noise

5.9.1 Program-Level Impacts

Significant Impact 3.9-4: The Final PEIR concludes in Impact 3.9-4 that operation of the proposed storage reservoirs and pump stations would result in long-term noise increases in the vicinity of the project facilities. (FEIR p. 3.9-17)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.9-4 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.9-4:** The implementing agencies shall comply with local noise ordinances. In areas where pump and/or stationary equipment operation would cause noise levels to exceed the normally acceptable range for a given land use, the operation of such equipment shall not cause noise levels to increase by 5 dBA CNEL or more. In areas where noise levels already exceed the normally acceptable range for a given land use, the operation of such equipment shall not cause noise levels to increase by 3 dBA CNEL or more. To accomplish these performance standards, the implementing agency shall consider the following:
>
> - Maximize the buffer area or setback distance between pump facilities and noise-sensitive land uses;
> - Design stationary equipment and pump enclosures such that building exhaust fans and louvers are oriented away from noise-sensitive uses. To the extent feasible, configure the facility layout such that noise-generating equipment is setback from noise-sensitive land uses;
> - Incorporate equipment enclosures, fan silencers, mufflers, acoustical treatments at vent openings, acoustical panels, etc.
> - Construct a perimeter wall at the site such that the line of site between the building openings (exhaust fans and louvers) at the pump facilities and nearby sensitive receptors is effectively blocked. Effective shielding can significantly reduce noise.

Rational/Supporting Explanation: Reservoir operations, which are limited to water storage, would not be anticipated to generate substantial noise. Potential operational noise impacts associated with the pump stations would primarily be from the operation of fixed stationary equipment. Implementation of Mitigation Measure 3.9-4 would require the implementing agencies to comply with local noise ordinances and reduce impacts to less than significant levels. (FEIR p. 3.9-17-19)

5.10 Transportation and Traffic

5.10.1 Project-Level Impacts

Significant Impact 3.11-1: The Final PEIR concludes in Impact 3.11-1 that construction of the proposed pipelines would adversely affect traffic and transportation conditions in the project area. (FEIR p. 3.11-4)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.11-1a through 3.11-1f would reduce the significant impact to a less than significant level.

Mitigation Measure 3.11-1a: The implementing agency's construction contractor shall prepare and implement a Traffic Control/Traffic Management Plan subject to approval by the appropriate local jurisdiction prior to construction. The plan shall:

- Identify hours of construction and hours for deliveries;
- Include a discussion of haul routes, limits on the length of open trench, work area delineation, traffic control and flagging;
- Identify all access and parking restrictions, pavement markings and signage requirements (e.g., speed limit, temporary loading zones);
- Maintain access to residence and business driveways at all times to the extent feasible; Minimize access disruptions to businesses and residences;
- Layout a plan for notifications and a process for communication with affected residents and businesses prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;
- Include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times;
- Include a plan to coordinate all construction activities with the Antelope Valley Union High School District and Southern Kern Unified School District at least two months in advance. The Antelope Valley Union High School District and Southern Kern Unified School District shall be notified of the timing, location, and duration of construction activities. The implementing agencies shall require

its contractor to maintain vehicle, pedestrian, and school bus service during construction through inclusion of such provisions in the construction contract. The assignment of temporary crossing guards at designated intersections may be needed to enhance pedestrian safety during project construction. Also the following provisions shall be met:

- Pipeline construction near schools shall occur when school is not in session (i.e., summer or holiday breaks). If this is not feasible, a minimum of two months prior to project construction, the implementing agencies shall coordinate with the Antelope Valley Union High School District and Southern Kern Unified School District to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require their contractor to avoid construction and lane closures during those periods;

- A minimum of two months prior to project construction, the implementing agencies shall coordinate with the Antelope Valley Union High School District and Southern Kern Unified School District to identify alternatives to their Safe Routes to School program, alternatives for the school busing routes and stop locations, and other circulation provisions, as part of the Traffic Control/Traffic Management Plan;

- Include the requirement that all open trenches be covered with metal plates at the end of each workday to accommodate traffic and access; and

- Specify the street restoration requirements pursuant to agreements with the local jurisdictions.

Mitigation Measure 3.11-1b: The implementing agencies shall identify all roadway locations where special construction techniques (e.g., horizontal boring, directional drilling or night construction) will be used to minimize impacts to traffic flow.

Mitigation Measure 3.11-1c: The implementing agencies shall develop circulation and detour plans to minimize impact to local street circulation, including bikeways. This may include the use of signing and flagging to guide vehicles and cyclists through and/or around the construction zone.

Mitigation Measure 3.11-1d: The implementing agencies shall encourage construction crews to park at staging areas to limit lane closures in the public right-of-way.

Mitigation Measure 3.11-1e: Peak travel periods shall be avoided when considering partial road closures.

Mitigation Measure 3.11-1f: The implementing agencies shall consult with the Antelope Valley Transit Authority and the East Kern Regional Transit Express that connects to Lancaster at least one month prior to construction to coordinate bus stop relocations (if necessary) and to reduce potential interruption of transit service.

Rational/Supporting Explanation: Construction-generated traffic would be temporary and therefore would not result in long-term degradation of operating conditions or levels of service on

any roadways along the pipeline alignment. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles. Implementation of Mitigation Measures 3.11-1a through 3.11-1f would reduce impacts to less than significant levels. (FEIR p. 3.11-5)

Significant Impact 3.11-2: The Final PEIR concludes in Impact 3.11-2 that construction of the proposed pipeline would have temporary effects on alternative transportation or alternative transportation facilities. (FEIR p. 3.11-7)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.11-1c through 3.11-1f would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Pipeline construction could disrupt alternate forms of transportation due to partial lane closures. Implementation of Mitigation Measure 3.11-1c would ensure potential impacts associated with temporary disruptions to bikeways would be mitigated to a less than significant level. Implementation of Mitigation Measure 3.11-1f would ensure potential impacts associated with temporary disruptions to transit service would be mitigated to a less than significant level. (FEIR p. 3.11-7)

5.10.2 Program-Level Impacts

Significant Impact 3.11-4: The Final PEIR concludes in Impact 3.11-4 that construction and operation of the proposed pump stations, storage reservoirs, and groundwater recharge basins would adversely affect traffic and transportation conditions in the project area. (FEIR p. 3.11-8)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.11-1a through 3.11-1f would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Potential traffic and transportation effects would be associated with construction of the proposed facilities. Construction-generated traffic would be temporary and therefore would not result in long-term degradation of operating conditions or levels of service on any roadways project vicinity. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles. Implementation of Mitigation Measures 3.11-1a through 3.11-1f would reduce the impacts to less than significant levels. (FEIR p. 3.11-8)

5.11 Utilities and Service Systems

5.11.1 Project-Level Impacts

Significant Impact 3.12-1: The Final PEIR concludes in Impact 3.12-1 that construction of the proposed pipeline could result in temporary, planned, or accidental disruption to utility services. (FEIR p. 3.12-4)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.12-1a through 3.12-1c would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.12-1a:** The locations of overhead and underground utility lines, such as natural gas, electricity, sewage, storm drains, telephone, fuel, and water lines, shall be verified by contractors through field surveys and other methods prior to construction. In areas where unanticipated underground utilities are found, plans to minimize service impacts shall be developed and worked out with the affected utilities.
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> **Mitigation Measure 3.12-1b:** As necessary, detailed specifications shall be prepared as part of the design and engineering plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. Affected utility services shall be notified of construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.
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> **Mitigation Measure 3.12-1c:** Residents and businesses in the project area shall be notified of any planned utility service disruption, in conformance with county and state standards.

Rational/Supporting Explanation: Utility disruptions could potentially occur at areas where project components cross under or over, or are situated adjacent to utility lines. Utility lines subject to disruption during construction would be identified during preliminary design. Implementation of Mitigation Measures 3.12-1a through 3.12-1c would reduce the impact to a less than significant level. (FEIR p. 3.12-5)

Significant Impact 3.12-2: The Final PEIR concludes in Impact 3.12-2 that construction activities associated with the proposed pipeline would generate solid waste that would increase the demand for landfill capacity. (FEIR p. 3.12-5)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.12-2a and 3.12-2b would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.12-2a:** Project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused shall be encouraged.

> **Mitigation Measure 3.12-2b:** A requirement for the contractor to describe plans for recovering, reusing, and recycling wastes produced through construction, demolition, and excavation activities shall be included in construction specifications.

Rational/Supporting Explanation: Mitigation Measures 3.12-2a and 3.12-2b would reduce the amount of solid waste expected to be generated. With implementation of the mitigation measures, the project construction waste generation would be considered less than significant. (FEIR p. 3.12-6)

5.11.2 Program-Level Impacts

Significant Impact 3.12-4: The Final PEIR concludes in Impact 3.12-4 that operation of the storage reservoirs and pump stations could result in effects to local and regional energy supplies. (FEIR p. 3.12-6)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 3.12-3 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 3.12-3:** During project design, LACWWD40 and the implementing agencies shall require the use of energy efficient equipment, including pumps and lighting. Project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused shall be encouraged.

Rational/Supporting Explanation: Operation of the pump stations would require new connections to the local electrical transmission system. Mitigation Measure 3.12-3 would require both energy efficient equipment and construction methods that reduce or reuse solid waste. Given the overall reduction in electricity demand resulting from the proposed project relative to energy demand required to import the same amount of raw water, the impact to energy use would be less than significant. (FEIR p. 3.12-7)

5.12 Cumulative Impacts

Significant Impact 4-1: The Final PEIR concludes in Impact 4-1 that concurrent construction of several projects in the Antelope Valley would result in cumulative short-term impacts to air quality and water quality. (FEIR p. 4-6)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.2-1a through 3.2-1f and 3.7-3 would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: LACWWD40 in coordination with its partner agencies would be required to implement Mitigation Measures 3.2-1a through 3.2-1f, in accordance with

the AVAQMD Air Quality Management Plan (AQMP) and Air Quality Attainment Plan (AQAP), to reduce emissions related to construction of pipelines, storage reservoirs, and pump stations to less than significant levels. The LACWWD40 in coordination with its partner agencies would require construction contractors to develop and implement BMPs to minimize sedimentation and erosion during project construction and obtain a construction dewatering permit from the Lahontan RWQCB (see Mitigation Measures 3.7-2 and 3.7-3). The measures included in the BMPs and construction dewatering WDRs would reduce the impact of construction of the proposed project to surface water and groundwater quality to less than significant levels. As such, the contribution of the proposed project to short-term air quality impacts and water quality impacts is not cumulatively considerable. (FEIR p. 4-6)

Significant Impact 4-3: The Final PEIR concludes in Impact 4-3 that the concurrent construction of several projects in the Antelope Valley would result in short-term impacts to traffic. (FEIR p. 4-8)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measure 4-3 would reduce the significant impact to a less than significant level.

> **Mitigation Measure 4-3:** The implementing agencies, shall communicate and coordinate project construction activities with other municipalities (e.g., Palmdale, Lancaster, and Rosamond CSD) and agencies (e.g., Caltrans, LA County DPW) in the Antelope Valley. Phasing of project construction shall be coordinated to minimize cumulative impacts to traffic and circulation.

Rational/Supporting Explanation: The Traffic Control/Traffic Management Plan in Mitigation Measure 3.11-1a will also take into consideration the effects other construction activities occurring simultaneously in the same geographic area. Mitigation Measure 4-3 requires the implementing agencies to coordinate construction of the proposed project with other agencies in the Antelope Valley to ensure cumulative impacts to traffic and circulation are reduced to less than significant levels. (FEIR p. 4-8)

Significant Impact 4-4: The Final PEIR concludes in Impact 4-4 that the concurrent construction of several projects in the Antelope Valley would result in short-term impacts to biological resources. (FEIR p. 4-9)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.3-1a-f, 3.3-2a-f, 3.3-4a-b, and 3.3-6a-b would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Construction of the proposed reservoirs and pump stations would convert vacant land to public facilities. The affected undeveloped parcels primarily are located near the urban centers of the valley and are not located within a County-designated SEA. This conversion of vacant land to public facilities is not considered to be a significant direct

impact with implementation of Mitigation Measures 3.3-1a-f, 3.3-2a-f, 3.3-4a-b, and 3.3-6a-b. Although the project would contribute to a reduction in undeveloped, vacant land, the acreage would not be considerable, and the land use conversion would be consistent with regional plans. Therefore the proposed project would not result in a cumulatively significant impact to biological resources. (FEIR p. 4-9)

Significant Impact 4-5: The Final PEIR concludes in Impact 4-5 that the proposed project and related projects would result in cumulative long-term impacts to groundwater resources. (FEIR p. 4-10)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that avoid or substantially lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.7-5a, 3.7-5b, and 3.7-9a through 3.7-9c would reduce the significant impact to a less than significant level.

Rational/Supporting Explanation: Implementation of Mitigation Measure 3.7-5a and 3.7-5b would reduce potential impacts to groundwater quality to less than significant levels by requiring M&I and agricultural end users to apply water and fertilizer to landscapes at agronomic rates, which is compatible with good farming practices on land, and by requiring the implementing agencies to develop and implement a Salt Management Plan if required in the future by the SWRCB. The implementation of proposed Mitigation Measures 3.7-9a through 3.7-9c are the minimum requirements for future potential GRRPs in the project area, including those proposed by the cities of Lancaster and Palmdale and Palmdale Water District. The recycled water would be required to meet the level of treatment determined by CDPH to sufficiently protect public health. Therefore, the long-term cumulative impact of the proposed project on groundwater resources would not be considerable. (FEIR p. 4-10)

CHAPTER 6
Significant Environmental Impacts

Pursuant to CEQA Guidelines Section 15091, the following project impacts are significant environmental effects for which feasible mitigation measures are not available to avoid or substantially lessen the significant environmental effects to below a level of significance. The impacts would remain significant and unavoidable.

6.1 Noise

6.1.1 Project-Level Impacts

Significant Impact 3.9-1: The Final PEIR concludes in Impact 3.9-1 that construction of the recycled water pipeline would temporarily generate noise levels above ambient levels at sensitive receptors in the vicinity of the project. (FEIR p. 3.9-12)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.9-1a and 3.9-1b would implement procedures to reduce noise generation from project construction activities. After implementation of the measures, construction noise would still exceed less-than-significant thresholds, and LACWWD40 finds that specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures.

> **Mitigation Measure 3.9-1a:** The implementing agencies shall implement procedures to reduce noise generation from project construction activities. Typical noise control procedures include the following:
>
> - Require construction contractors to comply with the construction hours and days limitations established in local noise ordinances. Night-time construction would require approval from local jurisdictions.
>
> - Require all construction contractors to locate fixed construction equipment (e.g., compressors and generators) as far as possible from noise-sensitive receptors.
>
> - Equipment used in the construction of individual project components shall be muffled and maintained in good operating condition. Internal combustion engine driven equipment shall be fitted with intake and exhaust mufflers that are in good condition.

- If pile driving is required for facility construction, the contract specifications for those projects shall incorporate the following requirements:
    - Wherever possible, sonic or vibratory pile drivers will be used lieu of impact pile drivers.
    - Wherever feasible, pile holes will be pre-drilled to reduce potential noise and vibration impacts.
- Additional noise attenuating measures include changing the location of stationary construction equipment and/or staging areas; notifying adjacent residences and nearby sensitive receptors in advance of construction work; shutting off idling equipment; rescheduling construction activities; requiring on-going construction noise monitoring to assure adherence to City/County construction equipment standards; and/or installing temporary barriers around stationary construction noise sources.

Mitigation Measure 3.9-1b: To further address the nuisance impact of project construction, construction contractors shall implement the following:

- Signs will be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number for the applicable jurisdiction agency in the event of problems.
- An onsite complaint and enforcement manager shall track and respond to noise complaints.

Rational/Supporting Explanation: The proposed project would result in temporary and intermittent noise increases due to construction of project components. Construction-related noise levels throughout the proposed project area would fluctuate depending on the particular type, number, and duration of use of various pieces of construction equipment associated with individual project components. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types of construction equipment generate percussive noises (such as pile driving), which can be particularly annoying. The effect of construction noise would depend upon how much noise would be generated by the equipment, the distance between construction activities and the nearest noise-sensitive uses, the existing noise levels at those uses, and the time of day in which construction activities would occur. (FEIR p. 3.9-12)

The new pipeline segments would extend for 70 miles, and could affect noise levels at sensitive receptor locations along the pipeline alignments for the duration of pipeline installation. The anticipated rate of pipeline installation along segments where open trench construction methods are used would be about 50 to 100 feet per day, which is typical for this type of construction in public roadway rights-of-way. At any one location along the pipeline segments, the duration of noise impacts would be relatively brief, approximately three to five days, from the commencement of trenching to the completion of backfilling and paving, if necessary. (FEIR p. 3.9-13)

The noisiest non-percussive construction phase would generate approximately 89 dBA at 50 feet, assuming no noise mitigation features. For pipeline construction occurring within 50 feet of noise-sensitive land uses, the sensitive receptors would potentially be exposed to 102 dBA Leq during excavation. Construction-related noise could exceed the construction equipment noise standards and hourly limits in at least some of the jurisdictions where construction would occur. Daytime construction noise is exempt from maximum noise thresholds identified in local noise ordinances. Therefore, daytime construction noise from pipeline construction would not violate the noise ordinance. Implementation of Mitigation Measures 3.9-1a and 3.9-1b would ensure construction activities are restricted to daytime hours and would minimize the effects of noise due to construction of the proposed project. Nonetheless, even with implementation of mitigation measures, construction noise greater than 100 dBA during the day within 50 feet of residences would be considered a significant impact of the project. (FEIR p. 3.9-14)

Significant Impact 3.9-2: The Final PEIR concludes in Impact 3.9-2 that construction of the proposed recycled water pipeline would expose sensitive receptors to excessive ground-borne vibration. (FEIR p. 3.9-15)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.9-2 would require a pre-construction crack survey for buildings within 25 feet of drilling or boring activities and would require the implementing agencies to be responsible the costs of any damage caused by vibration. After implementation of the measure, construction vibration would still exceed less-than-significant thresholds, and LACWWD40 finds that specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures.

> **Mitigation Measure 3.9-2:** When drilling or boring within 25 feet of any building or 50-100 feet of a historical building, a "crack survey" shall be undertaken. The crack survey must be taken before the start of construction with photo, video, or visual inventory of all existing cracks inside and outside buildings with sufficient detail for comparison after construction to determine whether actual vibration damage occurred. The implementing agencies shall be responsible for the costs of any damage caused by construction vibration.

Rational/Supporting Explanation: The use of heavy equipment during construction generates vibration levels of up to 0.089 PPV or 87 RMS (caisson drilling) at a distance of 25 feet. Construction of the proposed project would require horizontal drilling, and jack and bore drilling depending on the local geology and locations. The proposed pipeline could get as close as 15 feet from sensitive receptors and if drilling is needed at those areas, sensitive receptors would potentially be exposed to 0.19 PPV and 94 RMS. Vibration levels at these receptors would essentially be at the potential building damage threshold of 0.2 PPV and would exceed the annoyance threshold of 80 RMS. For such high vibration construction activities, Caltrans advisory documents recommend extreme care within 25 feet of any building and within 50-100 feet of a historical building or building in poor condition. Based on this information, boring or drilling within 15 feet of residences would be a potentially significant impact. Implementation of

Mitigation Measure 3.9-2 would minimize construction vibration impacts by compensating for the cost of any damage that occurs to any buildings within 25 feet, and any historical buildings within 50-100 feet, of the construction site. Nonetheless, even with implementation of this mitigation measure, construction vibration levels could exceed the annoyance threshold at sensitive receptors along the pipeline route. This impact would be considered a significant impact of the project. (FEIR p. 3.9-15)

6.1.2 Program-Level Impacts

Significant Impact 3.9-3: The Final PEIR concludes in Impact 3.9-3 that construction of the proposed storage reservoirs and pump stations would temporarily generate noise levels above ambient levels at sensitive receptors in the vicinity of these project components. (FEIR p. 3.9-16)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.9-1a and 3.9-1b would implement procedures to reduce noise generation from project construction activities. After implementation of the measures, construction noise would still exceed less-than-significant thresholds, and LACWWD40 finds that specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures.

Rational/Supporting Explanation: Construction of new above-ground storage tanks would include site preparation and clearing, excavation, grading and reservoir construction. Typical equipment includes bulldozers, excavators, scrapers, cranes, rollers, dump trucks, concrete trucks, pre-stressing equipment and construction delivery tractor-trailers. Construction would take approximately nine months. The noisiest non-percussive construction phase would generate approximately 89 dBA at 50 feet, assuming no noise mitigation features. The exact location of the proposed storage tanks on the identified parcels has not been determined. Therefore, the potential minimum and maximum distances from each reservoir site to neighboring sensitive receptors has been calculated, along with their corresponding construction noise exposure on sensitive receptors. (FEIR p. 3.9-16)

Construction of single story pump stations would involve excavation and structural foundation installation, pump house construction, pump installation, and final site restoration. Construction is estimated to take approximately eight months. The noisiest non-percussive construction phase would generate approximately 89 dBA at 50 feet, assuming no noise mitigation features. The exact location of the proposed pump stations on the identified parcels has not been determined. Therefore, the potential minimum and maximum distances from each reservoir site to neighboring sensitive receptors has been calculated, along with their corresponding construction noise exposure on sensitive receptors. (FEIR p. 3.9-17)

Daytime construction noise is exempt from maximum noise thresholds identified in local noise ordinances. Therefore, daytime construction noise from pump station construction would not violate noise ordinances. Implementation of Mitigation Measures 3.9-1a and 3.9-1b would ensure

construction activities are restricted to daytime hours and would further minimize the effects of noise due to construction of the proposed project. Even with implementation of mitigation measures, construction noise greater than 100 dBA during the day within 50 feet of residences would be considered a significant impact of the project. Construction of Booster Pump Station 2 could generate construction noise of 102 dBA at sensitive receptors within 15 feet of the project site. Construction of Booster Pump Station 2 would result in significant and unavoidable noise impacts. (FEIR p. 3.9-17)

6.2 Cumulative Impacts

Significant Impact 4-2: The Final PEIR concludes in Impact 4-2 that construction of several projects in the Antelope Valley, together with the proposed project, could result in cumulative, short-term impacts to sensitive receptors due to exposure to noise levels above ambient levels and exposure to ground-borne vibration. (FEIR p. 4-7)

Finding: LACWWD40 finds that changes or alterations have been required in, or incorporated into, the proposed project that lessen the significant environmental effect as identified in the Final PEIR. Specifically, Mitigation Measures 3.9-1a and 3.9-1b would implement procedures to reduce noise generation from project construction activities. Mitigation Measures 3.9-2 would require a pre-construction crack survey for buildings within 25 feet of drilling or boring activities and would require the implementing agencies to be responsible the costs of any damage caused by vibration. After implementation of these measures, construction noise and vibration would still exceed less-than-significant thresholds, and LACWWD40 finds that specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures.

Rational/Supporting Explanation: Construction of the proposed project, together with the identified related projects in the Antelope Valley (Table 4-1; FEIR p. 4-3), could generate noise and vibration that would affect existing ambient noise conditions in the region. Construction noise and vibration would be localized, affecting areas in the immediate vicinity of the construction sites. Some of the identified related projects could be constructed simultaneously in areas proximate to, or overlapping geographically with, the proposed project. In particular, construction of some capital improvement projects, such as roadway projects or flood control (storm drain) projects, could occur simultaneously and within the same streets as the proposed recycled water pipeline installation. This could result in a cumulative impact to local ambient noise conditions. (FEIR p. 4-7 and 4-8)

As described in the Chapter 3.9, Noise, of the Final PEIR, daytime construction noise is exempt from maximum noise thresholds identified in local noise ordinances. Therefore, noise associated with daytime construction activities would not violate noise ordinances. For the proposed project, implementation of Mitigation Measures 3.9-1a, 3.9-1b and 3.9-2 would ensure construction activities are restricted to daytime hours and would require other measures to reduce the effects of construction noise and vibration on sensitive receptors. Nonetheless, noise associated with construction of the proposed pipelines and pump stations could exceed 100 dBA during the day within 50 feet of residences and is considered a significant and unavoidable impact of the project.

Notably, any project that would individually have a significant noise impact could also have a significant cumulative noise impact when considered together with other related projects in the immediate vicinity. Therefore, simultaneous construction of the proposed project and other proximate capital improvement projects would result in significant cumulative noise impacts. (FEIR p. 4-8)

CHAPTER 7
Findings Regarding Project Alternatives

The Board of Supervisors hereby declares that it has considered and rejected as infeasible the alternatives identified in the Final PEIR and described below. CEQA requires that an EIR evaluate a range of reasonable alternatives to a project, or to the location of the project, which would feasibly obtain most of the basic project objectives but would avoid or substantially lessen any of the significant effects of the project (CEQA Guidelines §15126.6). The No Project alternative must be evaluated, and if it is the environmentally superior alternative, another environmentally superior alternative must be identified among the other alternatives (CEQA Guidelines Section 15126.6(e)).

The PEIR identified the objects for the proposed project as:

- Provide recycled water conveyance backbone infrastructure sufficient to accommodate planned regional recycled water demands;
- Integrate regional recycled water production, distribution, and re-use capabilities in the Antelope Valley;
- Provide conveyance, storage, and pumping capacity sufficient to accommodate peak future demands;
- Reduce the region's dependency on imported water;
- Augment local water supplies;
- Promote the State's policies for beneficial reuse of recycled water to replace potable water where possible.

In addition to the proposed project, the Final PEIR evaluated two other project alternatives. In summary, the No Project Alternative does not meet the project objectives and does not provide the benefits of the proposed project related to water supply reliability in the Antelope Valley. The Non-Integrated System Alternative (Alternative 1) would meet some of the project objectives but would not avoid or substantially lessen some of the significant effects of the proposed project, and would potentially worsen some of the significant impacts associated with project construction. Therefore, the proposed project is considered the environmentally superior project as compared to the No Project Alternative and the Non-Integrated System Alternative.

7.1 No Project Alternative

Description: According to Section 15126.6(e) of the CEQA Guidelines, discussion of the No-Project Alternative must include a description of existing conditions and reasonably-foreseeable future conditions that would exist if the project were not approved. Under the No-Project Alternative, LACWWD40 and the partner agencies would not implement the Regional Recycled Water Project. The LWRP, PWRP, and RWWTP would be upgraded as planned to produce tertiary-treated effluent; however, there would be no integrated system to distribute this recycled water to end users in the Antelope Valley. LACSD Nos. 14 and 20 would manage recycled water with agricultural reuse only. RCSD would need to develop alternative measures for discharge or distribution of the recycled water produced at the RWWTP. Under the No-Project Alternative, future water demand in the Antelope Valley would continue to grow and would be met with increased quantities of groundwater, surface water, and imported water, and/or increased conservation measures. (FEIR p. 6-3)

Finding: The Board of Supervisors finds that the No Project Alternative is infeasible because it fails to meet any Project objectives or provide the benefits of the Project related to water supply reliability.

Rational/Supporting Explanation: Implementation of the No-Project Alternative would result in no regional backbone system to connect the three producers of recycled water in the Antelope Valley and would hinder regional plans, such as the *Antelope Valley Integrated Regional Water Management Plan* (IRWMP), to use recycled water to meet water demands in the region. In the absence of the proposed project, there would no distribution system to convey recycled water to locations where it can be beneficially used. There would be no system to integrate recycled water production, distribution, and use in the Antelope Valley. The demand for imported water and local water (i.e. groundwater and surface water) would increase as population in the region grows and recycled water is not available to replace uses of potable water as appropriate. Therefore, implementation of the No-Project Alternative would not meet any of the stated project objectives. (FEIR p. 6-3)

Under the No-Project Alternative, the impacts identified in Chapter 3 that are associated with construction and operation of the proposed project would be avoided. Short-term construction impacts to aesthetics; air quality; agricultural resources; geology, soils and seismicity; hazardous materials; hydrology and water quality; noise; traffic; and utilities and service systems would be avoided. Potentially-significant long-term project impacts to aesthetics; geology, soils, and seismicity; hydrology and water quality; land use; and noise also would be avoided. (FEIR p. 6-4)

Under the No-Project Alternative, water demand in the Antelope Valley would continue to be met with water imported from the San Joaquin-Sacramento Delta (Delta) through the SWP and with local groundwater and surface water. The reliability of delivery of imported water from the Delta varies each year depending on annual precipitation and is subject to additional supply reductions from environmental constraints within the Delta (DWR, 2008). Although AVEK and PWD have Table A entitlements that exceed actual annual water deliveries, these water wholesalers may

experience restrictions on imported water in the future. The groundwater aquifer that underlies the project region is currently experiencing overdraft conditions and associated groundwater quality issues (RWMG, 2007). In addition, the Antelope Valley groundwater basin is not an adjudicated basin, although the adjudication process is in progress (RWMG, 2007). An increased dependence on local groundwater resources could further exacerbate existing overdraft conditions and further degrade groundwater quality. Surface water flows from Littlerock Creek, which are captured and stored in Littlerock Reservoir, currently are being utilized to their full potential. PWD is in the planning and design stage for a sediment removal project in Littlerock Reservoir to recover lost yield from the Reservoir. (FEIR p. 6-4)

7.2 Alternative 1: Non-Integrated System

Description: Under Alternative 1, instead of implementing the proposed project, LACWWD40, PWD, QHWD, and RCSD would design, construct, and operate their own recycled water systems. Alternative 1 would result in four separate recycled water systems in the Antelope Valley instead of one integrated regional system. LACWWD40 would construct recycled water pipelines, pump stations, and storage reservoirs within its service area. LACWWD40 would contract independently with LACSD No. 14, LACSD No. 20, and RCSD to purchase recycled water for the end users in its service area. (FEIR p. 6-4)

Finding: The Board of Supervisors finds that the Non-Integrated System Alternative (Alternative 1) is infeasible because it fails to meet some of the Project objectives, does not avoid or substantially lessen some of the significant effects of the Project, and potentially worsens some of the significant impacts associated with project construction.

Rational/Supporting Explanation: Implementation of Alternative 1 would result in no regional backbone system to connect the three producers of recycled water in the Antelope Valley and would hinder regional plans, such as the *Antelope Valley Integrated Regional Water Management Plan* (IRWMP), to use recycled water to meet water demands in the region. Instead, under Alternative 1 each water district in the Antelope Valley would act independently to implement its own recycled water project in order to meet future demands for recycled water in its service area. Alternative 1 would augment local water supplies by using recycled water instead of potable water where appropriate and thus would reduce demand for imported water in the Antelope Valley. Therefore, implementation of Alternative 1 would meet some of the stated project objectives. (FEIR p. 6-4)

Under Alternative 1, the impacts identified in Chapter 3 that are associated with construction and operation of the proposed project at least would be similar and could even be worsened. Short-term construction impacts to aesthetics; air quality; agricultural resources; geology, soils and seismicity; hazardous materials; hydrology and water quality; noise; traffic; and utilities and service systems likely would be similar for each district's project. Potentially-significant long-term project impacts to aesthetics; geology, soils, and seismicity; hydrology and water quality; land use; and noise also would be similar for each district's project. However, cumulative impacts to air quality, noise, traffic, and water quality could be greater if all four recycled water projects

are constructed simultaneously (as opposed to the phased approach for the proposed project) and if the four individual projects together affect a greater footprint than the proposed project. (FEIR p. 6-5)

CHAPTER 8
Statement of Overriding Considerations

Pursuant to CEQA Section 21081(b) and the CEQA Guidelines Section 15093, the County has balanced the benefits of the proposed North Los Angeles/Kern County Regional Recycled Water Project Final PEIR against the following unavoidable adverse impacts associated with the proposed project and has adopted all feasible mitigation measures. The LACWWD40 has also examined alternatives to the proposed project, and has determined that adoption and implementation of the proposed project is the most desirable, feasible, and appropriate action. The other alternatives are rejected as infeasible based on consideration of the relevant factors discussed in Chapter 7.

8.1 Significant Unavoidable Impacts

8.1.1 Project-Level Impacts

Based on the information and analysis set forth in the Final PEIR and the record of proceedings, construction of the proposed recycled water pipeline would result in significant impacts related to noise and vibration. In some locations, pipeline construction would occur within 50 feet of residences and would temporarily generate noise levels above 100 dBA during the day exceeding the nuisance threshold for noise impacts (FEIR p. 3.9-14). Implementation of Mitigation Measures 3.9-1a and 3.9-1b would ensure construction activities are restricted to daytime hours and would further minimize the effects of noise due to construction of the proposed project. However, implementation of Mitigation Measures 3.9-1a and 3.9-1b would not reduce construction noise below nuisance thresholds for sensitive receptors closest to the construction zone. Impacts would be significant and unavoidable.

In addition, pipeline construction could get as close as 15 feet from sensitive receptors, resulting in exposure to vibration levels at the potential building damage threshold of 0.2 PPV and exceeding the annoyance threshold of 80 RMS. Implementation of Mitigation Measure 3.9-2 would compensate for the cost of damage that occurs to buildings within 25 feet, and any historical buildings within 50-100 feet, of the construction site. Nonetheless, even with implementation of this mitigation measure, construction vibration levels could exceed the annoyance threshold at sensitive receptors along the pipeline route. This impact would be considered a significant and unavoidable impact. (FEIR p. 3.9-15)

8.1.2 Program-Level Impacts

Based on the information and analysis set forth in the Final PEIR and the record of proceedings, construction of the proposed Booster Pump Station 2 would result in significant impacts related to noise. Construction of Booster Pump Station 2 could generate construction noise of 102 dBA at sensitive receptors within 15 feet of the project site. Implementation of Mitigation Measures 3.9-1a and 3.9-1b would ensure construction activities are restricted to daytime hours and would further minimize the effects of noise due to construction of the proposed project. However, implementation of Mitigation Measures 3.9-1a and 3.9-1b would not reduce construction noise below nuisance thresholds for sensitive receptors closest to the construction zone. Impacts would be significant and unavoidable. (FEIR p. 3.9-17)

8.1.3 Cumulative Impacts

Based on the information and analysis set forth in the Final PEIR and the record of proceedings, construction of the proposed project, together with several projects in the Antelope Valley (Table 4-1; FEIR p. 4-3), could result in cumulative short-term impacts to sensitive receptors due to exposure to noise levels above ambient levels and exposure to ground-borne vibration (FEIR p. 4-7). Construction noise and vibration would be localized, affecting areas in the immediate vicinity of the construction sites. Some of the identified related projects could be constructed simultaneously in areas proximate to, or overlapping geographically with, the proposed project. This could result in a cumulative impact to local ambient noise conditions. (FEIR p. 4-7 and 4-8)

Daytime construction noise is exempt from maximum noise thresholds identified in local noise ordinances and would not violate such ordinances. Implementation of Mitigation Measures 3.9-1a and 3.9-1b would ensure construction activities are restricted to daytime hours and would further minimize the effects of noise due to construction of the proposed project. Implementation of Mitigation Measure 3.9-2 would compensate for the cost of damage that occurs to buildings within 25 feet, and any historical buildings within 50-100 feet, of the construction site. Nonetheless, noise and vibration associated with construction of the proposed project could exceed nuisance and damage thresholds and would be considered a significant and unavoidable impact of the project. Notably, any project that would individually have a significant noise impact could also have a significant cumulative noise impact when considered together with other related projects in the immediate vicinity. Therefore, simultaneous construction of the proposed project and other proximate capital improvement projects would result in significant cumulative noise impacts. (FEIR p. 4-8)

8.2 Project Benefits

The LACWWD40 has (i) independently reviewed the information in the Final PEIR and the record of proceedings; (ii) made a reasonable and good faith effort to eliminate or substantially lessen the impacts resulting from the Project to the extent feasible by adopting the mitigation measures identified in the EIR; and (iii) balanced the Project's benefits against the Project's

significant unavoidable construction-related noise and vibration impacts. The County finds that the project's benefits outweigh the project's temporary significant unavoidable impacts, and chooses to approve the Project, despite its significant and unavoidable effects, because, in its view, those impacts are considered acceptable in light of the Project's benefits. The County finds that each of the following benefits is an overriding consideration, independent of the other benefits, which warrants approval of the Project notwithstanding the Project's significant unavoidable impacts to noise and vibration. Substantial evidence supports the various benefits. Such evidence can be found in the preceding findings, which are incorporated by reference into this section, the Final PEIR, and the documents which make up the Record of Proceedings. Construction of the North Los Angeles/Kern County Regional Recycled Water Project would provide public benefits described below.

8.2.1 Regional Water Planning

The Antelope Valley is faced with serious challenges with respect to management of water and wastewater resources in the region. The population in the Antelope Valley is expected to increase by 161 percent by 2035 (RWMG, 2007). Currently, the demand for potable water exceeds supply in the region, and by 2035 this demand is expected to double (RWMG, 2007). Wastewater discharges also will increase in the future as population increases. (FEIR p. 1-8)

The Regional Water Management Group (RWMG) is a collection of 11 local agencies that are working collectively to resolve the water management challenges in the Antelope Valley. LACWWD40 and the partner agencies that are sponsoring the proposed project are members of the RWMG. Currently, the demand for potable water in the region is met largely by water imported through the State Water Project and groundwater pumped from the Antelope Valley Groundwater Basin. Imported water supplies are becoming less reliable; the AV Groundwater Basin is facing overdraft conditions; and the water rights of overlying landowners of the AV Groundwater Basin have not yet been adjudicated (although this process is currently under way) (DWR, 2008; RWMG, 2007). Thus, under current conditions, imported water and groundwater can not be expected to accommodate the future water demands of a growing population in the Antelope Valley. As a result, the RWMG is tasked with finding creative solutions for finding new sources of water for Antelope Valley residents. (FEIR p. 1-8)

The RWMG has prepared the *Integrated Regional Water Management Plan* (IRWMP) for the Antelope Valley as a roadmap for resolving the water management challenges in the region. The purpose of the IRWMP is to provide the region with information on how to meet shared objectives for long-term water management. Objectives include reliably providing quality drinking water to the growing population, satisfying agricultural users' demand for reliable supplies of reasonable cost irrigation water, and protecting and enhancing the current water resources in the Antelope Valley. The proposed project is identified in the IRWMP as a project that addresses the need for both increased water supplies and wastewater effluent management. The proposed project would provide a backbone system for distribution of recycled water throughout the Antelope Valley. The recycled water would be used instead of potable water for landscape irrigation, agricultural irrigation, groundwater recharge and other Title 22 approved

uses. The potable water that is being replaced by this recycled water thus would be available for other uses, ostensibly resulting in an increase in potable water supplies. In addition, using the recycled water for groundwater recharge would increase groundwater supplies. The proposed project also provides a management strategy for wastewater effluent by creating a system to distribute recycled water for beneficial use. (FEIR p. 1-9)

8.2.2 Energy Efficiency and Greenhouse Gas Emissions

The proposed project would provide the primary backbone system for distribution of recycled water to local users in the Antelope Valley, which would use less energy in the long term relative to alternative water sources. A recently published resource book on the significance of greenhouse gas emissions in California from various projects presents an example "Green List" of the types of projects that may have a beneficial effect on greenhouse gas emissions and climate change. The draft Green List includes recycled water projects that reduce energy consumption related to water supplies that service existing development, such as the proposed project (CAPCOA, 2008). For the proposed project, the end uses for the recycled water would otherwise be met with imported potable water if the proposed project were not implemented. The imported water would be delivered through the SWP, which consumes a substantial amount of energy to convey water to southern California from the Sacramento-San Joaquin River Delta in northern California. A recent study by West Basin Municipal Water District has shown that the energy required to import SWP water is over six times the energy requirement for Title 22 recycled water when considering kilowatt-hours per acre-foot (West Basin, 2007). In addition, the same study indicates that Title 22 recycled water produces 338 tons of CO_2 for every 1,000 af of water produced, while the SWP produces 2,250 tons of CO_2 for every 1,000 af of water imported (West Basin, 2007; USEPA, 1995).[4] Based on this analysis, the proposed project would be considered to be inherently energy efficient and and would reduce relative future CO_2 emissions for every acre-foot of water provided to end users in the Antelope Valley. (FEIR p. 3.2-17)

In addition, the proposed project would not conflict with the state goals in Assembly Bill 32 (AB 32) for reducing greenhouse gas emissions. AB 32, the California Global Warming Solutions Act of 2006, requires the California Air Resources Board to design and implement emission limits, regulations, and other measures, such that cost-effective statewide greenhouse gas emissions are reduced to 1990 levels by 2020. (PEIR pp. 3.2-17-18.)

8.3 Statement of Overriding Considerations

After balancing the specific economic, legal, social, technological, and other benefits of the proposed project, the LACWWD40 has determined that the unavoidable adverse environmental impacts identified may be considered "acceptable" due to the specific considerations listed above which outweigh the unavoidable, adverse environmental impacts of the proposed project.

[4] Conversion factor: kWh/1333.333 = tons CO_2. (USEPA, 1995)

The LACWWD40 has considered information contained in the Final EIR as well as the public testimony and record of proceedings in which the project was considered. Recognizing that significant unavoidable noise impacts will result from construction of the project, the LACWWD40 adopts the foregoing Statement of Overriding Considerations. Having adopted all feasible mitigation measures and recognized all unavoidable significant impacts, the LACWWD40 hereby finds that each of the separate benefits of the proposed project, as stated herein, is determined to be unto itself an overriding consideration, independent of other benefits, that warrants approval of the project and outweighs and overrides its unavoidable significant effects, and thereby justifies the approval of the North Los Angeles/Kern County Regional Recycled Water Project.

CHAPTER 9
Findings on Mitigation Monitoring and Reporting Program

Pursuant to Section 15091(a)(1) of the CEQA Guidelines, LACWWD40 finds that implementation of the mitigation measures and project design standards identified in the Final PEIR would substantially lessen the significant environmental impacts resulting from the project. These mitigation measures and project design standards have been required in, or incorporated into the project. In accordance with Section 15091 (d), and Section 15097 of the CEQA Guidelines, which require a public agency to adopt a program for reporting or monitoring required changes or conditions of approval to substantially lessen significant environmental effects, the Mitigation Monitoring and Reporting Program provided in this chapter is hereby adopted as the mitigation monitoring and reporting program for this project.

This Mitigation Monitoring and Reporting Program (MMRP) summarizes impacts and mitigation commitments identified in the North Los Angeles/Kern County Regional Recycled Water Project PEIR. Table 3 provides **project-level impacts**, mitigation measures, corresponding implementation, monitoring, and reporting tasks, responsible agency, and timing of implementation. Table 4 provides **program-level impacts**, mitigation measures, corresponding implementation, monitoring, and reporting tasks, responsible agency, and timing of implementation. Table 5 provides **cumulative impacts**, mitigation measures, corresponding implementation, monitoring, and reporting tasks, responsible agency, and timing of implementation. Impacts and mitigation measures are presented in the same order as they occur in the Final PEIR. The columns in the table provide the following information:

- **Environmental Impact:** A description of the significant or potentially significant impact to the environment as a result of the project, as stated in the Final PEIR.

- **Mitigation Measure(s):** The action(s) that will be taken to reduce the impact to a less-than-significant level.

- **Implementation, Monitoring, and Reporting Tasks:** This column outlines the appropriate steps to implement and verify compliance with the mitigation measures.

- **Responsibility:** This column lists the agency responsible for ensuring implementation of the mitigation measure. LACWWD40 or one of the Responsible Agencies (i.e. implementing agencies) will assume responsibility for all monitoring and reporting actions.

- **Monitoring Schedule:** This column indicates the general schedule for conducting each monitoring task, either prior to construction, during construction, and/or after construction.

TABLE 3
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
Aesthetics						
3.1-1: Construction of the proposed recycled water pipeline could generate short-term impacts to aesthetic resources.	**3.1-1:** Following construction activities, the implementing agencies shall restore disturbed areas by reestablishing pre-existing conditions including topography, repaving roadways, replanting trees, and/or reseeding with a native seed mix typical of the immediate surrounding area. The implementing agencies shall be responsible for monitoring the replanted areas to ensure that revegetation is successful.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measure by maintaining a record of construction oversight for the administrative record.	Implementing agencies			X
Air Quality						
3.2-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan.	**3.2-1a:** The implementing agencies shall include in contractor specifications the implementation of a fugitive dust control program pursuant to the provisions of AVAQMD Rule 403 or KCAPCD Rule 402. **3.2-1b:** All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications. **3.2-1c:** General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues shall turn their engines off when not in use to reduce vehicle emissions. Construction emissions shall be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts. **3.2-1d:** Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible. **3.2-1e:** All construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site. **3.2-1f:** The project applicant shall utilize coatings and solvents that are consistent with applicable AVAQMD or KCAPCD rules and regulations**.**	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.2-2: Construction activities associated with pipeline construction could generate substantial amounts of dust and other criteria pollutant emissions.	Implement Mitigation Measures 3.2-1a through 3.2-1f.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
Biological Resources						
3.3-1: Construction of the pipeline could have a substantial adverse effect on listed, candidate or special-status ground dwelling wildlife species including the California red-legged frog and Mohave ground squirrel.	**3.3-1a:** The implementing agencies shall have a qualified biologist conduct a pre-construction field reconnaissance survey for special-status ground-dwelling species within the construction right-of-way. If potential for special-status ground-dwelling species is identified then presence/absence protocol surveys shall be conducted. If protocol surveys identify the presence of special-status ground-dwelling species, the implementing agencies shall consult with CDFG to determine further required mitigation. **3.3-1b:** The implementing agencies shall avoid impacts on California red-legged frog by eliminating construction activities within areas where the species may occur. Implementing agencies shall employ tunneling or jack and bore construction methods under drainages that may support California red-legged frog in order to avoid impacting the species. **3.3-1c:** The implementing agencies shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project near areas that may support California red-legged frogs as determined by a qualified biologist. **3.3-1d:** The implementing agencies shall install a silt fence or some other impermeable barrier to exclude small wildlife species from entering the active work areas. Exclusion fencing can be limited to areas of documented occurrences of special-status wildlife as determined during pre-construction surveys by a qualified biologist. **3.3-1e:** Prior to project implementation, a habitat assessment will be conducted by a qualified biologist to determine the potential for the Mohave ground squirrel to occur within construction zones. If the habitat assessment determines that potential habitat for the Mohave ground squirrel is present in the impact zone or within 300 feet of the construction zone, then the implementing agencies have two options: 1) assume the Mohave ground squirrel is present and either take the steps necessary to avoid any potential direct or indirect impacts (i.e., construction noise and dust) that may be incurred by the Mohave ground squirrel or 2) arrange for a qualified biologist with the necessary permits to implement a trapping program to determine the presence or absence of the Mohave ground squirrel. If Mohave	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record. • Ensure appropriate permits are obtained and that permit conditions include these mitigation measures.	Implementing agencies	X	X	X

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
	ground squirrel is identified as present or assumed present, implementing agencies shall obtain an incidental take permit from CDFG pursuant to Section 2081 of the California Fish and Game Code and provide compensation at a ratio determined by CDFG. **3.3-1f:** Prior to project implementation, a burrowing owl presence/absence survey shall be conducted by a qualified biologist in accordance with CDFG's *1995 Staff Report on Burrowing Owl Mitigation* and the *Burrowing Owl Consortium's 1992 Burrowing Owl Protocol and Mitigation Guidelines* to determine the potential for the burrowing owl to occur within impacted areas and construction zones. If the survey results in discovery of burrowing owl, sign, or potential burrow sites in the impact zone, then additional surveys shall be performed during the breeding season (April 15 to July 15) in accordance with the *1992 Guidelines* to determine use of the site by burrowing owl. Following this survey, the implementing agencies shall consult with CDFG to determine avoidance or mitigation measure to minimize project impacts to burrowing owl.					
3.3-2: Construction of the pipeline could have a substantial adverse effect on listed, candidate or special-status bat and avian species including the Swainson's hawk, American peregrine falcon, southwestern willow flycatcher, and least Bell's vireo.	**3.3-2a:** Prior to any ground-disturbing activities, the implementing agencies shall have a qualified biologist conduct a pre-construction spring/summer active season reconnaissance survey for nesting/roosting special-status mobile bird and bat species, and other nesting birds within 300 feet (500 feet for raptors) of the construction limits of each project element to determine and map the location and extent of special-status species occurrence(s) that could be affected by the project. **3.3-2b:** The implementing agencies shall avoid direct impacts on any nesting birds located within the limits of construction. This could be accomplished by establishing the construction right of way and removal of plant material outside of the typical breeding season (February 1 through August 31). **3.3-2c:** If construction and vegetation removal is proposed for the bird nesting period February 1 through August 31, then preconstruction surveys for nesting/roosting bird and bats species shall begin 30 days prior to construction disturbance with subsequent weekly surveys, the last one being no more than three days prior to work initiation. The surveys shall include habitat within 300 feet (500 feet for raptors) of the construction limits. Active nest sites located during the pre-construction surveys shall be avoided and a non-disturbance buffer zone established dependent on the species and in consultation with the USFWS and CDFG. This buffer zone shall be delineated in the field with flagging, stakes or construction fencing. Nest sites shall be avoided with approved non-disturbance buffer zones until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist. For species with high site fidelity, such as Swainson's hawk, if direct take of nests outside of the breeding seasons is required, the implementing agency shall contact CDFG to determine appropriate mitigation measures. **3.3-2d:** If a natal bat roost site is located within the limits of construction during pre-construction surveys, it shall be avoided with non-disturbance buffer zone established by a qualified biologist in consultation with the USFWS and CDFG until the site is abandoned. **3.3-2e:** The implementing agencies shall minimize impacts on documented locations of special-status species and any nesting birds to the extent feasible and practicable by reducing the construction right-of-way through areas of occurrences to either avoid the occurrence or reduce impacts to the minimum necessary to complete the project. **3.3-2f:** The implementing agencies shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project that also would avoid and minimize impacts on special-status avian and bat species. **3.3-2g:** The implementing agencies shall instruct construction personnel on the importance of buffer zones and sensitivity of the delineated areas.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	
3.3-3: Construction of the pipeline could have a substantial effect on special-status plant species and habitat types.	**3.3-3a:** The implementing agencies shall have a qualified biologist conduct a pre-construction spring/summer floristic inventory and rare plant survey of the proposed project areas in accordance with CDFG's *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*, (revised May 8, 2000) to determine and map the location and extent of special-status plant species populations within the construction right-of-way. The survey shall be conducted during the appropriate flowering time for target plant species. **3.3-3b:** If not possible to avoid, the implementing agencies shall minimize impacts on special-status plant species by reducing the construction right-of-way through areas with potential occurrences of special-status plant species. For unavoidable direct impacts to special-status species, consultation with CDFG shall be required to determine the impact area and further mitigation, which could include acquisition of habitat of equal or superior value at a ratio of at least 2:1.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies			

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
	3.3-3c: The implementing agencies shall stake, flag, fence, or otherwise clearly delineate the construction right-of-way that restricts the limits of construction to the minimum necessary to implement the project that also would avoid and minimize impacts on special-status plant species. **3.3-3d:** The implementing agencies shall restore all disturbed areas back to pre-construction conditions and a restoration plan shall be developed and implemented that contains the following items: responsibilities and qualifications of the personnel to implement and supervise the plan; site preparation and planting implementation; schedule; maintenance plan/guidelines; and monitoring plan. **3.3-3e:** Earth-moving equipment will avoid maneuvering in areas outside the identified limits of construction in order to avoid disturbing open space areas that will remain undeveloped. Prior to construction, the natural open space limits will be marked by the construction supervisor and a qualified biologist. These limits will be identified on the construction drawings. The implementing agencies will submit a letter to the appropriate agencies verifying that construction limits have been flagged and clearly delineated in the field. No earth-moving equipment will be allowed outside demarcated construction zones.					
3.3-4: Construction of the pipeline could conflict with the Joshua Tree and Native Desert Vegetation Preservation Ordinance.	**3.3-4a:** The implementing agencies shall attempt to place all project components in areas exhibiting absence or a low density of Joshua trees and other native desert vegetation. **3.3-4b:** Prior to the commencement of grading activities for any component of the proposed project, within the City of Palmdale, a qualified biologist/arborist shall be consulted to determine the biological/aesthetic value of potentially impacted trees under the jurisdiction of the Palmdale Native Desert Vegetation Ordinance. For protected vegetation located within the final impact areas, a proposal application would be necessary, including a desert vegetation preservation plan which depicts the location of each Joshua tree and California juniper, details tree age and health, and describes which can be saved and maintained on the site or relocated. A permit must be obtained from the City of Palmdale's landscape architect prior to removal of protected vegetation in Los Angeles County, which may require mitigation in the form of replacement plantings of all impacted vegetation. Prior to the removal of protected vegetation in Kern County, the Kern County Environmental Health Services shall be contacted. **3.3-4c:** If avoidance of Joshua tree woodlands or other special-status vegetative community is not feasible, the implementing agencies shall acquire off-site habitat of equal or superior quality at a no less than a 2:1 ratio within remaining habitat in the Antelope Valley. Location, terms and conditions for habitat acquisition, protection, and maintenance shall be determined through consultation with resource agencies, including CDFG.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record. • Ensure appropriate permits are obtained and that permit conditions include these mitigation measures.	Implementing agencies	X	X	X
3.3-6: Construction of the pipeline could have a substantial adverse effect on wetlands considered waters of the state.	**3.3-6:** Prior to construction, the implementing agencies shall retain a qualified biologist to survey proposed construction zones including staging areas and access roads. If wetlands would be affected by construction, the qualified biologist would prepare a report outlining mitigation and compensation requirements to be implemented prior to construction. The mitigation requirements shall include the following at a minimum: • Implementing agencies shall avoid impacting previously undisturbed areas where possible. This would include employing tunneling or jack and bore methods under drainages. • If avoidance is not feasible for engineering or cost reasons, the implementing agencies shall conduct jurisdictional delineation of wetland features. • Implementing agencies shall obtain WDRs from the RWQCB for impacts to waters of the state including wetland areas.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	
Cultural Resources						
3.4-1: Ground-disturbing activities during pipeline installation could unearth, expose, or disturb archaeological, historical, or Native American resources.	**3.4-1a:** Prior to initial construction of pipelines, the implementing agency shall retain the services of a qualified archaeologist to prepare a Cultural Resources Monitoring and Mitigation Plan (CMMP) and a Treatment Plan (TP) in accordance with CEQA Guidelines Sections 15064.5 and 15126.4. The CMMP shall set forth criteria for evaluating the significance of resources discovered during construction and identify appropriate data recovery methods and procedures to mitigate project impacts on significant resources. At a minimum, the CMMP shall include a summary of available information on known sites and sensitive locations in the project area; a historical context for the evaluation of resources that may be encountered during construction; a research design outlining important historical themes and research questions relevant to the known sites in the study area; data requirements and the appropriate	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
	field and laboratory methods to be used to acquire data needed for significance evaluation and impact mitigation. The CMMP will also identify specific pipeline segments where cultural resources monitors would be required during construction. The TP will identify reporting and curating requirements for artifacts uncovered during construction. All project activities within or adjacent to the *Historical area of Old Palmdale and Old Lancaster* and *Old Rosamond and Tropico Mine* area shall be monitored by a professional archaeologist as there is a high probability for subsurface feature discovery, which includes (though is not limited to) foundations, cisterns, wells, cesspools, basements, or associated elements of the *Old Palmdale roundhouse spur of the Southern Pacific Railroad*. **3.4-1b:** A Phase I cultural resources survey shall be conducted for the segments of pipeline not already assessed in the Phase I Assessment conducted for the proposed project. Following completion of the Phase I cultural resource survey, the CMMP and TP shall be updated to include these segments.					
3.4-2: Ground-disturbing activities during pipeline installation could unearth, expose, or disturb human remains.	**3.4-2:** If human skeletal remains are uncovered during project construction, the implementing agency shall immediately halt work, contact the Kern County or the Los Angeles County coroner, depending upon the location of the find, 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 implementing agency shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity 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 most likely descendents regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	• Include mitigation measures in the construction contract specifications.	Implementing agencies		X	
3.4-3: Installation of pipelines could potentially unearth, expose, or disturb paleontologic resources including fossil remains, localities, or known fossil-bearing geologic horizons.	**3.4-3:** The implementing agencies shall develop and implement a Paleontological Resource Monitoring and Mitigation Plan (PRMMP) prior to the onset of construction-related earth moving activities in order to either avoid or mitigate to a less-than-significant level the effects on paleontological resources. During earth-moving construction-related activities, additional previously-unknown fossil sites may be uncovered. The PRMMP must include mitigation protocol for discoveries as well. The PRMMP shall include provisions for the following: special consideration shall be made to collect sediment samples for potential fossiliferous locations as per the Society of Vertebrate Paleontology standards; stratigraphic cross-sections shall be recorded, mapping of the geologic units graphed, and fossil remains, cleaned, analyzed, and catalogued to be accepted for curation at a legal repository; all work must be conducted by a qualified Paleontologist and a final Report of Findings must be submitted upon completion of laboratory analysis.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	
Geology, Soils and Mineral Resources						
3.5-1: In the event of a major earthquake within the region, underground pipelines could be subject to seismic hazards including surface rupture, liquefaction, landslide, and ground shaking capable of causing localized collapse or damage of engineered fills, structural damage, or pipeline rupture.	**3.5-1:** Prior to the approval of construction plans for the project, a design-level geotechnical investigation, including collection of site specific subsurface data shall be completed by the implementing agency. The geotechnical evaluation shall identify density profiles, approximate maximum shallow groundwater levels, a characterization of the vertical and lateral extent of the saturated sand/silt layers that could undergo liquefaction during strong ground shaking, and development of site-specific design criteria to mitigate potential risks. Recommendations made as a result of these investigations to protect new structures from seismic hazards shall become part of the proposed project.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X		
3.5-2: Construction of the proposed recycled water pipelines could result in substantial soil erosion or loss of topsoil, which would result in a significant impact.	**3.5-2:** To control water and wind erosion during construction of the project, the implementing agencies, shall ensure that contractors implement Best Management Practices (BMPs) to control wind and water erosion during and shortly after construction of the project and permanent BMPs to control erosion and sedimentation once construction is complete. The BMPs could include, but would not be limited to, sediment barriers and traps, silt basins, and silt fences.	• Include mitigation measures in the construction contract specifications.	Implementing agencies		X	X
3.5-3: The presence of yet undetermined local expansive soils in the project area could result in structural damage to the recycled water pipelines.	**3.5-3:** The implementing agencies shall require the preparation of site specific geotechnical investigations along the proposed pipeline alignments. These investigations shall identify appropriate engineering considerations, as recommended by a certified engineering geologist or registered geotechnical engineer for planned facilities, including engineering considerations to mitigate the effects of expansive soils. Recommendations made as a result of these investigations to protect new structures from expansive soils shall become part of the proposed project.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X		

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
Hazards & Hazardous Materials						
3.6-1: During construction of the proposed project, contaminated soils could be encountered during excavation activities, causing a risk of exposure to hazardous materials.	**3.6-1:** In the event that evidence of potential soil contamination, including soil discoloration, noxious odors, debris, or buried storage containers are encountered during construction, the implementing agencies shall require the construction contractor(s) to have a contingency plan for sampling and analysis of potentially hazardous substances and coordination with the appropriate regulatory agencies, if necessary. The required handling, storage, and disposal methods shall depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remedial actions shall comply with applicable laws.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.6-2: Accidental upset of hazardous materials used during project construction may increase the risk of exposure to the environment, workers, and the public.	**3.6-2a:** Construction contractor(s) shall be required to implement best management practices (BMPs) for handling hazardous materials during the project. The use of the construction BMPs shall minimize negative effects on groundwater and soils, and will include, without limitation, the following: • Follow manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction. • Avoid overtopping construction equipment fuel tanks. • During routine maintenance of construction equipment, properly contain and remove grease and oils. • Properly dispose of discarded containers of fuels and other chemicals. **3.6-2b:** The implementing agencies shall require the construction contractor(s) to implement safety measures in accordance with General Industry Safety Orders for Spill and Overflow Control (CCR Title 8, Sections 5163-5167) to protect the project area from contamination due to accidental release of hazardous materials. The safety measures shall include, but not be limited to, the following: • Spills and overflows of hazardous materials shall be neutralized and disposed of promptly. • Hazardous materials shall be stored in containers that are chemically inert to and appropriate for the type and quantity of the hazardous substance. • Containers shall not be stored where they are exposed to heat sufficient enough to rupture the containers or cause leakage. • Specific information shall be provided regarding safe procedures and other precautions before cleaning or subsequent use or disposal of hazardous materials containers. Disposal of all hazardous materials shall be in compliance with applicable California hazardous waste disposal laws. The construction contractor shall contact the local fire agency and the County Department of Public Health, Environmental Health Division, for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling. **3.6-2c:** In the event of an accidental release of hazardous materials during construction, containment and clean up shall occur in accordance with applicable regulatory requirements. **3.6-2d:** Oil and other solvents used during maintenance of construction equipment shall be recycled or disposed of in accordance with applicable regulatory requirements. All hazardous materials shall be transported, handled, and disposed of in accordance with applicable regulatory requirements. **3.6-2e:** The implementing agencies shall require the construction contractor(s) to prepare a Site Safety Plan in accordance with applicable regulatory requirements. **3.6-2f:** The implementing agencies shall require the construction contractor(s) to prepare and implement a Safety Program to ensure the health and safety of construction workers and the public during project construction. The Safety Program shall include an injury and illness prevention program, as site-specific safety plan, and information on the appropriate personal protective equipment to be used during construction.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	X
3.6-3: The proposed project could result in a safety hazard for people residing or working in the project area in the vicinity of airports.	**3.6-3:** The implementing agencies shall coordinate with appropriate airport agencies (such as LAWA, Caltrans, and FAA) and staff to ensure a safety program is developed and implemented during construction of the proposed project.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
3.6-4: The proposed project could interfere with emergency response and evacuation plans during project construction.	Implement Mitigation Measure 3.11-1a.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.6-5: Construction activities in grassland areas would have the potential to expose people or equipment to risk of loss, injury, or death involving wildland fires.	**3.6-5a:** The implementing agencies shall coordinate with local fire agencies to develop a fire safety plan, which describes various potential scenarios and action plans in the event of a fire. **3.6-5b:** During construction, all staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other material that could ignite. Any construction equipment that includes a spark arrestor shall be equipped with a spark arrestor in good working order. During the construction of the recycled water backbone, contractors shall require all vehicles and crews working at the project site to have access to functional fire extinguishers at all times. In addition, construction crews shall have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
Hydrology, Groundwater Resources and Water Quality						
3.7-1: Operation of the proposed recycled water pipelines could result in cross contamination of potable water pipelines, which could result in reduced water quality and potential public health concerns.	**3.7-1a:** Applicable backflow prevention devices, as outlined in Title 17 and the Purple Book, shall be incorporated into pipeline design to avoid potential for cross contamination. **3.7-1b:** Applicable minimum pipeline separation standards for potable and non-potable water pipelines, as outlined in Title 22, shall be incorporated into pipeline design to avoid potential for cross contamination. **3.7-1c:** All recycled water pipelines shall be painted purple or marked distinctly with purple tape. **3.7-1d**: Los Angeles County Department of Public Health (DPH), Cross Connection Control Program for Los Angeles County and the Kern County Department of Public Health in Bakersfield for Kern County shall be advised of each new site where recycled water is to be used prior to placing the site into service. **3.7-1e:** All recycled water sites shall be inspected and tested for possible cross connections with the potable water system, in accordance with Sections 60314(3) and 60316(a), Title 22, California Code of Regulations.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for administrative record.	Implementing agencies	X	X	X
3.7-2: Construction of the proposed recycled water pipelines could result in increased soil erosion and transport of subsequent contaminants and sedimentation, with impacts to water quality. Additionally, accidental release of fuels and other hazardous materials during construction could degrade water quality.	**3.7-2:** The implementing agencies shall develop and implement BMPs to minimize erosion and sedimentation. The implementing agencies shall include in contractor specifications that the contractor is responsible for developing and implementing the BMPs. The BMPs shall be maintained at the site for the entire duration of construction. The objectives of the BMPs are to identify pollutant sources that may affect the quality of storm water discharge and to implement measures to reduce pollutants in storm water discharges. The BMPs for the proposed project shall include, but not be limited to, the implementation of the following elements: • Identification of all pollutant sources, including sources of sediment that may affect the quality of storm water discharges associated with construction activity from the construction site; • Identification of non-storm water discharges; • Estimate of the construction area and impervious surface area; • Preparation of a site map and maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs); • Identification of all applicable erosion and sedimentation control measures, waste management practices, and spill prevention and control measures; • Maintenance and training practices; and, • A sampling and analysis strategy and sampling schedule for discharges from construction activities.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.7-3: Construction activities associated with the recycled water pipelines could result in the dewatering of shallow groundwater resources and	**3.7-3:** The implementing agencies shall obtain and comply with the requirements of dewatering permits issued by the Lahontan RWQCB for dewatering activities. Provisions of the permit may include treatment of flows prior to discharge.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
contamination of surface water.						
3.7-4: Construction of the recycled water pipelines could temporarily alter drainage patterns at the construction sites, which could cause localized flooding.	**3.7-4:** The implementing agencies shall include in contractor specifications that all disturbed areas are to be restored back to pre-construction conditions.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X		X
3.7-5: Operation of the pipelines would result in the use of recycled water for municipal and industrial (M&I) applications, which could affect surface and groundwater quality. This could be a potential public health impact.	**3.7-5a:** The implementing agencies shall require the development and implementation of Recycled Water User Agreements with each recycled water end user. The Agreements shall include provisions that prohibit over-application of recycled water and fertilizer, such as requiring irrigation at agronomic rates to reduce the potential for runoff and increased nutrients into the groundwater basin. **3.7-5b**: The implementing agencies, in consultation with the Lahontan RWQCB, shall develop and implement a salt management plan, if needed in the future, to reduce the potential for salt and nutrient loading and minimize impacts to water quality in the Antelope Valley groundwater basin.	• Monitor compliance with the Recycled Water User Agreements.	Implementing agencies	X		X
3.7-6: The use of recycled water for M&I applications could alter drainage patterns or increase local storm water runoff during storm events resulting in localized flooding.	**3.7-6:** The implementing agencies shall require recycled water end users to cease all irrigation activities during rain events, thereby minimizing off-site runoff.	• Monitor compliance with the Recycled Water User Agreements.	Implementing agencies			X
Land Use, Planning and Recreation						
3.8-2: The proposed pipeline would be constructed within the AIA for Palmdale Regional Airport, General William J. Fox Airfield, and Rosamond Skypark Airport.	**3.8-1a:** For project components occurring within an AIA, the implementing agencies shall submit their proposed project plans to the Los Angeles County ALUC for review and comment prior to final design. **3.8-1b:** Prior to conducting construction activities within an AIA, the implementing agencies shall prepare an airport construction safety plan that would identify best management practices. The plan would include, at a minimum, construction timeframes and hours, lighting and flagging requirements, air traffic control communication requirements, access and egress restrictions, equipment staging area requirements, and personal safety equipment requirements for construction workers, and appropriate notification to aviators. The plan would be reviewed and approved by airport staff and implemented by both the airport and project construction staff and FAA. **3.8-1c:** Prior to final design of project components within an AIA, the implementing agencies shall identify the ground elevation associated with each project component and submit their project plans to airport staff for review and comment. Working with airport staff, the implementing agencies shall submit their design plans for airspace analysis (FAA Part 7460 review) to determine whether any of the proposed project components or proposed construction equipment would protrude into protected airspace. If such objects are identified, the implementing agencies, airport staff, and FAA will identify appropriate steps to adjust project plans or include appropriate markings to identify hazards to aviators pursuant to FAA Part 7460. **3.8-1d:** To prevent the creation of wildlife attractants, the implementing agency should coordinate with construction contractors to ensure that neither project design nor construction plans create temporary or permanent sources of open water, inappropriate seed mixtures, or inappropriate landscaping designs. Notes should be incorporated on construction plans to warn against the creation of potential wildlife hazards.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.8-3: The proposed pipeline would be constructed in the vicinity of three public use airports and potentially affect navigable airspace as defined by FAR Part 77.	Implement Mitigation Measure 3.8-1c.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X		
Noise						
3.9-1: Construction of the proposed recycled water pipeline would intermittently and temporarily generate noise levels above existing ambient levels in the vicinity of those project elements.	**3.9-1a:** The implementing agencies shall implement procedures to reduce noise generation from project construction activities. Typical noise control procedures include the following: • Require construction contractors to comply with the construction hours and days limitations established in local noise ordinances. Night-time construction would require approval from local jurisdictions. • Require all construction contractors to locate fixed construction equipment (e.g., compressors and generators) as far as possible from noise-sensitive receptors.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
	• Equipment used in the construction of individual project components shall be muffled and maintained in good operating condition. Internal combustion engine-driven equipment shall be fitted with intake and exhaust mufflers that are in good condition. • If pile driving is required for facility construction, the contract specifications for those projects shall incorporate the following requirements: – Wherever possible, sonic or vibratory pile drivers will be used lieu of impact pile drivers. – Wherever feasible, pile holes will be pre-drilled to reduce potential noise and vibration impacts. • Additional noise attenuating measures include changing the location of stationary construction equipment and/or staging areas; notifying adjacent residences and nearby sensitive receptors in advance of construction work; shutting off idling equipment; rescheduling construction activities; requiring on-going construction noise monitoring to assure adherence to City/County construction equipment standards; and/or installing temporary barriers around stationary construction noise sources. **3.9-1b:** To further address the nuisance impact of project construction, construction contractors shall implement the following: • Signs will be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number for the applicable jurisdiction agency in the event of problems. • An onsite complaint and enforcement manager shall track and respond to noise complaints.					
3.9-2: Construction of the proposed recycled water pipeline would expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.	**3.9-2**: When drilling or boring within 25 feet of any building or 50-100 feet of a historical building, a "crack survey" shall be undertaken. The crack survey must be taken before the start of construction with photo, video, or visual inventory of all existing cracks inside and outside buildings with sufficient detail for comparison after construction to determine whether actual vibration damage occurred. The implementing agencies shall be responsible for the costs of any damage caused by construction vibration.	• Include mitigation measures in the construction contract specifications.	Implementing agencies		X	
Traffic and Transportation						
Impact 3.11-1: Construction of the proposed pipelines could adversely affect traffic and transportation conditions in the project area.	**3.11-1a:** The implementing agency's construction contractor shall prepare and implement a Traffic Control/Traffic Management Plan subject to approval by the appropriate local jurisdiction prior to construction. The plan shall: • Identify hours of construction and hours for deliveries; • Include a discussion of haul routes, limits on the length of open trench, work area delineation, traffic control and flagging; • Identify all access and parking restrictions, pavement markings and signage requirements (e.g., speed limit, temporary loading zones); • Maintain access to residence and business driveways at all times to the extent feasible; Minimize access disruptions to businesses and residences; • Layout a plan for notifications and a process for communication with affected residents and businesses prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints; • Include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times; • Include a plan to coordinate all construction activities with the Antelope Valley Union High School District and Southern Kern Unified School District at least two months in advance. The Antelope	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 3 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROJECT LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
	Valley Union High School District and Southern Kern Unified School District shall be notified of the timing, location, and duration of construction activities. The implementing agencies shall require its contractor to maintain vehicle, pedestrian, and school bus service during construction through inclusion of such provisions in the construction contract. The assignment of temporary crossing guards at designated intersections may be needed to enhance pedestrian safety during project construction. Also the following provisions shall be met: – Pipeline construction near schools shall occur when school is not in session (i.e., summer or holiday breaks). If this is not feasible, a minimum of two months prior to project construction, the implementing agencies shall coordinate with the Antelope Valley Union High School District and Southern Kern Unified School District to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require their contractor to avoid construction and lane closures during those periods; – A minimum of two months prior to project construction, the implementing agencies shall coordinate with the Antelope Valley Union High School District and Southern Kern Unified School District to identify alternatives to their Safe Routes to School program, alternatives for the school busing routes and stop locations, and other circulation provisions, as part of the Traffic Control/Traffic Management Plan; • Include the requirement that all open trenches be covered with metal plates at the end of each workday to accommodate traffic and access; and • Specify the street restoration requirements pursuant to agreements with the local jurisdictions. **3.11-1b:** The implementing agencies shall identify all roadway locations where special construction techniques (e.g., horizontal boring, directional drilling or night construction) will be used to minimize impacts to traffic flow. **3.11-1c:** The implementing agencies shall develop circulation and detour plans to minimize impact to local street circulation, including bikeways. This may include the use of signing and flagging to guide vehicles and cyclists through and/or around the construction zone. **3.11-1d:** The implementing agencies shall encourage construction crews to park at staging areas to limit lane closures in the public right-of-way. **3.11-1e:** Peak travel periods shall be avoided when considering partial road closures. **3.11-1f:** The implementing agencies shall consult with the Antelope Valley Transit Authority and the East Kern Regional Transit Express that connects to Lancaster at least one month prior to construction to coordinate bus stop relocations (if necessary) and to reduce potential interruption of transit service.					
3.11-2: Construction of the proposed pipeline would have temporary effects on alternative transportation or alternative transportation facilities.	Implement Mitigation Measures 3.11-1c and 3.11-1f.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
Utilities and Service Systems						
3.12-1: Construction of the proposed pipeline could result in temporarily, planned or accidental disruption to utility services.	**3.12-1a:** The locations of overhead and underground utility lines, such as natural gas, electricity, sewage, storm drains, telephone, fuel, and water lines, shall be verified by contractors through field surveys and other methods prior to construction. In areas where unanticipated underground utilities are found, plans to minimize service impacts shall be developed and worked out with the affected utilities. **3.12-1b:** As necessary, detailed specifications shall be prepared as part of the design and engineering plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. Affected utility services shall be notified of construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services. **3.12-1c:** Residents and businesses in the project area shall be notified of any planned utility service disruption, in conformance with county and state standards.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.12-2: Construction activities associated with the proposed pipeline would generate solid waste that would increase the demand for landfill capacity.	**3.12-2a:** Project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused shall be encouraged. **3.12-2b:** A requirement for the contractor to describe plans for recovering, reusing, and recycling wastes produced through construction, demolition, and excavation activities shall be included in construction specifications.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 4
MITIGATION MONITORING AND REPORTING PROGRAM – PROGRAM LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
Aesthetics						
3.1-2: Construction and operation of the proposed storage reservoirs and pump stations could result in significant impacts to aesthetic resources.	**3.1-2a:** The implementing agencies shall attempt to locate pump stations and reservoirs in areas that are compatible with existing views and vistas. **3.1-2b:** During project design, the implementing agencies shall prepare a landscape plan for each aboveground project component. The landscape plan shall include measures to restore disturbed areas by reestablishing existing topography, including replanting trees and/or reseeding with a native seed mix typical of the immediately surrounding area. The landscape plan shall include a required seed mix and plant palate. Vegetation screening shall be included in the landscape plan in order to shield proposed aboveground facilities from public view. The landscape plan shall include a monitoring plan to ensure that the site restoration and the establishment of vegetation is successful. **3.1-2c:** The implementing agencies shall ensure that storage reservoir designs include non-glare exterior coatings that are colored an earth tone to blend in with the surrounding landscape.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measure by maintaining a record of construction oversight for the administrative record.	Implementing agencies	X		X
3.1-3: Operation of the proposed storage reservoirs and pump stations could result in additional light and glare impacts due to nighttime security lighting.	**3.1-3:** The exterior lighting installed around the storage reservoirs and pump stations shall be of a minimum standard required to ensure safe visibility. Lighting shall be shielded and directed downward, away from neighboring land uses to minimize impacts of light and glare.	• Include mitigation measures in the construction contract specifications.	Implementing agencies		X	
3.1-4: Application of recycled water for groundwater recharge could result in significant impacts to aesthetic resources.	Implement Mitigation Measure 3.1-2b.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measure by maintaining a record of construction oversight for the administrative record.	Implementing agencies	X		X
Air Quality						
3.2-6: Construction activities associated with reservoirs and pump stations could generate substantial amounts of dust and other criteria pollutant emissions.	Implement Mitigation Measures 3.2-1a through 3.2-1f.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
Biological Resources						
3.3-7: Construction of the pump stations and reservoirs could have a substantial effect on special-status wildlife species including the California red-legged frog and Mohave ground squirrel.	Implement Mitigation Measures 3.3-1a through 3.3-1f.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record. • Ensure appropriate permits are obtained and that permit conditions include these mitigation measures.	Implementing agencies	X	X	X
3.3-8: Construction of the pump stations and reservoirs could have a substantial effect on special-status bat and avian species including the Swainson's hawk, American peregrine falcon, southwestern willow flycatcher, and least Bell's vireo.	Implement Mitigation Measures 3.3-2a through 3.3-2g.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	
3.3-9: Construction of the pump stations and reservoirs could have a substantial effect on special-status plant species.	Implement Mitigation Measures 3.3-3a through 3.3-3e.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	
3.3-10: Construction of the pump stations and reservoirs could conflict with the Joshua Tree and Native Desert Vegetation Preservation Ordinance.	Implement Mitigation Measures 3.3-4a through 3.3-4c.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	X

TABLE 4 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROGRAM LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
		• Ensure appropriate permits are obtained and that permit conditions include these mitigation measures.				
3.3-12: Construction of the pump stations and reservoirs could have a substantial adverse effect on wetlands considered waters of the state.	Implement Mitigation Measure 3.3-6.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	
Cultural Resources						
3.4-4: Proposed ground-disturbing activities for storage reservoirs, pump stations and groundwater recharge facilities could unearth, expose, or disturb archaeological, historical, or Native American resources.	**3.4-4a:** Prior to initial construction of storage reservoirs, pump stations, and recharge facilities, the implementing agency shall retain the services of a qualified archaeologist to prepare a Cultural Resources Monitoring and Mitigation Plan (CMMP) and a Treatment Plan (TP) in accordance with CEQA Guidelines Sections 15064.5 and 15126.4. The CMMP shall set forth criteria for evaluating the significance of resources discovered during construction and identify appropriate data recovery methods and procedures to mitigate project impacts on significant resources. At a minimum, the CMMP shall include a summary of available information on known sites and sensitive locations in the project area; a historical context for the evaluation of resources that may be encountered during construction; a research design outlining important historical themes and research questions relevant to the known sites in the study area; data requirements and the appropriate field and laboratory methods to be used to acquire data needed for significance evaluation and impact mitigation. The CMMP will also identify specific locations where cultural resources monitors would be required during construction. The TP will identify reporting and curating requirements for artifacts uncovered during construction. **3.4-4b:** *DPS1-Hist1* and *BPS1-Hist1* would be adversely impacted by the proposed construction activities and, therefore, shall be subjected to Phase II testing and evaluation for significance under CEQA and NHPA (see Section 3.4.2). **3.4-4c:** A Phase I cultural resources survey shall be conducted within areas affected by storage reservoir, pump stations, and recharge facilities not already assessed in the Phase I Assessment conducted for the proposed project. **3.4-4d:** Following completion of additional Phase I cultural resource surveys for sites not already surveyed, the CMMP and TP shall be updated to include these additional sites. **3.4-4e:** All project activities within or adjacent to the *Historical area of Old Palmdale and Old Lancaster* and *Old Rosamond and Tropico Mine area* shall be monitored by a professional archaeologist as there is a high probability for subsurface feature discovery, which includes (though is not limited to) foundations, cisterns, wells, cesspools, basements, or associated elements of the *Old Palmdale roundhouse spur of the Southern Pacific Railroad*. If these elements are identified, mitigation measures shall be employed that include in-field evaluation by a professional archaeologist (per Secretary of the Interior Standards) and possible data recovery, as needed, per a mitigation treatment plan. **3.4-4f:** If a prehistoric site is encountered in the vicinity of the concentration of isolated prehistoric artifacts within the northern portion of the western parcel of Proposed Reservoir 3, mitigation measures shall be employed that include in-field evaluation by a professional archaeologist (per Secretary of the Interior Standards) and possible data recovery, as needed, per a mitigation treatment plan. **3.4-4g:** If human skeletal remains are uncovered during project construction, the implementing agency shall immediately halt work, contact the Kern County or the Los Angeles coroner, depending upon the location of the find, 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 implementing agency shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity 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 most likely descendents regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	
3.4-5: Construction of storage reservoirs, pump stations, and recharge facilities could potentially	**3.4-5:** The implementing agencies shall develop and implement a Paleontological Resource Monitoring and Mitigation Plan (PRMMP) prior to the onset of construction-related earth moving activities in order	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 4 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROGRAM LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
unearth, expose, or disturb paleontologic resources including fossil remains, localities, or known fossil-bearing geologic horizons.	to either avoid or mitigate to a less-than-significant level the effects on paleontological resources. During earth-moving construction-related activities, additional previously-unknown fossil sites may be uncovered. The PRMMP must include mitigation protocol for discoveries as well. The PRMMP shall include provisions for the following: special consideration shall be made to collect sediment samples for potential fossiliferous locations as per the Society of Vertebrate Paleontology standards; stratigraphic cross-sections shall be recorded, mapping of the geologic units graphed, and fossil remains, cleaned, analyzed, and catalogued to be accepted for curation at a legal repository; all work must be conducted by a qualified Paleontologist and a final Report of Findings must be submitted upon completion of laboratory analysis.	• Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.				
Geology, Soils and Mineral Resources						
3.5-4: Construction of the proposed storage reservoirs and pump stations could result in substantial soil erosion or loss of topsoil, which would result in a significant impact.	Implement Mitigation Measure 3.5-2.	• Include mitigation measures in the construction contract specifications.	Implementing agencies		X	X
3.5-5: In the event of a major earthquake within the region, storage reservoirs and pump stations could be subject to seismic hazards including surface rupture, liquefaction, landslide, and ground shaking capable of causing localized collapse or damage of engineered fills or structural damage.	Implement Mitigation Measure 3.5-1 through 3.5-3.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	X
3.5-6: Ground shaking, expansive soils, liquefaction, settlement, erosion and corrosive soils could damage recycled water end uses including the power plant cooling water system and the groundwater recharge basins and appurtenant facilities.	Implement Mitigation Measure 3.5-1 through 3.5-3.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	X
Hazards & Hazardous Materials						
3.6-6: Accidental upset of hazardous materials used during construction of the storage reservoirs and pump stations may increase the risk of exposure to the environment, workers, and the public, resulting in a significant impact.	Implement Mitigation Measures 3.6-2a through 3.6-2f.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	X
Hydrology, Groundwater Resources and Water Quality						
3.7-7: Construction of the proposed storage reservoirs and pump stations could result in increased soil erosion and transport of contaminants, with impacts to water quality. Additionally, release of fuels or other hazardous materials associated with construction activities could degrade water quality.	Implement Mitigation Measure 3.7-2.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.7-8: Construction and operation of the proposed storage reservoirs and pump stations would increase the amount of impervious surfaces at each site, altering the drainage patterns at each site and resulting in increased local storm water runoff. This could cause localized flooding or contribute to a cumulative flooding impact.	**3.7-7:** The implementing agencies shall ensure adequately sized and located storm water capture facilities are incorporated into the final design for each storage reservoir and pump station facility.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.7-9: Placement of storage reservoirs and pump stations within a 100-year flood zone could expose people or property to risks related to flooding.	**3.7-8:** The implementing agencies shall require flood diversion facilities to be incorporated into each storage reservoir and pump station site and facility design that would not increase flood risk in other areas.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 4 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROGRAM LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
3.7-10: Use of recycled water for agricultural irrigation could potentially affect surface and groundwater quality.	Implement Mitigation Measures 3.7-5a and 3.7-5b.	• Monitor compliance with Recycled Water User Agreements.	Implementing agencies	X	X	
3.7-11: The use of recycled water for groundwater recharge could result in significant water quality impacts if the native groundwater is degraded below existing or acceptable conditions.	**3.7-9a:** The implementing agencies shall operate recharge projects in compliance with CDPH Title 22 regulations as well as in coordination with the RWQCB. The recharge water shall be a blend of recycled water and diluent water at a ratio consistent with Title 22 regulations and CDPH criteria. **3.7-9b:** The implementing agencies shall develop and implement a monitoring program of the proposed recharge area in compliance with Title 22 regulations and CDPH criteria. As part of this program, some monitoring wells shall be placed between the proposed recharge area and down gradient drinking water supply wells. **3.7-9c:** The implementing agencies shall require recharged recycled water via surface spreading to remain in groundwater storage for the minimum time period stipulated by CDPH Title 22 Water Recycling Criteria prior to extraction.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record.	Implementing agencies	X	X	X
Land Use, Planning and Recreation						
3.8-4: Construction and operation of the proposed storage reservoirs and pump stations could result in short-term disturbance to some adjacent land uses or result in long-term effects to existing land uses.	**3.8-2:** The implementing agencies shall obtain conditional use permits and complete site plan reviews from the appropriate jurisdiction, as necessary, prior to construction of project facilities. The implementing agencies shall also coordinate with FAA regarding the locations and design of proposed reservoirs and pump stations. Implement Mitigation Measures 3.2-1a through 3.2-1f and 3.11-1a.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.8-5: Construction and operation of the proposed groundwater recharge basins could result in short-term disturbance to some adjacent land uses or result in long-term effects to existing land uses.	**3.8-3:** The implementing agencies shall obtain a conditional use permit or a general plan amendment if necessary from the appropriate jurisdiction prior to construction of groundwater recharge facilities. The implementing agencies shall also coordinate with FAA regarding the locations and design of future recharge basins. Implement of Mitigation Measure 3.2-1a through 3.2-1f and Mitigation Measure 3.11-1a.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
Noise						
3.9-3: Construction of the proposed storage reservoirs and pump stations would intermittently and temporarily generate noise levels above existing ambient levels in the vicinity of those project elements.	Implement Mitigation Measure 3.9-1a and 3.9-1b.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
3.9-4: Operation of the proposed storage reservoirs and pump stations could result in substantial noise increases in the vicinity of project facilities.	**3.9-4:** The implementing agencies shall comply with local noise ordinances. In areas where pump and/or stationary equipment operation would cause noise levels to exceed the normally acceptable range for a given land use, the operation of such equipment shall not cause noise levels to increase by 5 dBA CNEL or more. In areas where noise levels already exceed the normally acceptable range for a given land use, the operation of such equipment shall not cause noise levels to increase by 3 dBA CNEL or more. To accomplish these performance standards, the implementing agency shall consider the following: • Maximize the buffer area or setback distance between pump facilities and noise-sensitive land uses; • Design stationary equipment and pump enclosures such that building exhaust fans and louvers are oriented away from noise-sensitive uses. To the extent feasible, configure the facility layout such that noise-generating equipment is setback from noise-sensitive land uses; • Incorporate equipment enclosures, fan silencers, mufflers, acoustical treatments at vent openings, acoustical panels, etc. • Construct a perimeter wall at the site such that the line of site between the building openings (exhaust fans and louvers) at the pump facilities and nearby sensitive receptors is effectively blocked. Effective shielding can significantly reduce noise.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 4 (CONT.)
MITIGATION MONITORING AND REPORTING PROGRAM – PROGRAM LEVEL

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
Traffic and Transportation						
3.11-4: Construction and operation of the proposed pump stations, storage reservoirs, and groundwater recharge basins could adversely affect traffic and transportation conditions in the project area.	Implement Mitigation Measures 3.11-1a through 3.11-1f.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
Utilities and Service Systems						
3.12-4: Operation of the storage reservoirs and pump stations could result in effects to local and regional energy supplies.	**3.12-3:** During project design, LACWWD40 and the implementing agencies shall require the use of energy efficient equipment, including pumps and lighting. Project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused shall be encouraged.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

TABLE 5
MITIGATION MONITORING AND REPORTING PROGRAM –CUMULATIVE IMPACTS

Environmental Impact	Mitigation Measures	Implementation, Monitoring, and Reporting Tasks	Responsibility	Monitoring Schedule		
				Before Construction	During Construction	After Construction
Cumulative Impacts						
4-1: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to air quality and water quality.	Implement Mitigation Measures 3.2-1a through 3.2-1f, 3.7-2, and 3.7-3.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
4-2: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to noise.	Implement Mitigation Measures 3.9-1a, 3.9-1b, and 3.9-2.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
4-3: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to traffic.	**4-3:** The implementing agencies, shall communicate and coordinate project construction activities with other municipalities (e.g., Palmdale, Lancaster, and Rosamond CSD) and agencies (e.g., Caltrans, LA County DPW) in the Antelope Valley. Phasing of project construction shall be coordinated to minimize cumulative impacts to traffic and circulation.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	
4-4: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to biological resources.	Implement Mitigation Measures 3.3-1a-f, 3.3-2a-g, 3.3-3a-e, 3.3-4a-c and 3.3-6.	• Include mitigation measures in the construction contract specifications. • Monitor compliance with mitigation measures and maintain a record of construction oversight for the administrative record. • Ensure appropriate permits are obtained and that permit conditions include these mitigation measures.	Implementing agencies	X	X	X
4-5: The proposed project and related projects could result in cumulative long-term impacts to groundwater resources.	Implement Mitigation Measures 3.7-5a, 3.7-5b, and 3.7-9a through 3.7-9c.	• Include mitigation measures in the construction contract specifications.	Implementing agencies	X	X	

CHAPTER 10
CERTIFICATION OF PEIR AND PROJECT APPROVAL

10.1 CERTIFICATION OF PEIR

Pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15090, the LACWWD40 certifies that:

1. The PEIR, State Clearinghouse No. 2007101125, is an accurate and objective statement that fully complies with CEQA, the CEQA Guidelines, and the County Environmental Guidelines;

2. The PEIR was presented to the Board of Supervisors, which is the decision making body for the County of Los Angeles and LACWWD40, and the Board reviewed and considered the information in the PEIR prior to approving the Project; and

3. The PEIR reflects the County of Los Angeles' independent judgment and analysis.

The County of Los Angeles Board of Supervisors further finds that no comments or responses to comments made during the review period for the PEIR, or any other public hearing on the Project, rise to the level of significant new information requiring recirculation or additional environmental review pursuant to CEQA Guidelines Section 15088.5.

As required by Public Resources Code Section 21081.6, the Board, in adopting these Findings, also adopts a Mitigation Monitoring and Reporting Program, designated to ensure that, during Project implementation, the LACWWD40 and other responsible parties (implementing agencies) will comply with the mitigation measures adopted in these Findings.

The Board hereby finds that the Mitigation Monitoring and Reporting Program, which is attached hereto as Chapter 9, meets the requirements of Public Resources Code Section 21081.6.

10.2 PROJECT APPROVAL

Based on the entire record before the Board of Supervisors, including the above Findings and all written evidence presented to the County of Los Angeles, the County of Los Angeles hereby approves the North Los Angeles/Kern County Regional Recycled Water Project.

A Notice of Determination shall be filed with the County of Los Angeles within five (5) working days of final Project approval.