



NOTICE AND CALL OF SPECIAL MEETING

Notice is hereby given that I, Gary Martin, Chair of the Planning and Engineering Committee, call a SPECIAL MEETING of the Agency's Planning and Engineering Committee.

Said SPECIAL MEETING of the Committee to be held on:

Wednesday, July 5, 2017 at 5:30 P.M.

Castaic Lake Water Agency
Rio Vista Water Treatment Plant
27234 Bouquet Canyon Road
Santa Clarita, California 91350
Rio Vista Training Room

Enclosed with and as part of this Notice and Call is an agenda for the meeting.

Signed: _____

Gary Martin

Date: _____

6/22/17

BOARD OF DIRECTORS

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GENERAL COUNSEL
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SECRETARY
APRIL JACOBS



June 21, 2017

TO: Planning and Engineering Committee
Gary Martin, Chair
Tom Campbell, Vice Chair
B. J. Atkins
Bill Cooper
Bill Pecsì

FROM: Brian J. Folsom *BJF*
Engineering and Operations Manager

A special meeting of the **Planning and Engineering Committee** is scheduled to meet on **Wednesday, July 5, 2017 at 5:30 PM** in the Training Room at the Rio Vista Water Treatment Plant.

SPECIAL MEETING AGENDA

1. Public Comment
2. * Recommend Approval of a Resolution Awarding a Construction Contract to GSE Construction Company, Inc. for the Saugus Perchlorate Treatment Facility Pressure Control Modifications Project
3. * Recommend (1) Approval of a Resolution Adopting a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, (2) Authorize the General Manager to Enter into a Cost Sharing Agreement with Valencia Water Company and (3) Approval of a Work Authorization for RMC Water and Environment for Final Design of the Recycled Water West Ranch (Phase 2D) Project
4. * Capital Improvements Projects Construction Status Report
5. * Committee Planning Calendar
6. General Report on Engineering and Operations Department Activities
7. Adjournment

- * Indicates attachment
- ◆ To be distributed

cc: CLWA Board of Directors
Joe Byrne

BOARD OF DIRECTORS

PRESIDENT

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SECRETARY

APRIL JACOBS

Notices:

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning (661) 297-1600, or writing to Castaic Lake Water Agency at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that Agency staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the Agency to provide the requested accommodation.

Pursuant to Government Code Section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection at the Castaic Lake Water Agency, located at 27234 Bouquet Canyon Road, Santa Clarita, California 91350, during regular business hours. When practical, these public records will also be made available on the Agency's Internet Web site, accessible at <http://www.clwa.org>.

M65



Castaic Lake Water Agency Memorandum

June 21, 2017

To: CLWA Planning and Engineering Committee

From: Brian J. Folsom *BJF*
Engineering and Operations Manager

Subject: Recommend Approval of a Resolution Awarding a Construction Contract to GSE Construction Company, Inc. for the Saugus Perchlorate Treatment Facility Pressure Control Modifications Project

SUMMARY

The Saugus Perchlorate Treatment Facility (SPTF) Pressure Control Modifications Project has been advertised for construction bids. Bids have been received and staff is recommending award of a construction contract. (FY 2017/18 Action B.6.11: Complete construction of SPTF Pressure Modifications Project.)

DISCUSSION

The SPTF has been operational since May 2010. Generally, the resin beds exceed the vendor's warranty for performance duration before resin changeout is required. However, when the SPTF suddenly goes off line because of wells tripping off or other issues, the sudden pressure surge can cause the resin beds to shift, resulting in drastically reduced resin bed performance. The vendor's warranty would not apply if decreased resin bed performance is caused by shifting resin beds. The SPTF discharges treated water into an equalization tank at atmospheric pressure before a booster pump conveys it to the Agency's distribution system. This project would install valves to maintain system pressure and mitigate the effect of surges from well shutdowns.

On June 6, 2017, two bids were received and opened for construction of the SPTF Pressure Control Modifications Project. A summary of the bids is presented below:

Bidder	Total Base Bid Price
GSE Construction Company Inc.	\$ 134,600
Hemet Manufacturing, Inc., dba Genesis Construction	\$ 176,330

The apparent low bid is from GSE Construction Company, Inc. (GSE) for a total of \$134,600. The engineer's estimate is \$135,000.

Staff has reviewed GSE's proposal and concluded the bid is complete and the information provided in the bid package is comprehensive and accurate. The bid package did not contain any irregularities or omissions. Staff has verified that GSE is a properly licensed contractor in the State of California and is registered with the Department of Industrial Relations. The Agency has previous experience with GSE and has found its work performance to be satisfactory in all respects.

CEQA Determination

Staff has determined that the proposed project is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The action is a minor alteration to the existing Saugus Perchlorate Treatment Facility and there will be no expansion of use beyond that existing at the time of the lead

agency's determination. CLWA finds that installation of four valves within the developed plant site has no possibility for a significant effect on the environment. Accordingly, the CEQA determination is that the proposed action qualifies under a Categorical Exemption (Class 1, Section 15301 of the State CEQA Guidelines).

FINANCIAL CONSIDERATIONS

GSE's total construction bid is \$134,600. The project is funded in the Agency's FY 2017/18 Budget for the SPTF Pressure Control Modifications Project. All project costs are reimbursable from Whittaker pursuant to the Perchlorate Settlement Agreement.

RECOMMENDATIONS

That the Planning and Engineering Committee recommends that the Board of Directors approve the attached resolution awarding a construction contract to GSE Construction Company, Inc., in the amount of \$134,600 for the SPTF Pressure Control Modifications Project.

JL

Attachment

MBS

RESOLUTION NO. _____

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE CASTAIC LAKE WATER AGENCY AWARDING
A CONSTRUCTION CONTRACT TO GSE CONSTRUCTION COMPANY, INC.,
FOR THE SAUGUS PERCHLORATE TREATMENT FACILITY
PRESSURE CONTROL MODIFICATIONS PROJECT**

WHEREAS, all bid proposals submitted to the Castaic Lake Water Agency (Agency) pursuant to the Agency's specifications (Project No. 300329) for the construction of Saugus Perchlorate Treatment Facility Pressure Control Modifications Project, as amended by Addendum, were publicly opened and read at the Agency's offices on Tuesday, June 6, 2017, at 2:00 p.m., in full accordance with the law and the Agency's customary procedures; and

WHEREAS, the Board of Directors finds, after considering the opinion of staff, that the total bid of GSE Construction Company, Inc. in the amount of \$134,600 is the lowest bid of two bids submitted, and that said bid substantially meets the requirements of said specifications as amended by Addendum; and

WHEREAS, it is in the Agency's best interest that the Board of Directors, on behalf of the Agency, authorize its General Manager to accept the \$134,600 bid; and

WHEREAS, the Saugus Perchlorate Treatment Facility Pressure Control Modifications Project has been determined by Agency staff to be categorically exempt from the California Environmental Quality Act (CEQA) under provisions of Class 1, Section 15301 of the State CEQA Guidelines and no further CEQA documentation is necessary for the Board to act with regards to the proposed actions.

NOW, THEREFORE, BE IT RESOLVED that the Agency's Board of Directors does authorize its General Manager to accept said low bid and does thereafter authorize the Agency's General Manager or its Engineering and Operations Manager to issue a Notice of Award to GSE Construction Company, Inc., hereby found to be the "lowest responsible bidder" for the Saugus Perchlorate Treatment Facility Pressure Control Modifications Project for the total sum of \$134,600, pursuant to said Agency specifications as amended by Addendum.

RESOLVED FURTHER that the Agency's General Manager or its President and Secretary are thereupon authorized, upon receipt of appropriate payment and performance bonds, appropriate certificates of insurance and an executed Contract Agreement from GSE Construction Company, Inc., all of which must be approved by General Counsel, to execute the said Contract Agreement on behalf of the Agency.

RESOLVED FURTHER that the Agency's General Manager or its Engineering and Operations Manager are thereafter authorized to execute and forward to GSE Construction Company Inc. an appropriate Notice to Proceed.



Castaic Lake Water Agency Memorandum

June 22, 2017

To: CLWA Planning and Engineering Committee

From: Brian J. Folsom *BJF*
Engineering and Operations Manager

Subject: Recommend (1) Approval of a Resolution Adopting a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, (2) Authorize the General Manager to Enter into a Cost Sharing Agreement with Valencia Water Company and (3) Approval of a Work Authorization for RMC Water and Environment for Final Design of the Recycled Water West Ranch (Phase 2D) Project

SUMMARY

On May 3, 2017, the Castaic Lake Water Agency (CLWA) released a Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the Recycled Water West Ranch (Phase 2D) Project (Project) for public review in compliance with the requirements of the California Environmental Quality Act (CEQA). CLWA is the CEQA lead agency and must adopt the IS/MND and Mitigation Monitoring and Reporting Program (MMRP) prior to approving the project and authorizing final design funding. Staff recommends that the Committee review the IS/MND and that the Committee recommend that the Board of Directors adopt the attached resolution approving the IS/MND and MMRP, authorize the General Manager to enter into a final design cost sharing agreement with Valencia Water Company (VWC), and authorize the General Manager to execute a work authorization for RMC Water and Environment (RMC) for final design of the Recycled Water West Ranch (Phase 2D) Project. *(FY 2017/18 Action B.6.8: Complete final design for the West Ranch Recycled Water Project (Phase 2D).)*

DISCUSSION

CLWA proposes to expand the existing recycled water system in the Santa Clarita Valley to reduce the demands on potable water supplies. The Project would implement a phase of the Agency's Draft Recycled Water Master Plan (Draft RWMP). As use of potable water increases and wastewater production increases, the amount of recycled water available to meet system demands would also increase. Therefore, the Draft RWMP recommends that construction of the recycled water system be phased to utilize the increases in recycled water production. Phase 1 was previously constructed and currently serves recycled water to The Player's Club golf course and various landscaped parcels along The Old Road west of Interstate 5. The Project is one of the next phases of implementation of the RWMP.

The Project IS/MND analyzed the environmental impacts of the proposed Project and concluded that with mitigation, there would be no significant environmental impacts. CLWA published the IS/MND for public review from May 3, 2017 to June 1, 2017. Comments were received from three responders during the public review period. Exhibit A to the attached Resolution contains the comment letters received during the public review period. As stated in the State CEQA Guidelines (Section 15074), the Board is required to review and consider the MND, the Initial Study and comments received during the public review period prior to the adoption of the MND. Adoption of the MND is dependent on the finding by the Board that, based on the whole record before it, there is no substantial evidence,

with the mitigation measures required by the MND, that the proposed project will have a significant impact on the environment, and that the MND reflects the Lead Agency's independent judgment and analysis.

The Mitigation Monitoring and Reporting Program (MMRP) is required under CEQA (Section 21081.6 of the California Public Resources Code) and must also be adopted by the Board prior to project approval. All of the above documentation, including other materials that constitute the record of proceedings upon which the Lead Agency decision is based, has been and will be on file at the Castaic Lake Water Agency, 27234 Bouquet Canyon Road, Santa Clarita, CA 91350.

Final design is the next step after completing CEQA in order to provide a near "shovel ready" project for pursuit of any available grant funding opportunities. Staff requested RMC Water and Environment to provide final design based on its good performance during the planning and preliminary design phase of the project. The general scope of work includes the following items:

- Prepare construction drawings and technical specifications
- Assist with obtaining necessary permits
- Perform QA/QC reviews and revise project documents as needed
- Prepare construction cost estimates
- Provide support during bidding to include responding to bidders' questions, preparing addenda documents and evaluating contractor bid documents
- Provide project administration to include preparing monthly progress reports, schedule updates and budget reports

CLWA and Valencia Water Company (VWC) have agreed to share the final design costs. The current engineering design estimate is \$230,000, whereby CLWA shall pay \$87,400 (38%) and VWC shall pay \$142,600 (62%).

FINANCIAL CONSIDERATIONS

RMC's budget for final design services is \$230,000 and work would be performed on a time and expense basis. The project is funded in the Agency's FY 2017/18 Budget for the Recycled Water West Ranch (Phase 2D) Project and there are adequate funds remaining for this work. The FY 2017/18 project budget amount is \$395,000 and the current total estimated cost of the project is \$4,585,000. As of April 30, 2017, total project expenditures are \$119,170.

RECOMMENDATIONS

That the Planning and Engineering Committee recommends that the Board of Directors (1) approve the attached resolution adopting a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, (2) authorize the General Manager to enter into a cost sharing agreement with VWC, and (3) authorize the General Manager to execute a work authorization for final design services with RMC Water and Environment for an amount not to exceed \$230,000 for the Recycled Water West Ranch (Phase 2D) Project

SB

Attachment

MBS

RESOLUTION NO.

**RESOLUTION OF THE CASTAIC LAKE WATER AGENCY BOARD OF DIRECTORS
ADOPTING THE MITIGATED NEGATIVE DECLARATION
AND MITIGATION MONITORING AND REPORTING PROGRAM
UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT
FOR THE RECYCLED WATER WEST RANCH (PHASE 2D) PROJECT**

WHEREAS, the Agency determined that recycled water is an important component of future water supplies; and

WHEREAS, the proposed Recycled Water West Ranch (Phase 2D) Project is a component of the Draft 2016 Recycled Water Master Plan; and

WHEREAS, the proposed Recycled West Ranch (Phase 2D) Project is a collaborative project between the Castaic Lake Water Agency (CLWA) and the Valencia Water Company (VWC); and

WHEREAS, on May 3, 2016, the Agency circulated for public comment an Initial Study, a proposed Mitigated Negative Declaration and an Environmental Assessment on its proposed Recycled Water West Ranch (Phase 2D) Project; and

WHEREAS, the Agency received written public comments during the comment period from May 3, 2017 to June 1, 2017 on the proposed Project; and

WHEREAS, the Agency Board needs to review the Final Mitigated Negative Declaration, the Initial Study (IS/MND) and Mitigation Monitoring and Reporting Program (MMRP); and

WHEREAS, the Agency Board, acting as a Lead Agency, will need to adopt the IS/MND; and

WHEREAS, the Agency's Board has determined that the proposed Project can be approved because there is no substantial evidence in light of the whole record that the Project may have a significant effect on the environment; and

WHEREAS, the Agency and its Board have considered all of the information presented to it as set forth above and this Resolution and action taken hereby is a result of the Board's independent judgment and analysis.

NOW, THEREFORE, BE IT RESOLVED that the Agency Board does hereby find and determine as follows:

SECTION 1. RECITALS. The Agency finds that the foregoing recitals are true and correct and are incorporated herein as substantive findings of this Resolution.

SECTION 2. COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT. As a decision-making body for the Project, the Agency has reviewed and considered the information contained in the MND, comments received, and other documents contained in the administrative record for the Project. Based on the Agency's independent review and analysis, the Agency finds that the MND and

administrative record contain a complete and accurate reporting of the environmental impacts associated with the Project, and that the MND has been completed in compliance with CEQA and the State CEQA Guidelines.

SECTION 3. FINDINGS ON ENVIRONMENTAL IMPACTS. Based on the whole record before it, including the MND, the administrative record, and all other written and oral evidence presented to the Agency, the Agency finds that all environmental impacts of the Project are either less than significant or can be mitigated to a level of less than significant under the mitigation measures outlined in the MND and the MMRP. The Agency finds that substantial evidence fully supports the conclusion that no significant and unavoidable impacts will occur and that, alternatively, there is no substantial evidence in the administrative record supporting a fair argument that the Project may result in any significant environmental impacts. The Agency finds that the MND contains a complete, objective, and accurate reporting of the environmental impacts associated with the Project and reflects the independent judgment and analysis of CLWA.

SECTION 4. ADOPTION OF THE MITIGATED NEGATIVE DECLARATION. The Agency hereby approves and adopts the MND as the Lead Agency.

SECTION 5. ADOPTION OF THE MITIGATION MONITORING AND REPORTING PROGRAM. In accordance with Public Resources Code section 21081.6, the Agency hereby adopts the MMRP. In the event of any inconsistencies between the Mitigation Measures as set forth in the MND and the MMRP, the MMRP shall control.

SECTION 6. LOCATION AND CUSTODIAN OF RECORDS. The documents and materials associated with the Project, the MND and MMRP that constitute the record of proceedings on which these findings are based are located at the offices of Castaic Lake Water Agency, 27234 Bouquet Canyon Road, Santa Clarita, CA 91351. The Custodian of Record is the Board Secretary.

Castaic Lake Water Agency

Recycled Water Program, Phase 2D

Final Mitigated Negative Declaration



Prepared for
Castaic Lake Water Agency



Prepared by:



910 Hampshire Road, Suite V
Westlake Village, CA 91361
(805) 367-5720 FAX (805) 367-5733

June 2017

Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program

Phase 2D—West Ranch Recycled Water Main Extension Project

Prepared for:

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, California 91350

Prepared by:

Meridian Consultants LLC
910 Hampshire Road, Suite V
Westlake Village, CA 91361

June 2017

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List of Appendices

- A Mitigation Monitoring and Reporting Program
- B Castaic Lake Water Agency Recycled Water Program, Phase 2D Project Draft Mitigated Negative Declaration

1.0 INTRODUCTION

1.1 PURPOSE

This Final Initial Study (IS) and Mitigated Negative Declaration (MND; together, IS/MND) has been prepared for the Phase 2D—West Ranch Recycled Water Main Extension Project (“proposed Project”) in accordance with the requirements of the California Environmental Quality Act (CEQA)¹ and the State CEQA Guidelines.² Castaic Lake Water Agency (CLWA) is acting as the Lead Agency as defined by CEQA for the environmental review of the proposed Project.

1.2 DESCRIPTION OF THE PROPOSED PROJECT

The proposed Project was developed to offset nonpotable irrigation and residential demands from domestic drinking water to recycled water. The proposed Project would utilize recycled water from the Santa Clarita Valley Sanitation District’s Valencia Water Reclamation Plant (WRP) to serve existing customers within the Stevenson Ranch area within unincorporated Los Angeles County. The proposed Project includes construction of approximately 5,000 linear feet of new 12-inch diameter pipeline and an enclosed pump station and hydropneumatics tank that would convey tertiary-treated recycled water from the existing Recycled Water Reservoir No. 1 to surrounding customers. The proposed Project would convey an average annual demand of approximately 186 acre-feet (af) of recycled water from the Valencia WRP to customers along Valencia Boulevard and Old Rock Road. The proposed Project is located within the northern portion of Stevenson Ranch, approved with a recorded Parcel Tract/Map. The maximum peak summer month nonpotable water demand would be 27 af.

The pipeline would include isolation valves, air-release valves, blow-off valves, recycled water service connections, and all other necessary appurtenances. All pipelines would be polyvinyl chloride (PVC) or ductile iron pipe (DIP) and would be installed using typical open-trench cut-and-cover method, at a typical cover of approximately 5 feet with roadway pavement and native soils above the pipeline. Bedding and backfill material would be utilized to fill around and below the proposed water pipeline. In addition to the water pipeline, pressure-release valves and wharf heads would be installed aboveground along the proposed alignment. The main transmission line would consist of a 12-inch pipeline.

During construction of the proposed Project, construction equipment would need to be stored at the end of each day. Three construction staging areas were identified along the proposed pipeline alignment: a northern staging area, northcentral staging area, and a southern staging area. The northern staging area would be located at the west end of Westridge Parkway; the northcentral staging area would be located

1 California Code of Regulations, sec. 21000 et seq.

2 California Code of Regulations, sec. 15070–15075, State CEQA Guidelines.

adjacent to the existing Recycled Water Reservoir No. 1; and the southern staging area would be located at the west end of Valencia Boulevard.

1.3 PUBLIC REVIEW PROCESS

On May 3, 2017, CLWA circulated a Notice of Intent (NOI) of the IS for a 30-day review and comment period by the public and by responsible and reviewing agencies. The review period ended on June 2, 2017. In addition, a notice was published in the *Santa Clarita Valley Signal* on May 3, 2017.

The Final IS/MND and Draft IS are available for review at:

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

The Final IS/MND and Draft IS are also available online at:

<http://www.clwa.org/docs/>

The State CEQA Guidelines³ require that the decision-making body of the Lead Agency consider the proposed IS together with any comments received during the public review process prior to approving a project.

Three comment letters were received regarding the Draft IS. One letter was from the State of California Governor's Office of Planning and Research, State Clearinghouse, on June 3, 2017. The comment notes that only two State agencies, the California State Water Resources Control Board—Division of Drinking Water (SWRCB) and the California Department of Transportation ("CalTrans") submitted comments on the Draft IS, and that CLWA has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA.

SWRCB submitted a comment letter on May 19, 2017. The comment states that "CLWA must make sure the layouts of the new recycled water pipelines are in compliance with the Water Main Separation requirements of Chapter 16, California Waterworks Standards of Title 22, California Code of Regulations (CCR). CLWA must submit the project plans the Division."

CalTrans District 7—Office of Transportation Planning submitted a comment letter on May 22, 2017. The comment states that CalTrans does not expect proposed Project approval to result in direct adverse impacts to the existing State transportation facilities; notes that any transportation which requires the use of oversized transport vehicles on State highways will require a Caltrans transportation permit; and

3 California Code of Regulations, sec. 15074(b), State CEQA Guidelines.

further notes that the proposed Project should be mindful of stormwater runoff as a sensitive issue for the area.

The Final MND, when combined with the Draft IS, constitutes the complete environmental review document for the proposed Project to be considered by CLWA Board of Directors, as the decision-making body, before it makes its decision on the proposed Project. State CEQA Guidelines⁴ require that the Lead Agency consider the IS together with any comments received during the public review prior to approving a project. The decision-making body shall adopt the Final IS/MND only if it finds, on the basis of the whole record before it (including the IS and any comments received), that no substantial evidence exists that the proposed Project will have a significant effect on the environment and that the Final IS/MND reflects the Lead Agency's independent judgment and analysis.

Additionally, the State CEQA Guidelines⁵ require that the Lead Agency adopt a mitigation monitoring program for reporting on or monitoring the physical changes of the Project site and mitigating significant environmental effects.

1.4 ORGANIZATION OF THE FINAL IS/MND

As required by the State CEQA Guidelines, the Final IS/MND consists of the following elements:

- Comments received from reviewing agencies and the public on the Draft IS during the public review process and responses to those comments (see **Section 2.0**).
- A Mitigation Monitoring and Reporting Program (MMRP), which provides a summary of impacts, mitigation measures, and implementation procedures (see **Appendix A**).
- The Draft IS (see **Appendix B**).

A disc containing these documents is also attached to the inside back cover of this Final IS/MND.

⁴ California Code of Regulations, sec. 15074(b), State CEQA Guidelines.

⁵ California Code of Regulations, sec. 15074(d), State CEQA Guidelines.

2.0 COMMENTS ON THE DRAFT IS

The State CEQA Guidelines⁶ require that the decision-making body of the Lead Agency consider the proposed IS together with any comments received during the public review process prior to approving a project.

The following comment letters were received regarding the Draft IS:

- California State Clearinghouse Office of Planning and Research, dated June 3, 2017
- California State Water Resources Control Board, Division of Drinking Water, dated May 19, 2017
- California Department of Transportation District 7—Office of Transportation Planning, dated May 22, 2017

Response to California State Clearinghouse Office of Planning and Research

The comment notes that only two State agencies, SWRCB and CalTrans, submitted comments on the Draft IS and that CLWA has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA.

Response to California State Water Resources Control Board

The comment expresses gratitude for including SWRCB in the environmental review process for the proposed Project. The comment indicates that CLWA must make sure the layouts of the new recycled water pipelines are in compliance with the Water Main Separation requirements of Chapter 16, California Waterworks Standards of Title 22 of the CCR and must submit the project plans to the SWRCB. The comment is noted. As identified in the Draft IS/MND, the proposed Project is subject to, and the design plans must comply with California Water Code, CCR Title 22, Division 4, Chapter 16, California Waterworks Standards, including water main separation requirements.

Response to California Department of Transportation District 7—Office of Transportation Planning

The comment notes that the nearest State facilities to the proposed project is Interstate 5 (I-5). The comment indicates that Caltrans does not expect Project approval to result in a direct adverse impact to the existing State transportation facilities. The comment also notes that any transportation of heavy construction equipment and/or materials necessitating the use of oversized transport vehicles on State highways will require a Caltrans transportation permit, and that large-size truck trips are be limited to off-peak commute periods. This comment is noted. As identified in the Draft IS, construction-related trips

⁶ California Code of Regulations, sec. 15074(b), State CEQA Guidelines.

would occur outside of the peak commuting periods. No significant impact would occur to transportation levels of service.

Finally, Caltrans commented on stormwater runoff. As indicated in the Draft IS, the proposed Project would be required to comply with the General Construction Storm Water Permit (Water Quality Order 2009-0009-DWQ, amended by 2010-0014-DWQ and 2012-0006-DWQ) issued by the SWRCB. No significant impacts to water runoff would occur with implementation of the proposed Project.



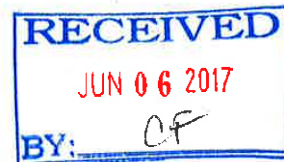
EDMUND G. BROWN JR.
GOVERNOR

June 2, 2017

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR



Rick Viergutz
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

Subject: Phase 2D Recycled Water Pipeline Project
SCH#: 2017051009

Dear Rick Viergutz:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on June 1, 2017, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

SCH# 2017051009
Project Title Phase 2D Recycled Water Pipeline Project
Lead Agency Castaic Lake Water Agency

Type MND Mitigated Negative Declaration
Description The proposed project would utilize recycled water from the Santa Clarita Valley Sanitation District's Valencia WRP to serve existing customers within the Stevenson Ranch area within the unincorporated LA County. The proposed project includes construction of approx 5,000 lf of new 12-in diameter pipeline and an enclosed pump station and hydropneumatics tank that would convey tertiary treated recycled water from the existing Recycled Water Reservoir No. 1 to surrounding customers. The proposed project would convey an average annual demand of approx 186 acre feet of recycled water from the Valencia WRP to customers along Valencia Blvd and Old Rock Rd. All pipelines would be polyvinyl chloride or ductile iron pipe and would be installed using typical open trench cut and cover method.

Lead Agency Contact

Name Rick Viergutz
Agency Castaic Lake Water Agency
Phone (661) 513-1281 **Fax**
email
Address 27234 Bouquet Canyon Road
City Santa Clarita **State** CA **Zip** 91350

Project Location

County Los Angeles
City Santa Clarita
Region
Lat / Long 34° 24' 14" N / 118° 35' 24" W
Cross Streets Westridge Pkwy and Valencia Blvd
Parcel No.
Township 4N **Range** 16W **Section** **Base** SB

Proximity to:

Highways I-5
Airports
Railways
Waterways Santa Clara River
Schools West Ranch HS/MS
Land Use Residential 5, public & semi public

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Minerals; Noise; Other Issues; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Native American Heritage Commission; State Lands Commission; State Water Resources Control Board, Division of Drinking Water; State Water Resources Control Board, Division of Drinking Water, District 16; State Water Resources Control Board, Division of Financial Assistance

Date Received 05/03/2017 **Start of Review** 05/03/2017 **End of Review** 06/01/2017



CLWA
6-1-17
T



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

May 19, 2017

Governor's Office of Planning & Research

MAY 30 2017

STATE CLEARINGHOUSE

Mr. Rick Viergutz
Principal Water Resources Planner
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

Dear Mr. Viergutz:

**COMMENTS ON THE DRAFT MITIGATED NEGATIVE DECLARATION FOR THE
CLWA RECYCLED WATER PHASE 2D PROJECT, SCH# 2017051009**

Thank you for including the State Water Resources Control Board, Division of Drinking Water (Division) in the environmental review process for the Recycled Water Program, Phase 2 project proposed by the Castaic Lake Water Agency (CLWA). The Division received and reviewed the Draft Mitigated Negative Declaration for this project. We would like to offer the following comment:

- CLWA must make sure the layouts of the new recycled water pipelines are in compliance with the Water Main Separation requirements of Chapter 16, California Waterworks Standards of Title 22, CCR. CLWA must submit the project plans to the Division.

If you have any questions regarding this matter, please feel free to contact Dmitriy Ginzburg, P.E. at (818) 551-2022 or me at (818) 551-2045.

Sincerely,

A handwritten signature in black ink, appearing to read "Shu-Fang Orr".

Shu-Fang Orr, P.E.
District Engineer
Angeles District

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

500 North Central Avenue, Suite 500, Glendale, CA 91203 | www.waterboards.ca.gov

Mr. Rick Viergutz

- 2 -

May 19, 2017

cc: Mr. Matt Stone
General Manager
Castaic Lake Water Agency

State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

District 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0673
FAX (213) 897-1337
www.dot.ca.gov



*Serious Drought.
Making Conservation
a California Way of Life.*

GEAR
6-1-17
E

May 22, 2017

Governor's Office of Planning & Research

MAY 22 2017

STATE CLEARINGHOUSE

Mr. Rick Viergutz
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

RE: Phase 2D Recycled Water Pipeline Project
Mitigated Negative Declaration
SCH#2017051009
IGR# 07-LA-2017-00909-FL
Vic. LA/ 05/ PM R52.62

Dear Mr. Viergutz:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project includes construction of approximately 5,000 linear feet of new 12-inch diameter pipeline and an enclosed pump station and hydropneumatics tank that would convey tertiary treated recycled water from the existing Recycled Water Reservoir No.1 to surrounding customers, such as the existing customers within the Stevenson Ranch area within unincorporated Los Angeles County.

The nearest State facilities to the proposed project is I-5. Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities. As a reminder, any transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. Caltrans recommends that large size truck trips be limited to off-peak commute periods.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that project needs to be designed to discharge clean run-off water, and storm water run-off is not permitted to discharge onto State highway facilities.

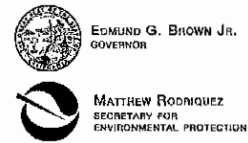
If you have any questions or concerns regarding these comments, please contact project coordinator, Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Dianna Watson'.

DIANNA WATSON, Branch Chief
LD-IGR/CEQA Review

cc: Scott Morgan, State Clearinghouse



State Water Resources Control Board
Division of Drinking Water

May 19, 2017

Mr. Rick Viergutz
Principal Water Resources Planner
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

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Shu-Fang Orr, P.E.
District Engineer
Angeles District

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

500 North Central Avenue, Suite 500, Glendale, CA 91203 | www.waterboards.ca.gov

Mr. Rick Viergutz

- 2 -

May 19, 2017

cc: Mr. Matt Stone
General Manager
Castaic Lake Water Agency

State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

DEPARTMENT OF TRANSPORTATION

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May 22, 2017

Mr. Rick Viergutz
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

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Mitigated Negative Declaration
SCH#2017051009
IGR# 07-LA-2017-00909-FL
Vic. LA/ 05/ PM R52.62

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If you have any questions or concerns regarding these comments, please contact project coordinator, Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dianna Watson".

DIANNA WATSON, Branch Chief
LD-IGR/CEQA Review

cc: Scott Morgan, State Clearinghouse

APPENDIX A

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (MMRP) has been prepared, pursuant to the requirements of the State CEQA Guidelines,¹ identifying the monitoring of mitigation measures that would reduce potential significant impacts as stated in the Draft IS for the proposed Project.

The State CEQA Guidelines² require public agencies adopting an IS/MND to also adopt a program for monitoring or reporting to ensure that the mitigation measures it has imposed to mitigate or avoid significant environmental effects are implemented.

Castaic Lake Water Agency (CLWA) will be required to adopt the MMRP should the Board of Directors approve the proposed Project.

The MMRP is available at Castaic Lake Water Agency located at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350.

The MMRP may be modified by CLWA in response to changing conditions or circumstances. A summary table (**Table 1, Summary of Project Impacts, Mitigation Measures, and Implementation Responsibility**) will guide CLWA in its evaluation and documentation of the implementation of mitigation measures. The MMRP is organized as follows:

- **Mitigation Measure:** Provides the text of the mitigation measures identified in the IS/MND.
- **Timing/Schedule:** Identifies the timeframe in which the mitigation will take place.
- **Implementation Responsibility:** Identifies the entity responsible for complying with mitigation measure requirements.
- **Action:** Describes the type of action taken to verify implementation.
- **Date Completed:** Provides for the acknowledgement of completion of each mitigation measure as it is implemented. Entries should be dated and initialed by CLWA personnel based on the documentation noted in the mitigation measure and provided by the individual or entity responsible for implementing the measure.

Unless otherwise specified herein, CLWA is responsible for taking all actions necessary to implement the mitigation measures according to the provided specifications and for demonstrating that each action has been successfully completed. CLWA, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor.

1 California Code of Regulations, sec. 15074(b)(6), State CEQA Guidelines.

2 California Code of Regulations, sec. 15097, State CEQA Guidelines.

Table 1
Summary of Project Impacts, Mitigation Measures, and Implementation Responsibility

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	Date Completed
			Action	
Aesthetics				
AES-1	a) Following construction activities, CLWA shall attempt to restore disturbed areas ground surface areas to preexisting conditions to the maximum extent practicable by repaving roadways, replanting trees, and/or reseeding with a native seed mix typical of the immediate surrounding area.	Upon completion of construction activities	CLWA and/or construction contractor	1a. Restore disturbed areas to conditions prior to the start of construction activities. This includes repaving roadways and, if applicable, replanting trees and/or reseeding with a native mix typical of the surrounding area.
AES-1	b) During facility design, CLWA shall prepare a landscape plan for the pump station facility. 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 palette. Vegetation screening shall be included in the landscape plan in order to shield proposed aboveground facilities from public view. Following construction, CLWA shall restore the vegetation removed as a result of construction activities. The replanting shall be monitored by a qualified biologist. CLWA shall monitor the emergent vegetation to ensure that the	During final engineering design/plan check and prior to the start of construction	CLWA prior to construction; CLWA and/or construction contractor post construction	1b. Create a landscape plan for the pump station facility prior to construction activities. The landscape plan will include native trees, shrubs, or other vegetation to provide screening. Ensure plantings survive 2 years post construction. If plantings fail within 2 years, then a restoration plan will be developed to ensure the area is fully restored.

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
	restoration is successful. If the plants fail to recover within 2 years, CLWA shall develop and implement a restoration plan in coordination with CDFW to ensure the area is fully restored.			
AES-2	Aboveground facilities exterior, including the pump station, shall be finished with a nonreflective material in an earth tone that blends in with the natural environment.	Upon completion of the pump station enclosure	CLWA	2. Paint exterior aboveground facilities with a nonreflective material in an earth tone that blends in with the natural environment.
AES-3	Any necessary security lighting during construction or operation of the pump station shall be designed to be consistent with County zoning codes and applicable design guidelines and to minimize glare to adjacent areas. Construction activities shall be restricted to daytime hours on residential streets. If nighttime construction is required, temporary lighting must be directed onto the worksite and avoid any spillover light or glare onto adjacent properties.	During final engineering plan design/plan check During construction	CLWA CLWA and/or construction contractor	3a. Create a lighting plan for the pump station prior to construction activities that will be designed consistent with County zoning codes to minimize glare to adjacent areas. 3b. Limit construction activities to daytime hours on residential streets. If nighttime construction is required, temporary lighting must be directed onto the worksite and avoid spillover onto adjacent properties.
Biological Resources				
BIO-1	If construction or vegetation removal is proposed between February 1 and August 31, a qualified biologist shall conduct a pre-construction survey no more than 5 days prior to the start of ground-disturbing activities for breeding and nesting birds	Prior to construction activities or vegetation removal	CLWA	1a. A biological monitor will perform a preconstruction survey within 500 feet of construction limits no earlier than 5 days prior to initiation of ground or vegetation disturbance to determine the presence of

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
within 500 feet of the construction limits. The biologist shall locate and map the location of active nests or breeding territories that could be affected by the proposed plan. A 300-foot buffer shall be delineated around any active nest of any bird of the order <i>Passeriformes</i> , and a 500-foot buffer around an active nest of any raptor species. Buffer distances may be reduced at the qualified biologist's discretion, depending on the species' tolerance to human presence and the location of the nest. For example, a reduced buffer may be appropriate for a nest located near a high-use road. Buffers shall be delineated in the field with high-visibility fencing, such as orange-mesh snow drift fencing, and shall persist and be maintained until the adults and young are no longer reliant on the nest site for survival, as determined by a qualified biologist. The monitoring biologist or proposed plan compliance monitor shall inspect the integrity of the fence on a weekly basis. Any gaps in the fence shall be corrected within 24 hours following communication from the monitoring biologist or proposed plan compliance manager.			an active bird nest between February 1 and August 31. 1b. If an active nest is identified, then appropriate buffers will be established by the biologist.	
Cultural Resources				
CUL-1: Inadvertent construction,	Discoveries. should	During subsurface	During excavation and	CLWA
				1. The CLWA Project manager or their designee will monitor excavations during

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
archaeological resources be discovered, all activity in the vicinity of the find shall stop and the qualified archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, the archaeologist shall determine, in consultation with CLWA and any local Native American groups expressing interest for prehistoric resources, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to, rerouting or redesign, cancellation, or identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with CLWA and any local Native American representatives expressing interest in prehistoric archaeological resources. If an archaeological site does not qualify as a historical resource but meets the criteria for a unique archaeological resource as	construction activities		construction. If resources are found, halt construction within a 30-foot radius will be halted; a qualified archaeologist and/or Native American representative will be notified; and construction activities will be modified until the resource has been properly removed, catalogued, and preserved.	

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.				
CUL-2: Inadvertent Discoveries. During construction, should paleontological resources be discovered when a paleontological monitor is not present, all activity in the vicinity of the find shall stop, an exclusion zone of 50 feet around the find shall be established, and the qualified paleontologist shall be contacted to assess the significance of the find. If any find is determined to be significant, the qualified paleontologist shall determine, in consultation with CLWA, appropriate avoidance measures or steps to salvage the resource quickly and safely.	During excavation and construction activities	CLWA	2. The CLWA Project manager or their designee shall monitor excavations during construction. If resources are found, halt construction within a 50-foot radius and notify a qualified paleontologist and modify construction activities until the resource has been properly removed, catalogued, and preserved.	

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
Hazards and Hazardous Materials				
HAZ-1: Implement Fire Hazard Reduction Measures. During construction of facilities located in areas designated as Very High Fire Hazard Severity Zones (VHFHSZs) by CAL FIRE, 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 Project facilities, all vehicles and crews working at the Project Site shall be required 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.	During Construction	CLWA and construction contractor	1. The construction contractor shall provide fire-fighting equipment, such as fire extinguishers, to the satisfaction of the Los Angeles Fire Department and shall provide instruction on possible fire risk and the use of fire extinguishers as part of required construction-related safety training.	
Noise				
Noise-1: CLWA and its contractors shall implement the following measures during all Project-related construction activities: <ul style="list-style-type: none">Sensitive receptors (residences, residential areas, schools, and hospitals) within 1,500 feet of Project construction activities shall be identified and mapped, and this information shall be used to minimize noise impacts to sensitive receptors.	Prior to and during construction	Construction contractor and CLWA	1a. Locate all stationary noise-generating equipment as far as possible from nearby noise-sensitive receptors. 1b. Shield noise-generating equipment, where possible, from nearby noise-sensitive receptors (single family residences only) by noise attenuating buffers. 1c. Construction activities shall be limited to between 7:00 AM and 7:00 PM	

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
<ul style="list-style-type: none"> Construction activities shall meet municipal code requirements related to noise. Construction activities shall be limited to between 7 AM and 7 PM Monday through Friday and 8 AM to 6 PM Saturday to avoid noise-sensitive hours of the day. Construction activities shall be prohibited on Sundays and holidays. Construction equipment noise shall be minimized by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools. Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from nearby sensitive receptors, including residences, schools, and hospitals. Should construction occur near a school, the construction contractor shall coordinate the timing of the highest noise-producing construction activities with school administration in order to limit disturbance to the campus. 			Monday through Friday, and 8:00 AM to 6:00 PM Saturday. Construction activities shall be prohibited on Sundays and holidays.	
			1d. Construction contractor shall coordinate highest noise-producing construction activities with school administration when near a school.	
			1e. Map sensitive receptors (residences, residential areas, and schools) within 1,500 feet of the project alignment.	

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
<p>Noise-2: CLWA shall implement the following measures when Project-related construction is planned to occur within the City/County limits and/or within 50 feet of sensitive receptors:</p> <ul style="list-style-type: none"> • Sensitive receptors (residences, residential areas, schools, and hospitals) within 50 of Project construction activities shall be identified and mapped, and this information shall be used to minimize ground-borne vibration and ground-borne noise impacts to sensitive receptors. • Limit jack and bore drilling to at least 43 feet from sensitive receptors and 15 feet from any structures. • If jack and bore drilling must occur within 15 feet of any structure, the construction contractor shall conduct crack surveys before drilling to prevent potential architectural damage to nearby structures. The surveys shall be done by photographs, video tape, or visual inventory, and shall include inside as well as outside locations. All existing cracks in walls, floors, and driveways shall be documented with sufficient detail for comparison after construction to determine whether actual vibration damage occurred. A post-construction survey shall be conducted to 	Prior to and during construction	Construction contractor and CLWA	<p>2a. Map sensitive receptors within 50 feet of the project construction activities.</p> <p>2b. Limit jack and bore drilling to a minimum of 43 feet from the sensitive receptors and 15 feet from any structure.</p> <p>2c. Construction contractor shall conduct crack surveys prior to drilling to prevent architectural damage if jack and bore drilling must occur within 15 feet of any structure.</p>	

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
document the condition of the surrounding buildings after the construction is complete.				
Transportation and Traffic				
<p>TRAF-1: For proposed plan phases that may affect traffic, implementing agencies shall require that contractors prepare a construction traffic control plan. Elements of the plan should include, but are not necessarily limited to, the following:</p> <ul style="list-style-type: none"> • Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible. • To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours. • Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers and/or signage to safely direct traffic through construction work zones. • Coordinate with facility owners or administrators of sensitive land uses, such as police and fire stations, 	Prior to issuance of construction permits	CLWA	1. Develop construction traffic control plan in consultation with the Los Angeles County Fire Department and Los Angeles County Sherriff's Department.	

Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Implementation and Verification	
			Action	Date Completed
hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities.				

Note: CLWA = Castaic Lake Water Agency.

APPENDIX B

Castaic Lake Water Agency Recycled Water Program, Phase 2D Project Draft Mitigated Negative Declaration

Castaic Lake Water Agency

Recycled Water Program, Phase 2D

Draft Mitigated Negative Declaration



Prepared for
Castaic Lake Water Agency

Prepared by:



910 Hampshire Road, Suite V
Westlake Village, CA 91361
(805) 367-5720 FAX (805) 367-5733

May 2017

Mitigated Negative Declaration

Castaic Lake Water Agency Recycled Water Program, Phase 2D

Prepared for:

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

Prepared by:

Meridian Consultants
910 Hampshire Road, Suite V
Westlake Village, California 91361

May 2017

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1.0 INTRODUCTION

1.1 OVERVIEW

The Castaic Lake Water Agency (CLWA) prepared this Initial Study (IS)/Mitigated Negative Declaration (MND) to evaluate the potential environmental impacts associated with the Recycled Water Phase 2D Project (“proposed Project”).

In 2002, CLWA developed a Recycled Water Master Plan (RWMP) for the use of 17,400 acre-feet per year (afy) of recycled water from the Santa Clarita Valley Sanitation District (SCVSD) system by 2030. CLWA previously completed the CEQA process and adopted the RWMP Update Program Environmental Impact Report (“2007 EIR”) in March 2007.¹ The 2007 EIR analyzed potential environmental impacts from obtaining recycled water from the Valencia Water Reclamation Plant (WRP). CLWA has prepared an updated Draft RWMP, which was released for public review in June 2016 (“2016 RWMP Update”), followed by release for public review of the Draft Program EIR for the RWMP Update in October 2016 (“2016 DEIR”).² All three documents have been incorporated by reference.

1.2 AUTHORITY

As part of CLWA’s approval process, the proposed Project is required to undergo an environmental review pursuant to the California Environmental Quality Act (CEQA).

The preparation of an IS/MND is governed by CEQA³ and, more specifically, the State CEQA Guidelines,⁴ which guide the process for the preparation of a negative declaration (ND) or MND. Where appropriate and supportive to an understanding of the issues, reference will be made to the statute, the State CEQA Guidelines, or the appropriate case law.

This IS, as required by CEQA, contains a project description, a description of the environmental setting, potential environmental impacts, mitigation measures for any significant effects, consistency with plans and policies, and names of preparers. CLWA is the Lead Agency for the proposed Project and, as such, is required to conduct an environmental review to analyze the potential environmental effects associated with the proposed Project described in this IS. An MND is prepared for a project when the IS has identified mitigation measures to reduce potentially significant effects on the environment to less than significant.

1 BonTerra Consulting, *Final Program Environmental Impact Report—Castaic Lake Water Agency Recycled Water Master Plan* (2007).

2 Kennedy/Jenks Consultants for the Castaic Lake Water Agency (CLWA), *Draft Recycled Water Master Plan* (June 2016); CLWA, *Castaic Lake Water Agency Recycled Water Master Plan Update Draft Program EIR* (October 2016).

3 California Code of Regulations, sec. 15000, et seq., State CEQA Guidelines. Public Resources Code, sec. 21000, et. seq.

4 California Code of Regulations, sec. 15000, et seq.

For those impacts that would not potentially affect the environment, the IS shows that no substantial evidence indicates that the proposed Project would have significant environmental effects.

1.3 PROJECT HISTORY

1.3.1 Wastewater Treatment Facility Improvements and Expansions

Two WRPs, the Saugus WRP and the Valencia WRP, currently treat wastewater generated by residents in the City of Santa Clarita (“City”) and unincorporated Los Angeles County. The Santa Clarita Valley Sanitation District (SCVSD), a consolidation of Sanitation Districts No. 26 and No. 32, provides wastewater conveyance, treatment, and disposal services for residential, commercial, and industrial users in the Santa Clarita Valley. The SCVSD operates the Saugus and the Valencia WRPs. The plants produce high-quality, tertiary-disinfected recycled water that is distributed for nonpotable reuse or discharged into the upper reaches for the Santa Clara River (under NPDES Order Nos. R4-2005-0031 and R4-2005-0032). The Saugus and Valencia WRPs have a design capacity of 28.1 million gallons per day (mgd) and currently process an average flow of 19.3 mgd (13.8 mgd from Valencia WRP and 5.5 mgd from Saugus WRP). The current capacity is sufficient to treat influent flows until approximately 2036, at which time planned expansion at the Valencia WRP would bring the total system treatment capacity to 34.1 mgd (38,190 afy).⁵ No expansion is planned at the Saugus WRP.

Some of the planned future developments in the Santa Clarita Valley, such as the Westside Communities and Vista Canyon developments, intend to construct water reclamation facilities to produce tertiary-recycled water suitable for nonpotable reuse to offset all potable demands. No excess recycled water from these water reclamation facilities is anticipated to be available to CLWA in the future. The Vista Canyon Water Factory is anticipated to come online in 2018 to treat flows from the planned Vista Canyon development⁶ and produce 0.39 mgd or 440 afy of disinfected tertiary-recycled water for use within the development, with excess supply available for nearby existing SCWD customers. The proposed Newhall Ranch WRP is anticipated to produce 3.75 mgd (4,200 afy)⁷ of recycled water based on anticipated flows from the Newhall Ranch Specific Plan development at buildout (2034). Other Westside Communities would need recycled water supplies from the Valencia WRP.

5 Castaic Lake Water Agency (CLWA), *2015 Urban Water Management Plan [UWMP] for Santa Clarita Valley*, sec. 4.1, p. 4-3 (adopted June 8, 2016)

6 CLWA, *2015 UWMP* (Adopted June 8, 2016), Table 4-2.

7 CLWA, *2015 UWMP* (Adopted June 8, 2016), Table 4-2.

Recycled Water Supply and Demand

As identified in the 2016 RWMP Update, the proposed Project will use approximately 186 afy which represents approximately 1.2 percent of current effluent levels from the Valencia WRP and 0.9 percent of the total from the Valencia WRP and Saugus WRP.⁸

CLWA, Valencia Water Company (VWC), Newhall County Water District (NCWD), and CLWA Santa Clarita Water Division (SCWD) are working together to accelerate expansion of the existing recycled water system (Phase 1A) by adding the proposed Project to offset potable water demands and improve reliability. CLWA has constructed Phase 1A of the 2002 RWMP, which is designed to deliver up to 1,600 afy of water to the VWC service area (Phase 1 as constructed currently delivers about 450–500 afy).⁹ In 2015, recycled water deliveries were 450 af.

The existing contract (SCVSD Contract No. 3425, signed on July 24, 1996) is the basis for wholesaling recycled water in Santa Clarita Valley and makes 1,600 afy of recycled water from the Valencia WRP available to CLWA for purchase. Contract No. 3118266 (signed on Oct 20, 2014) and Contract No. 3322936 (signed on July 23, 2015) served to temporarily increase the allotment for fiscal years 2014/15 and 2015/16, respectively, to 2,200 afy. This increase was attributed to the need for recycled water to be used for dust control for Newhall Ranch development construction activities. CLWA will be required to comply with the eventual SCVSD baseline for required minimal flows discharged to the Santa Clara River as a result of the future studies and approved 1211 petition to divert discharges. A 1211 petition is required when a wastewater treatment plant makes changes to the discharge of treated wastewater. Future contracts, allotment increases, and/or amendments to the wholesaling contract with the SCVSD, including a new 1211 petition process, will need to be approved prior to the expansion of the recycled water system beyond 1,600 afy. The 1211 process will require the approval of the State Water Resources Control Board (SWRCB) and the California Department of Fish and Wildlife (CDFW), which would be conditioned to any reduction in the quantity of discharged effluent that does not impact habitat that might be dependent on those flows.

SCVSD has prepared technical analyses showing that a minimum of 13 mgd (14,560 afy) of discharge to the Santa Clara River will be required to sustain biological resources.¹⁰ For the purpose of the 2016 RWMP Update, that amount is assumed to be the minimum required discharge and can be met by maintaining at least 8.5 mgd (9,520 afy) of discharge to the river at the Valencia WRP and 4.5 mgd (5,040 afy) of discharge at the Saugus WRP. Under the Facilities Plan and Final EIR, the SCVSD would be required to

⁸ CLWA, *2016 RWMP Update* (Draft June 2016), Table 6-3.

⁹ CLWA, *2015 UWMP* (Adopted June 8, 2016), sec. 4.1, p. 4-1.

¹⁰ Sanitation Districts of Los Angeles County, *Santa Clarita Valley Sanitation District Chloride Compliance Facilities Plan and Environmental Impact Report* (October 2013).

discharge at least 13 mgd of recycled water into the Santa Clara River, while some or all of the remaining supply would be made available to CLWA for reasonable and beneficial nonpotable use in accordance with State law and policy to maximize the use of recycled water.

The minimum discharge of 13 mgd to the Santa Clara River was previously determined to be an amount sufficient to avoid harm to biological resources in the Santa Clara River, including the unarmored three-spined stickleback, an endangered fish species (as designated under both the federal and State endangered species acts).¹¹

Recycled water supplies can be affected by legal and regulatory factors, as indicated in the recent March 9, 2016, judgment entered by the Los Angeles Superior Court in *Affordable Clean Water Alliance v. Santa Clarita Valley Sanitation District of Los Angeles* (Los Angeles County Superior Court Case No. BS145869). While the trial court decision affects the ability of the UWMP to specify how much recycled water will be available from the Valencia and Saugus WRPs, it appears reasonably likely that supplies will be available from that facility once a minimum discharge amount to the Santa Clara River is established according to further environmental and public review, as noted by the SCVSD.¹² This will be verified by the 1211 process.

From a long-term regional water supply planning perspective, recycled water supplies that are not obligated to be discharged to the river have been identified as supplies that could be available for nonpotable reuse within Santa Clarita Valley. Additional information regarding recent factors having the potential to affect the availability of recycled water supplies is provided below.

Recycled Water Program, Phase 2

The proposed Project is a part of the Phase 2 expansion of the recycled water system. Phase 2 is planned to expand recycled water use within Santa Clarita Valley and consists of four projects currently in various stages of design. All of the available recycled water in the peak summer months is anticipated to be used to meet demands, including those for existing Phase 1 projects, Phase 2 expansions currently in design, planned developments (including Newhall Ranch and Vista Canyon) and future nearby customers served by extending the Phase 2 system.

Four projects planned to expand recycled water use within Santa Clarita Valley, which are collectively known as Phase 2. Phases 2A, 2C, and 2D would use recycled water from the Valencia WRP and Phase 2B would use recycled water produced at the Vista Canyon Water Factory, which is being constructed to treat flows from the planned Vista Canyon Development. Phase 2A would serve Central Park and customers

11 CLWA, 2015 UWMP (Adopted June 8, 2016), p. 4-8.

12 CLWA, 2015 UWMP (adopted June 8, 2016), p. 4-8.

along the path from the Valencia WRP to the park. Phase 2B would serve the proposed Vista Canyon Development and nearby irrigation customers. Phase 2C would serve Valencia Country Club, Vista Valencia Golf Course, College of the Canyons, California Institute of the Arts, Hart High School, and Newhall Elementary School. Phase 2D would serve West Ranch High School, Ranch Pico Junior High School and customers along the way. Anticipated annual demands, construction completion dates and purveyors for each phase are listed below:

- Existing Phase 1: 450 afy
- Phase 2A: 560 afy in 2024 (224 afy in SCWD and 336 afy in VWC)
- Phase 2B: 300 afy in 2018 (163 afy in SCWD and 137 afy in Vista Canyon Development)
- Phase 2C: 1,374 afy in 2020 (208 afy in NCWD and 1,125 afy in VWC)
- Phase 2D: 186 afy in 2020 (186 afy in VWC)

In total, demand would be met by the Valencia WRP recycled water supply, less the 8.5 mgd discharge to the Santa Clara River, with a surplus of 3,230 afy in 2020 and 8,830 afy in 2050.¹³

1.4 ORGANIZATION OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The content and format of this IS/MND are designed to meet the requirements of CEQA. The IS/MND consists of the proposed findings that the project, as mitigated, would have no significant impacts. The IS/MND contains the following sections and supporting studies:

- **Section 1, *Introduction***, identifies the purpose and scope of the IS/MND and the terminology used in the report.
- **Section 2, *Project Description***, identifies the location, background, and planning objectives of the proposed Project and describes the proposed Project in detail.
- **Section 3, *Environmental Setting***, describes the existing conditions, surrounding land use, general plan, and existing zoning in the proposed Project area.
- **Section 4, *Environmental Checklist***, presents the checklist responses and evaluation for each resource topic.
- **Section 5, *Environmental Analysis***, includes an analysis for each resource topic and identifies potential impacts of implementing the proposed Project. It also identifies mitigation measures, if applicable.
- **Section 6, *References***, identifies all printed references and individuals cited in this IS/MND.
- **Section 7, *List of Preparers***, identifies the individuals who prepared this report and their areas of technical specialty.

¹³ CLWA, 2016 RWMP Update (Draft June 2016), Table 8-2.

- Appendices present data supporting the analysis or contents of this IS/MND. These include:
 - **Appendix A**, Air Quality and Greenhouse Gas Modeling Data
 - **Appendix B**, Cultural Resource Records Search and Sacred Lands File Search
 - **Appendix C**, Noise Measurement Data

1.5 PUBLIC AND AGENCY REVIEW OF THE DRAFT IS/MND

CEQA requires that the lead agency provide the public and agencies the opportunity to review and comment on a Draft IS/MND. As outlined by CEQA, CLWA is providing a 30-day period for review and comment on the Draft IS/MND. Upon completion of the public and agency review period, CLWA, as lead agency, will evaluate comments on environmental issues received from persons who reviewed the Draft IS/MND and prepare written responses. CLWA will include these comments and responses in a Final MND along with any changes that will be reviewed and considered for adoption by the CLWA Board of Directors.

Interested individuals, organizations, responsible agencies, and other agencies can provide written comments to:

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350
Contact: Rick Viergutz, Principal Water Resources Planner

Comments may also be sent by facsimile to (661) 513-1281 or by email at rviergutz@clwa.org. Please put “Recycled Water Phase 2D Project” in the subject line. Agency responses should include the name of a contact person within the commenting agency.

The Draft IS/MND is available for review at the following locations:

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, California 91350

County of Los Angeles Public Library, Valencia Branch
23743 Valencia Blvd.
Santa Clarita, California 91355

County of Los Angeles Public Library, Stevenson Ranch Branch
25950 The Old Road
Stevenson Ranch, CA 91381

In addition, the Draft IS/MND is available on CLWA’s website at:

<http://www.clwa.org/docs/>

2.0 PROJECT DESCRIPTION

2.1 PROPOSED PROJECT

Recycled Water Phase 2D of the CLWA Recycled Water System was developed to offset nonpotable irrigation and residential demands from domestic drinking water to recycled water. The proposed Project, will use recycled water from the Valencia WRP to serve existing customers within CLWA's service area.

2.1.1 Water Demand and Availability Estimates

Water availability for the proposed Project has been determined based on the water available from the Valencia WRP. Water availability has taken into account demand requirements from the Valencia WRP for other uses, including a minimum 13 mgd discharge to the Santa Clara River to sustain biological resources, and identifies the water available for diversion to the proposed Project.

The proposed Project would convey an average annual demand of approximately 186 acre-feet (af) of recycled water from the Valencia WRP to customers along Valencia Boulevard and Old Rock Road. Details of the potential Phase 2D recycled water demands associated with landscape irrigation along each reach of the pipeline and major customers is presented in **Table 2.0-1, Potential Phase 2D Recycled Water Demands**.

The Demand Method was utilized to estimate the average daily demand. This method corresponds to the residential lot size and commercial or institutional area. The Demand Method is based on density and lot size, and as such, assumes that unimproved land has a water demand component.

Table 2.0-1
Potential Phase 2D Recycled Water Demands

Customer/Reach	Purveyor	Average Annual Demand (afy)
Westridge Parkway Landscaping	VWC	4.96
Old Rock Road Landscaping	VWC	32.72
Valencia Boulevard Landscaping	VWC	148.00
Total Demand		185.68

Note: afy = acre-feet per year.

The proposed Project is located within the northern portion of Stevenson Ranch, approved with a recorded Parcel Tract/Map,¹⁴ and would meet existing irrigation demand. The maximum peak summer month nonpotable water demand would be 27 af. To appropriately meet the anticipated water demands associated with nonpotable water along each reach of the pipeline, the main transmission water pipeline would need a minimum pipeline diameter of 12 inches.

2.2 PROJECT LOCATION

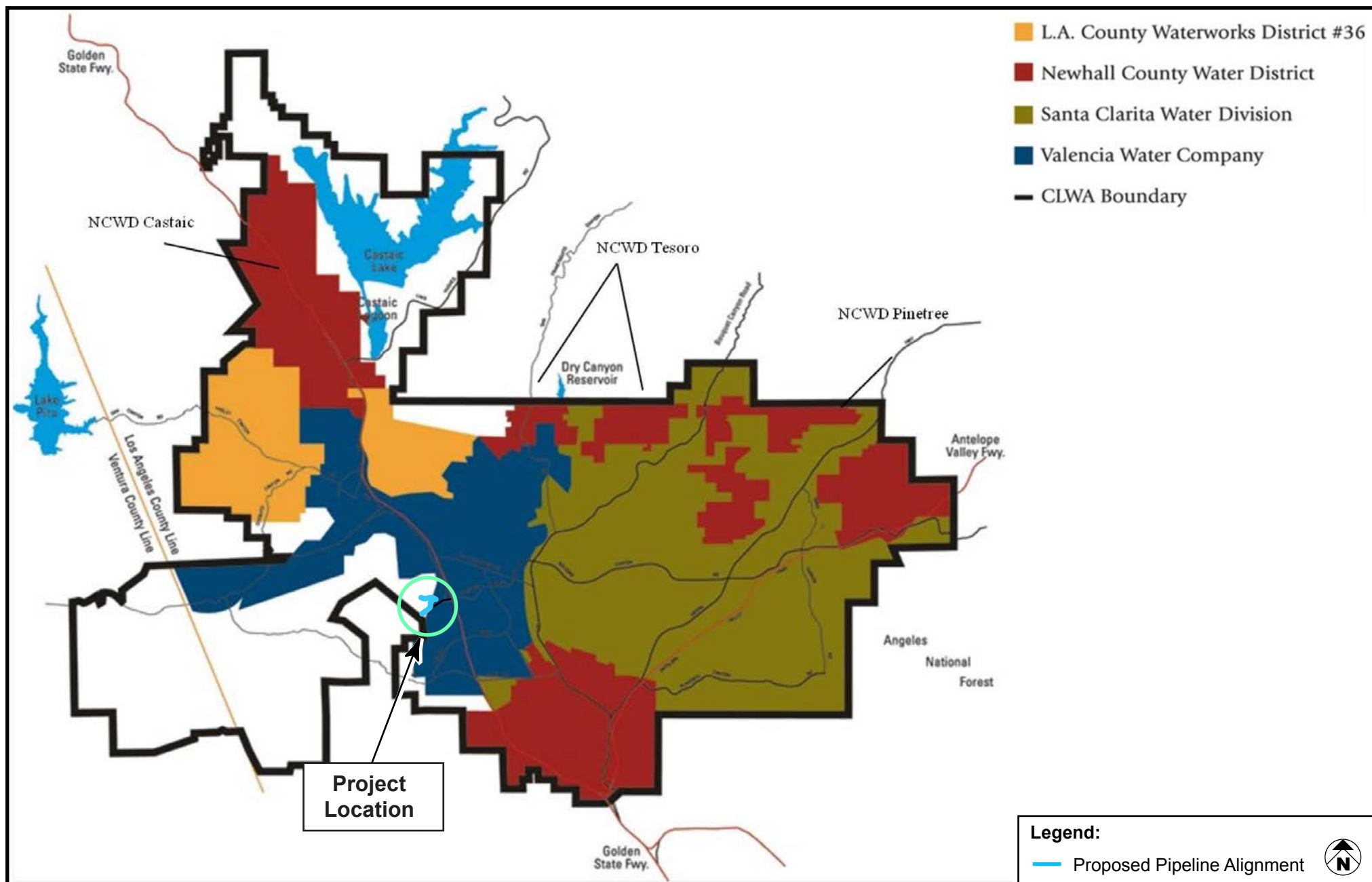
The proposed Project is located in unincorporated Los Angeles County, bordering the western boundary of the City of Santa Clarita as shown in **Figure 2.0-1, Regional Location**. In addition, the proposed Project is located in the western portion of the CLWA boundaries and service area. As shown in **Figure 2.0-2, CLWA Boundary and Service Area**, the CLWA service area encompasses approximately 195 square miles of land in the incorporated and unincorporated areas of Santa Clarita Valley in Los Angeles County, as well as in eastern Ventura County. No components of the proposed Project would be located in Ventura County.

2.3 PROJECT DESCRIPTION

The proposed Project would utilize recycled water from the Santa Clarita Valley Sanitation District's Valencia WRP to serve existing customers within the Stevenson Ranch area within unincorporated Los Angeles County. The proposed Project includes construction of approximately 5,000 linear feet of new 12-inch diameter pipeline and an enclosed pump station and hydropneumatics tank that would convey tertiary-treated recycled water from the existing Recycled Water Reservoir No. 1 to surrounding customers, as shown in **Figure 2.0-3, Project Site Alignment and Staging Areas**. Recycled Water Reservoir No. 1 is a 1.5 million gallon (MG) recycled water reservoir, 40 feet high and 80 feet wide, and is supplied recycled water from the Valencia WRP through the existing Phase 1 of the RWMP.

The pipeline would include isolation valves, air release valves, blow off valves, recycled water service connections, and all other necessary appurtenances. All pipelines would be polyvinyl chloride (PVC) or ductile iron pipe (DIP) and would be installed using typical open trench cut and cover method, at a typical cover of approximately 5 feet with roadway pavement and native soils above the pipeline. Bedding and backfill material would be utilized to fill around and below the proposed water pipeline.

14 County of Los Angeles, Department of Regional Planning and City of Santa Clarita, Santa Clarita Valley Subdivision Activity Map, Updated February 2014, <http://www.santa-clarita.com/city-hall/departments/administrative-services/technology-services/geographic-information-systems-gis/map-gallery>.



SOURCE: Source: Castaic Lake Water Agency, 2010 Urban Water Management Plan - Final, June 2011.

FIGURE 2.0-2



SOURCE: CLWA - June 2016

FIGURE 2.0-3

In addition to the water pipeline, pressure release valves and wharf heads would be installed aboveground along the proposed alignment. The main transmission line would consist of a 12-inch pipeline.

The proposed Project would begin along Westridge Parkway, where the first of three staging areas would be located at the northern end of the street. The pipeline would start approximately 135 feet east of the first staging area, as shown in **Figure 2.0-3**. The 12-inch pipeline would tee off of the proposed pumping station, located approximately 65 feet northwest of the Recycled Water Reservoir No. 1. The proposed pipeline would extend approximately 12 feet northwest, then extend east along Westridge Parkway for approximately 1,850 feet to the middle of the intersection of Old Rock Road. At Westridge Parkway and Old Rock Road, the pipeline would split and extend for approximately 230 feet along Westridge Parkway to serve the existing park. The remainder of the proposed pipeline would extend south along the center of Old Rock Road for approximately 1,450 feet to Valencia Boulevard. At the Old Rock Road and Valencia Boulevard, the pipeline would extend along the northern side of Valencia Boulevard for approximately 1,600 feet to the end of the street, where the pipeline would stub out. Staging area 3 is located at this end of the pipeline, as shown in **Figure 2.0-3**. The pipeline would change in elevation from approximately 1,380 feet above mean sea level (amsl) and to approximately 1,500 feet amsl.

Construction

For all proposed pipeline construction, the pipelines would be constructed using traditional cut and cover methods.

An excavator would create an approximate a 5-foot-wide trench within the existing roadway right-of-way and removed soils would be temporarily stored along the trench. Work crews would place the pipe in the trench, combined together if applicable, and then backfill the trench with a loader or backhoe. Finally, the soil would be compacted to match existing grade. The road would be restored to preconstruction conditions after installing the pipeline and backfilling the trench. The temporary disturbance zone associated with pipe installation would be approximately 10 feet wide.

During construction of the proposed Project, construction equipment would need to be stored at the end of each day. All construction staging areas would be located above the high water mark and would include best management practice measures, including but not limited to hay bales, to ensure no fuels or oils are collected in runoff.

The Project has proposed three (3) staging areas, as shown on **Figure 2.0-3** and discussed below:

Staging Area 1

Staging area 1 is located at the west end of Westridge Parkway, approximately 135 feet from the northern end of the proposed pipeline. The area is approximately 0.2 acres in size and located within the paved portion of the street. The end of the street would be temporarily locked secured with fencing for safety.

Staging Area 2

The second staging area is located adjacent to the Valencia Water company's domestic water tank. The site is currently a dirt lot, approximately 0.5 acres in size, with only one entrance through a gate driveway connected to Westridge Parkway.

Staging Area 3

Staging area 3 is located at the west end of Valencia Boulevard, at the southern end of the pipeline. The staging area is approximately 0.3 acres in size, located within the existing paved portion of Valencia Boulevard, and would be secured with fencing for safety.

Project Schedule

Construction would last approximately 2 months, with approximately 150 linear feet of pipeline constructed each day. Construction of the proposed Project is expected to begin in 2017.

Work would be coordinated with the Los Angeles County Department of Public Works to ensure adequate traffic control measures along the main roadways. Pipeline construction would occur between 7:00 AM and 4:00 PM, Monday through Friday. Pipeline installation operations would include backhoes, dump trucks, excavators, welders, and compaction machines. Operation-related trips would generate up to a single vehicle trip per week for the proposed pipeline infrastructure.

2.4 OTHER PUBLIC AGENCY–REQUIRED APPROVALS

The proposed pipeline alignment would occur in the public roadway right-of-way. An encroachment permit from the County of Los Angeles Department of Public Works will be required prior to construction of the pipeline. A recycled water project permit from the Regional Water Quality Control Board will be required. Other permits that would be required for the proposed Project, but could be the contractor's responsibility, are General Construction Storm Water Permit from the Los Angeles Regional Water Quality Control Board and Trenching and Excavation Permit from the California Division of Occupational Safety and Health.

The following approvals and actions are required:

- Adoption of the Mitigated Negative Declaration

3.0 ENVIRONMENTAL SETTING

3.1 EXISTING CONDITIONS

The Project Site is located in unincorporated Los Angeles County, adjacent to the City of Santa Clarita, and is approximately 35 miles northwest of downtown Los Angeles. The Santa Clarita Valley is surrounded by the Angeles National Forest to the north and west; the San Gabriel Mountains to the east; and the Santa Susana Mountains to the south.

The Project Site is located within the northern portion of Stevenson Ranch within the public right-of-way and the pipeline will extend for approximately 5,000 feet, beginning along Westridge Parkway near Recycled Water Reservoir No. 1 and ending at the western end of Valencia Boulevard. Three construction staging areas would be included as part of the Project Site, two near Recycled Water Reservoir No. 1 and one at the western end of the proposed pipeline along Valencia Boulevard.

Westridge Parkway and Old Rock Road are side streets that allow access to neighborhoods. Valencia Boulevard is considered a Major Highway.¹

Currently, Westridge Parkway is four lanes, and Old Rock Road is two lanes. Valencia Boulevard currently is six lanes. A new six-lane Major Highway is planned between Long Canyon Road and the existing Valencia Boulevard terminus just west of Boulder Crest Drive at full build-out of the Santa Clarita Valley Area Plan.²

All roadways are paved, and some sections along Valencia Boulevard include a landscaped striped median separating the direction of travel.

3.1.1 Pipeline

The majority of the areas adjacent to the proposed pipeline alignment are disturbed due to either residential or public facilities development. Topography along the pipeline alignment ranges from 1,380 to 1,520 feet above mean sea level.

Soils adjacent to the alignment consist of silty clay loams and loam.³ No creeks or bodies of water are located near the proposed Project. Vegetation along the Westridge Parkway, Old Rock Road, and Valencia Boulevard primarily consists of ruderal and landscaped ornamental vegetation associated with the existing residential communities. No habitat is located within the pipeline alignment as it is paved asphalt.

1 County of Los Angeles Department of Regional Planning, *Santa Clarita Valley Area Plan Update*, "Circulation Element" (2012), Table C-2.

2 County of Los Angeles Department of Regional Planning, *Santa Clarita Valley Area Plan Update*, "Circulation Element" (2012), Table C-3.

3 US Department of Agriculture, Natural Resources Conservation Service, *Web Soil Survey*, <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

The proposed pump station location consists of the Recycled Water Reservoir No. 1 to the southwest, paved access areas adjacent to the Recycled Water Reservoir No. 1, and ornamental landscaping to the north along Westridge Parkway.

The northern portion of the proposed alignment includes single-family residential uses located to the north of Westridge Parkway and the existing Recycled Water Reservoir No. 1 site located to the south of Westridge Parkway. The area south of the Recycled Water Reservoir No. 1 includes residential uses along both sides of Westridge Parkway. An existing park with a parking lot and swimming pool and Oaks Hills Elementary School are located along the southern portion of Old Rock Road. West Ranch High School is located to the north of Old Rock Road and Valencia Boulevard. West Ranch High School and Rancho Pico Junior High School border Valencia Boulevard to the north and south, respectively.

The existing land use designation for the proposed Project is Residential 5 (0-5 du/ac, H5) and Public and Semi-Public (P).⁴

The California Government Code exempts the development of water infrastructure projects initiated by water agencies from County and City building and zoning ordinances.⁵

3.1.2 Staging Area 1

Staging area 1 is located on at the west end of Westridge Parkway, approximately 135 feet from the northern portion of the proposed Project. The staging area is approximately 0.2 acres in size and lies within the paved portion of the street. This area will be fenced off while being used as a staging area.

The land use designation for this area is Residential 2 (H2, 0-2 du/ac).⁶ The site is not zoned because it is within the roadway. Residential Planned Development (RPD-8500-5.1U) is located adjacent to the staging area.⁷

3.1.3 Staging Area 2

Staging area 2 is located within the Recycled Water Reservoir No. 1 site. The area is currently a dirt lot, approximately 0.5 acres in size, with a gated entrance from Westridge Parkway.

4 *Santa Clarita Valley Area Plan, Maps, Land Use Policy Map (2012),*
http://planning.lacounty.gov/assets/upl/project/ovov_2012-land-use-map.pdf.

5 California Government Code. sec. 53091(d) and (e).

6 *Santa Clarita Valley Area Plan, Maps, Land Use Policy Map (2012),*
http://planning.lacounty.gov/assets/upl/project/ovov_2012-land-use-map.pdf.

7 *Santa Clarita Valley Area Plan, Maps, Zoning Map (2012),* http://planning.lacounty.gov/assets/upl/project/ovov_2012-zoning-map.pdf.

The land use designation for this area is Residential 2 (H2, 0-2 du/ac) and Public and Semi-Public (P)⁸ and the zoning is Residential Planned Development (RPD-8500-5.1U).⁹

3.1.4 Staging Area 3

Staging area 3 is located at the west end of Valencia Boulevard, adjacent to the southern portion of the proposed Project. The staging area is approximately 0.3 acres in size within the paved portion of the roadway. This area will be fenced off while being used as a staging area.

The land use designation is Public and Semi-Public (P).¹⁰ The site is not zoned because it is within the roadway. Heavy Agriculture (A-2-5) is located adjacent to this area.¹¹

3.2 APPLICABLE PLANNING DOCUMENTS

3.2.1 Santa Clarita Valley Area Plan

The Santa Clarita Valley Area Plan (SCVAP) is a component of the Los Angeles County General Plan and provides focused goals, policies, and maps to guide the regulation of development within the unincorporated portions of the Santa Clarita Valley. The SCVAP is a long-term blueprint for development over the next 20-year planning period. The SCVAP is the culmination of a unique cooperative effort between the County of Los Angeles (“County”) and the City of Santa Clarita (“City”), which worked together to create a unified vision for the Santa Clarita Valley. The Santa Clarita City Council and Los Angeles County Board of Supervisors initiated this joint planning effort, called One Valley One Vision, in recognition of a mutual need to coordinate land uses and the pace of development with the provision of adequate infrastructure, conservation of natural resources, and common objectives for the Santa Clarita Valley. Major goals of the One Valley One Vision joint planning effort were to achieve greater cooperation between the County and the City; coordinate planning for roadways, infrastructure, and resource management; and enhance quality of life for all who live and work in the Santa Clarita Valley. The SCVAP was adopted by the Board of Supervisors on November 27, 2012. The SCVAP amendment and related zone changes took effect on December 27, 2012.¹²

8 *Santa Clarita Valley Area Plan*, Maps, Land Use Policy Map (2012), http://planning.lacounty.gov/assets/upl/project/ovov_2012-land-use-map.pdf.

9 *Santa Clarita Valley Area Plan*, Maps, Zoning Map (2012), http://planning.lacounty.gov/assets/upl/project/ovov_2012-zoning-map.pdf.

10 *Santa Clarita Valley Area Plan*, Maps, Land Use Policy Map (2012), http://planning.lacounty.gov/assets/upl/project/ovov_2012-land-use-map.pdf.

11 *Santa Clarita Valley Area Plan*, Maps, Zoning Map (2012), http://planning.lacounty.gov/assets/upl/project/ovov_2012-zoning-map.pdf.

12 *Santa Clarita Valley Area Plan* (2012).

3.2.2 Final 2012 Air Quality Management Plan

The South Coast Air Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (“Basin”). As such, SCAQMD’s 2016 Air Quality Management Plan (AQMP) is the applicable air quality plan for the proposed Project. The Air District certified the Final Program EIR for the 2016 AQMP and adopted the 2016 AQMP, which was submitted into the California State Implementation Plan on March 3, 2017. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments, and cooperates actively with all State and federal government agencies to develop rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

To fulfill its commitments as a metropolitan planning organization under the Sustainable Communities and Climate Protection Act, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (“2016 RTP/SCS”). Projects that are consistent with the projections of employment and population forecasts identified in the Growth Management chapter of the RTP are considered consistent with the AQMP growth projections because the Growth Management chapter forms the basis of the land use and transportation control portions of the AQMP.¹³

3.2.3 Urban Water Management Plan

An Urban Water Management Plan (UWMP) guides the actions of water management agencies within the CLWA service area. The 2015 UWMP for the CLWA service area includes four retail water purveyors: the SCWD, Valencia Wastewater Company, Newhall County Water District, and Los Angeles County Waterworks District 36. Together, CLWA and the purveyors are the Santa Clarita Valley’s “water suppliers.” The 2015 UWMP was adopted by the CLWA Board of Directors on June 8, 2016. The 2015 UWMP includes estimations of potential supply and demand for 2020 to 2050 in 5-year increments. The projected water demand in 2050 for the CLWA service area is approximately 93,900 acre-feet per year.¹⁴

13 South Coast Air Quality Management District, 2016 *Air Quality Management Plan* (March 2017).

14 2015 *Santa Clarita Valley Urban Water Management Plan*, Public Draft (April 2016), <http://clwa.org/docs/wp-content/uploads/2016/04/DRAFT-2015-Urban-Water-Management-Plan.pdf>.

4.0 ENVIRONMENTAL CHECKLIST

4.1 SUMMARY

Pursuant to the California Environmental Quality Act (CEQA) Guidelines,¹ an Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining whether an Environmental Impact Report (EIR), a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The State CEQA Guidelines require that an Initial Study contain a project description; a location map; a description of the environmental setting; an identification of environmental effects by checklist or other similar form; an explanation of environmental effects; a discussion of mitigation for potentially significant environmental effects; an evaluation of the project's consistency with existing, applicable land use controls; and the names of persons who prepared the study.

4.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed Project COULD NOT have a significant effect on the environment, and is eligible for a Categorical Exemption.
<input type="checkbox"/>	I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

¹ California Code of Regulations, Title 14, Section 15063.

<input type="checkbox"/>	I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Matthew J. [Signature]
Signature

5/2/17
Date

5.0 ENVIRONMENTAL ANALYSIS

This section provides an evaluation of the various topics considered for environmental review.

1. A brief explanation for the determination of significance is provided for all impact determinations except “No Impact” determinations that are adequately supported by the information sources the Lead Agency (Castaic Lake Water Agency) cites in the parentheses following each question. A “No Impact” determination is adequately supported if the referenced information sources show that the impact simply does not apply to the proposed project (e.g., the project falls outside a fault rupture zone). A “No Impact” determination includes an explanation of its bases relative to project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the Lead Agency has determined that a particular physical impact may occur, then the checklist indicates whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering of a program EIR (PEIR) or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

- c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

5.1 AESTHETICS

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

Discussion

a. Less Than Significant with Mitigation.

Scenic resources typically include natural open spaces, topographic formations, and landscapes that contribute to a high level of visual quality. They also can include ridgelines, parks, trails, nature preserves, sculpture gardens, and similar features. Views of oak, willow, and sycamore groves are identified in the Santa Clarita Valley Area Plan (SCVAP) as a scenic view to its residents and visitors.² The Project Site is located within unincorporated Los Angeles County in the Santa Susana Mountains, specifically in Stevenson Ranch area. The proposed Project would loop around an area in the northern portion of Stevenson Ranch from an enclosed pump station along Westridge Parkway, south to the western end of Valencia Boulevard.

The Project Site is located within the Santa Clara Watershed, watershed number 18070102.³ According to the National Wild and Scenic Rivers System,⁴ the proposed Project is approximately 19 miles from the closest wild and scenic river, which is a portion of Piru Creek.⁵ Therefore, the proposed Project would not impact a designated Wild and Scenic River. Therefore, impacts would be less than significant.

The proposed Project would involve the installation of a 12-inch water pipeline extension in Westridge Parkway, Old Rock Road, and Valencia Boulevard. The construction of the proposed pipeline would be short term in nature and the construction equipment would be stored at the staging areas overnight. The

² Santa Clarita Valley Area Plan, *Scenic Resources* (2012), 157.

³ US Geological Survey (USGS), *Science in your Watershed* (2014), <http://water.usgs.gov/wsc/ca>. Accessed March 2017.

⁴ Public Law 90-542; 16 U.S.C. 1271 et seq.

⁵ National Wild and Scenic Rivers System. <https://www.rivers.gov>. Accessed March 2017.

temporary use of the construction staging areas would also be short term in nature and would not block or obstruct views of the surrounding hillsides. Mitigation Measure **AES-1.a** would ensure that the roadways would be repaired and restored upon completion of the construction activities, consistent with the requirements of the encroachment permits from the Los Angeles County Department of Public Works. The enclosed pump station would be less than 1,000 square feet, one story, and would not impede views of surrounding areas. Additionally, Mitigation Measure **AES-1.b** would reduce potential impacts to scenic vistas with implementation of a landscape plan. Views of scenic vistas would remain unchanged. Additionally, the elevations of the surrounding mountains, as indicated in the SCVAP, would remain to provide a scenic backdrop to the County and City residents without detriment from development of the proposed water pipeline extension.⁶ Impacts from the proposed Project to scenic vistas would be less than significant.

Mitigation Measures: The following mitigation measure shall be implemented.

- AES-1**
- a) Following construction activities, CLWA shall attempt to restore disturbed areas ground surface areas to preexisting conditions to the maximum extent practicable by repaving roadways, replanting trees, and/or reseeding with a native seed mix typical of the immediate surrounding area.
 - b) During facility design, CLWA shall prepare a landscape plan for the pump station facility. 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 palette. Vegetation screening shall be included in the landscape plan in order to shield proposed aboveground facilities from public view. Following construction, CLWA shall restore the vegetation removed as a result of construction activities. The replanting shall be monitored by a qualified biologist. CLWA shall monitor the emergent vegetation to ensure that the restoration is successful. If the plants fail to recover within 2 years, CLWA shall develop and implement a restoration plan in coordination with CDFW to ensure the area is fully restored.

b. No Impact.

The nearest eligible scenic highway is Interstate 5 (I-5), which runs north–south and is listed as “Eligible State Scenic Highways–Not Officially Designated” from where Interstate 210 meets I-5 to where State Route 126 meets I-5. The I-5 is located approximately 1 mile east of the Project Site. Construction and

⁶ Santa Clarita Valley Area Plan, Appendix II: Maps, *Hillsides and Designated Ridgelines*, Exhibit CO-1 (2012).

development of the proposed Project would not be visible from the I-5 and, as such, would not impact trees, rock outcroppings, or historic buildings within a State scenic highway.⁷ No significant impacts to scenic resources within a scenic highway would occur.

Mitigation Measures: No mitigation measures are required.

c. Less Than Significant with Mitigation.

Trenching and pipeline connection activities would last for approximately 1 month, and as such, would be temporary and short-term in nature. Storage of construction equipment at the staging areas would include temporary fencing, as appropriate, for security. The short-term storage of equipment would not obstruct or block views of scenic resources including views of surrounding hillsides. As noted previously, Mitigation Measure **AES-1.a** would ensure the roadway would be repaired and restored upon completion of construction activities, similar to existing conditions. Construction-related aesthetic impacts would be less than significant with mitigation.

The proposed 12-inch PVC or DIP recycled water pipeline would be connected to the proposed pumping station, extend east along Westridge Parkway, south along Old Rock Road, and then west along Valencia Boulevard. The recycled water pipeline would be located belowground within the public roadway right-of-way and would not be visible. The proposed enclosed pump station would be located adjacent to the west of an existing reservoir tank on an existing concrete pad. Views of the proposed pump station would be obstructed from the north by existing landscaping along Westridge Parkway. Therefore, impacts to the existing visual characteristic and quality of the site and surroundings would be less than significant.

Mitigation Measures: Mitigation Measure **AES-1.a** shall be implemented.

d. Less Than Significant with Mitigation.

Glare is generated during the day from reflective surfaces. Light pollution occurs when nighttime views of the stars and sky are diminished by an over-abundance of light coming from the ground. Construction activities would take place during daylight hours, typically between 7:00 AM and 4:00 PM. Potential glare generated during construction activities would be consistent with existing vehicle traffic traveling along Westridge Parkway, Old Rock Road, and Valencia Boulevard. Furthermore, implementation of Mitigation Measure **AES-2** requires low-reflective paint on the pump station. Therefore, glare impacts would be less than significant with mitigation.

⁷ Department of Transportation (DOT), "California Scenic Highway Mapping System" http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed June 2016.

As previously discussed, no construction activities would occur during nighttime hours. However, if security lighting is needed for the pump station, lighting would be shielded to avoid glare impacts to local areas in accordance with Mitigation Measure **AES-3**. There would be no permanent light or glare upon completion of the proposed Project because the recycled water pipeline would be located beneath the paved street. The pump station would be equipped with motion detection lighting for security. These lights would be directed downward and would only be triggered upon movement around the pump station. Nighttime lighting impacts would be less than significant with mitigation.

Mitigation Measures: The following mitigation measures shall be implemented.

AES-2 Aboveground facilities exterior, including the pump station, shall be finished with a nonreflective material in an earth tone that blends in with the natural environment.

AES-3 Any necessary security lighting during construction or operation of the pump station shall be designed to be consistent with County zoning codes and applicable design guidelines and to minimize glare to adjacent areas. Construction activities shall be restricted to daytime hours on residential streets. If nighttime construction is required, temporary lighting must be directed onto the worksite and avoid any spillover light or glare onto adjacent properties.

5.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
AGRICULTURE AND FORESTRY RESOURCES – Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forestland or conversion of forestland to nonforest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature could result in conversion of Farmland, to nonagricultural use or conversion of forestland to nonforest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. No Impact.

The Project Site is not currently used for agricultural operations. According to the California Department of Conservation “Los Angeles County Important Farmland 2014” map, the proposed staging areas are designated as “Urban and Built-Up Land” or “Grazing Land.” Staging area 1 and a portion of the proposed pipeline is designated as “Grazing Land.”⁸ The proposed Project is located in previously disturbed areas and along roadways and asphalt. None of the Project Site is designated as Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. Accordingly, no impacts would occur.

Mitigation Measures: No mitigation measures are required.

⁸ California Department of Conservation (DOC), Division of Land Resource Protection, Los Angeles County Important Farmland 2014 (April 2016) and “California Important Farmland Finder” <http://maps.conservation.ca.gov/ciff/ciff.html>. Accessed March 2017.

b. No Impact.

As identified in **Figure 2.0-3**, none of the staging areas or areas that the proposed pipeline crosses, are zoned agricultural or have agricultural uses. The use of the property to store construction equipment would be temporary and would not result in a permanent conflict with the existing zoning designation. Therefore, no impact would occur.

The proposed Project is not subject to a Williamson Act contract.⁹ Accordingly, no impacts would occur.

Mitigation Measures: No mitigation measures are required.

c. No Impact.

None of the Project area is currently designated as, or located near land designated for, forest, timberland, or timberland zoned Timberland Production.¹⁰ The land uses surrounding the Project Site include urban residential, public/semi-public, and open space uses. Therefore, the proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Accordingly, no impacts would occur.

Mitigation Measures: No mitigation measures are required.

d. No Impact.

As previously discussed, the Project Site is not located within a forest area. All construction activities would occur within the public roadway right-of-way and the storage of construction equipment would not result in the loss of existing trees. None of the proposed construction activities would result in the loss of forestland or in the conversion of forestland to nonforest use.¹¹

Projects are subject to the Farmland Protection Policy Act (FPPA) requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency.¹² The proposed Project does not contain farmland within its

9 California Department of Conservation (DOC), Division of Land Resource Protection, Los Angeles County Williamson Act FY 2015/2016 (April 2016), ftp://ftp.consrv.ca.gov/pub/dlrp/wa/2012%20Statewide%20Map/WA_2012_11x17.pdf. Accessed March 2017.

10 Santa Clarita Valley Area Plan, Maps, Zoning Map (2012), http://planning.lacounty.gov/assets/upl/project/ovov_2012-zoning-map.pdf.

11 Santa Clarita Valley Area Plan, Maps, Zoning Map (2012), http://planning.lacounty.gov/assets/upl/project/ovov_2012-zoning-map.pdf.

12 US Department of Agriculture, Farmland Protection Policy Act, http://www.nrcs.usda.gov/wps/portal/nrcs/detail/?cid=nrcs143_008275. Accessed March 2017.

boundaries and, as such, is not subject to the FPPA. Also, according to the National Forest Locator Map, the closest National Forest is the Angeles National Forest to the north and west of the Project Site, but no part of the proposed Project itself is located within any National Forests.¹³ Accordingly, no impacts would occur.

Mitigation Measures: No mitigation measures are required.

e. No Impact.

As previously noted, the Project Site is not designated as either farmland or forestland and does not involve farming or forestry operations. Furthermore, there are no agriculture or forestry operations in the vicinity of the Project Site. Therefore, no such land would be converted and no impacts would occur.

Mitigation Measures: No mitigation measures are required.

13 US National Forest, Locator Map (2015), <http://www.fs.fed.us/locatormap/>. Accessed March 2017.

5.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less Than Significant Impact.

The SCAQMD is the regional agency that provides air quality guidance with jurisdiction over the entire County. The most recently adopted comprehensive plan applicable to the proposed Project is the 2016 AQMP.¹⁴ Regional growth projections are used by SCAQMD to forecast future emission levels in the South Coast Air Basin. The AQMP is implemented to meet the federal and State emission standards identified in both Clean Air Acts.

The proposed Project would utilize recycled water from the Santa Clarita Valley Sanitation District's Valencia WRP to serve existing customers within the Stevenson Ranch area within the County of Los Angeles. This water supply would not directly or indirectly induce population growth within the County because the pipeline would serve existing communities and public facilities. As discussed in the analysis in Section 5.3(b), the emissions generated by the proposed Project would not exceed applicable emissions thresholds, and as such, would not conflict with the SCAQMD AQMP or the federal or State Clean Air Acts. As described previously, the proposed Project would meet the objectives and policies of the AQMP and would not establish new or modified permitted sources of nonattainment air contaminants or precursors.

¹⁴ South Coast Air Quality Management District, Final 2016 Air Quality Management Plan, March 2017.

Therefore, the proposed Project would not conflict with the population projections identified within the latest SCAQMD AQMP. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impact.

The Project Site is located in the Santa Clarita Valley (Source Receptor Area 13)¹⁵ within the South Coast Air Basin, which is designated as nonattainment for ozone and fine particulate matter (PM_{2.5}) under the National Ambient Air Quality Standards (AAQS), as well as particulate matter (PM₁₀) under the California Air Quality Standards.¹⁶ The SCAQMD established maximum mass daily thresholds of criteria air pollutants and ozone precursors to prevent air quality violations during construction and operation of development projects under CEQA.¹⁷ Maximum daily emissions of air pollutants that would be generated during construction and operation of the proposed Project were compared to the applicable thresholds to determine the likelihood of potential air quality impacts.

Construction Emissions

The California Emissions Estimator Model (CalEEMod) was used to prepare estimates of proposed Project emissions. The analysis assumes that approximately 5,000 linear feet of proposed pipeline would be completed in approximately 2 months, with approximately 150 linear feet of pipeline constructed each working day. The construction equipment inventory for the proposed Project is anticipated to include four to eight pieces of equipment (eight assumed for CalEEMod) including the use of two back hoes, two dump trucks, two excavators, two compaction machines, welder, paver, grader, and signal board. All construction equipment was assumed to meet CARB Tier 3 fleet requirements, and fugitive dust control techniques compliant with SCAQMD Rule 403 were applied to construction activities (i.e., watering of storage piles and disturbed surfaces, maintaining vehicle speeds under 15 miles per hour). It was assumed that a total of ten vehicle trips per day during construction would occur.

The maximum daily emissions during proposed Project construction are presented in **Table 5.3-1, Maximum Daily Construction Emissions (pounds/day)**. Maximum daily emissions of air pollutants that would result from construction activities were estimated to be 0.5 pounds per day of volatile organic compounds (VOC), 8.5 pounds per day of nitrous oxides (NO_x), 10.5 pounds per day of carbon monoxide

15 South Coast Air Quality Management District, General Forecast Areas and Air Monitoring Areas, <http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf>. Accessed June 2016.

16 California Environmental Protection Agency (CalEPA), Air Quality Standards and Area Designation (December 2015), <http://www.arb.ca.gov/desig/adm/adm.htm>.

17 South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds (March 2015), <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.

(CO), 0.0 pounds per day of sulfur dioxide (SO₂), 0.7 pounds per day of PM₁₀, and 0.6 pounds per day of PM_{2.5}. Each of these estimates is compared to the applicable SCAQMD mass daily emission thresholds for construction activities in **Table 5.3-1**. Maximum daily estimated emissions would be below the SCAQMD threshold for all modeled air pollutants. Accordingly, emissions of air pollutants during proposed Project construction would not violate any air quality standard or contribute substantially to an existing air quality violation. Impacts would be less than significant.

Table 5.3-1
Maximum Daily Construction Emissions (pounds/day)

Year	ROG	NOx	CO	SOx	PM10	PM2.5
2016	0.5	8.5	10.5	0.0	0.7	0.6
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

*Air Emissions Model Results are presented in **Appendix A**.*

Note:

Abbreviations: CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; ROG = reactive organic gases; SOx = sulfur oxides.

Operational Emissions

Operational emissions would be generated by routine maintenance vehicle trips to service the water meter and pipeline. The analysis of daily operational emissions has been prepared using the data, methodologies, and current motor vehicle emission factors in the CalEEMod model. For a conservative analysis, a total of a single vehicle trip was assumed to be generated each week during operation of the proposed Project. The proposed Project would also be required to comply with SCAQMD Rule 1113 to limit VOC content of architectural coatings; SCAQMD Rule 201 which, requires a Permit To Construct if a backup generator or engine would be installed that is greater than 50 brake horsepower in the event that the electricity to the pumping plant is interrupted; and SCAQMD Rule 402, which prohibits the discharge from a facility of air pollutants that cause injury, detriment, nuisance, or annoyance to the public or that damage business or property. **Table 5.3-2, Maximum Operational Emissions (pounds/day)**, provides the maximum daily operational emissions. As indicated in **Table 5.3-2**, the proposed Project would not exceed the SCAQMD operational emission thresholds nor would it come close to the NOx threshold. Accordingly, impacts would be less than significant.

Table 5.3-2
Maximum Operational Emissions (pounds/day)

Source	ROG	NOx	CO	SOx	PM10	PM2.5
Maximum	0.7	0.7	0.7	0.0	0.1	0.1
SBCAPCD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

*Air Emissions Model Results are presented in **Appendix A**.*

Note:

Abbreviations: CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; ROG = reactive organic gases; SOx = sulfur oxides.

Mitigation Measures: No mitigation measures are required.

c. Less Than Significant Impact.

Los Angeles County is in nonattainment for ozone, PM10, and PM2.5 at the State level. Projects that do not exceed the project-level emission thresholds would not contribute to cumulatively significant air quality impacts. As shown in **Table 5.3-1** and **Table 5.3-2**, all emissions associated with the proposed Project would not exceed the SCAMQD threshold values and would, therefore, not result in a cumulatively considerable net increase of any criteria pollutant. Accordingly, the proposed Project would not contribute to a cumulatively considerable net increase in ozone, PM10, or PM2.5. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

d. Less Than Significant Impact.

Sensitive receptors are defined as schools, residential homes, hospitals, resident care facilities, daycare centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. The proposed water pipeline would be constructed along Westridge Parkway, Old Rock Road, and Valencia Boulevard. There are residential and institutional uses located along Westridge Parkway and Old Rock Road within 50 to 75 feet of the proposed pipeline route. However, approximately 150-foot segments of the pipeline would be completed each day, and thus the proximity of construction equipment will not remain nearby a single residence for more than a week. Furthermore, maximum daily emissions are substantially below applicable SCAQMD thresholds. Therefore, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

e. Less Than Significant Impact.

According to the California Air Resources Board's *Air Quality and Land Use Handbook*,¹⁸ odors are the most common sources of air pollution complaints and as with other types of air pollution, a number of factors need to be considered when determining potential effects on land use. Land uses that are more likely to produce odors include agriculture, chemical plants, composting operations, dairies, fiberglass molding, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants.

Construction activities associated with the proposed Project would generate odors from heavy-duty equipment exhaust including diesel and gasoline. Odors associated with diesel and gasoline fumes are transitory in nature and would not create objectionable odors affecting a substantial number of people. The impacts from these odors would be short term and would cease upon the completion of the proposed Project. The pumping plant would use electric motors and there would be no associated emission source at the site. Accordingly, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

18 CalEPA, California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective* (2005), 32.

5.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES – Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. Less Than Significant with Mitigation.

Special-status species include those listed as endangered or threatened under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), species otherwise given certain designations by the California Department of Fish and Wildlife (CDFW), and plant species listed as rare by the California Native Plant Society (CNPS).

Standard database searches were conducted to determine if sensitive species were present in the Project Site, including that of the California Natural Diversity Database (CNDDB). The CNDDB lists historical and recently recorded occurrences of special-status animal and special-status plant species. The database

searches included the Newhall and Val Verde United States Geological Survey (USGS) 7.5-minute quadrangle, in which the Project Site is located, as well the six surrounding quadrangles: Whitaker Peak, Warm Springs Mountain, Mint Canyon, San Fernando, Green Valley, Santa Susana, and Oat Mountain. Based on the review of the CNDDDB, four species were identified within 5 miles of the Project Site including San Fernando Valley spineflower (*Chorizanthe parryi* var. *Fernandina*), California Orcutt grass (*Orcuttia californica*), Nevin's barberry (*Berberis nevinii*), and slender-horned spineflower (*Dodecahema leptoceras*). No endangered, threatened, or special-status plants or animal species were identified within the Project Site; however, potential habitat for sensitive species was identified in the Project area within a 5-mile radius.

Developed areas represent the majority of the ROW along the proposed alignment. These areas consist of all paved areas including the road and paved shoulder, gutters, curbs, and sidewalks. Developed areas include ornamental vegetation. The proposed enclosed pump station would be constructed, to the west of the reservoir on an adjacent existing concrete pad. The proposed pipeline and staging areas would be located within the ROW and were determined to have minimal to no potential impact on federally threatened or endangered species.

As discussed in the 2016 CLWA Draft PEIR, the unarmored threespine stickleback (UTS) is known to occur within the Santa Clara River. The UTS is a State and federally endangered species and a Fully Protected California species. No direct impacts would occur to the UTS as the Project Site is located approximately 1.5 miles southwest and up gradient from the Santa Clara River. However, the proposed Project has the potential to reduce treated discharge flows from the Valencia WRP into the Santa Clara River, and thus, have a potential indirect impact on the UTS and its habitat.

The average treatment of wastewater and resultant discharge at the Valencia WRP is 13.8 mgd. The proposed Project would use a portion of the discharge (approximately 0.2 mgd) from the Valencia WRP for recycled water use as the primary designated source of all recycled water in the RWMP. Thus, a reduction in the annual average of discharge to 13.6 mgd represents approximately 1.2 percent of current effluent levels from the Valencia WRP and 0.9 percent of the total from the Valencia WRP and Saugus WRP. Growth in effluent would occur as development within CLWA service boundaries increases, which would also increase discharge effluent into the river.

Accordingly, the proposed Project would result in less than significant indirect impacts to UTS.

Suitable bird nesting habitat is present along the proposed pipeline route and near the construction staging areas. Nesting birds are protected under the Migratory Bird Treaty Act (MTBA) and the California Department of Fish and Game Code and could be impacted by proposed Project activities when

construction occurs near nesting areas during the nesting season (February through August). Due to the proximity of proposed Project construction activities in relation to the identified species above, the proposed Project would have the potential for a significant impact on bird species.

If construction activities occur outside of the breeding season (February through August), then potential impacts on sensitive bird species would be less than significant. Impacts would be less than significant with the implementation of Mitigation Measure **BIO-1**.

Mitigation Measures: The following mitigation measure shall be implemented.

BIO-1 If construction or vegetation removal is proposed between February 1 and August 31, a qualified biologist shall conduct a pre-construction survey no more than 5 days prior to the start of ground-disturbing activities for breeding and nesting birds within 500 feet of the construction limits. The biologist shall locate and map the location of active nests or breeding territories that could be affected by the proposed plan. A 300-foot buffer shall be delineated around any active nest of any bird of the order *Passeriformes*, and a 500-foot buffer around an active nest of any raptor species. Buffer distances may be reduced at the qualified biologist's discretion, depending on the species' tolerance to human presence and the location of the nest. For example, a reduced buffer may be appropriate for a nest located near a high-use road. Buffers shall be delineated in the field with high-visibility fencing, such as orange-mesh snow drift fencing, and shall persist and be maintained until the adults and young are no longer reliant on the nest site for survival, as determined by a qualified biologist. The monitoring biologist or proposed plan compliance monitor shall inspect the integrity of the fence on a weekly basis. Any gaps in the fence shall be corrected within 24 hours following communication from the monitoring biologist or proposed plan compliance manager.

b. Less Than Significant Impact.

Riparian habitats line the banks of rivers, streams, creeks, and ponds and consist of a variety of vegetation types.¹⁹ These habitats preserve water quality by filtering sediment and some pollutants from runoff before it enters the water body, protect stream banks from erosion, provide food and habitat for fish and wildlife, and preserve open space and aesthetic values.

The proposed Project would be constructed within the existing right-of-way along Westridge Parkway, Old Rock Road, and Valencia Boulevard. The elevation of the proposed Project is 1,380 to 1,520 feet above

¹⁹ Santa Valley Clarita Area Plan, Biological Resources (2012).

mean sea level and located approximately 1.5 miles southwest of the Santa Clara River. Therefore, there would be no direct impact to riparian habitats or other sensitive natural community along the length of the Project Site because the area is already developed with paved roadways and ornamental landscaping and impacts would be less than significant.

As discussed in Section 5.4.a, reduced flow impacts from existing conditions would be less than significant on biological resources and the hydrology in the river downstream of the Valencia WRP. Indirect impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

c. No Impacts.

Section 404 of the Federal Clean Water Act authorizes the State of California to certify that Federal permits and licenses do not violate the State's water quality standards. Executive Order 11990 aids in the protection of wetlands existing or under evaluation by the U.S. Army Corps of Engineers (USACE).

The National Wetlands Mapper does not indicate any seasonally wet areas, federally protected streams or wetlands, or other water bodies on or adjacent to the Project Site.²⁰ Additionally, the Project Site would not adversely affect federally protected wetlands because the area contains roadway and water infrastructure uses. The proposed enclosed pump station would be located adjacent to an existing reservoir on a concrete pad. Construction staging areas would be located within the roadway right-of-way or adjacent to the existing reservoir. Accordingly, no impacts to wetlands would occur, and the proposed Project would be consistent with Section 404 of the Federal Clean Water Act and Executive Order 11990.

Mitigation Measures: No mitigation measures are required.

d. No Impact.

The proposed Project is located in an urban developed area of the County of Los Angeles. Construction of the proposed Project would last approximately 2 months. All activities would occur within existing paved roadway right-of-way. No trees would be removed as a result of construction activities. At the completion of construction, the pipeline would be located belowground and would not interfere with the movement of wildlife. As the pump station would be located adjacent to an existing tank and the pipelines would be located belowground, aboveground structures would not interfere with the movement of wildlife species. Therefore, no impacts would occur.

20 US Fish and Wildlife Service (USFWS), National Wetlands Mapper, 2017, <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed March 2017.

Mitigation Measures: No mitigation measures are required.

e. No Impact.

The nearest County of Los Angeles Significant Ecological Area (SEA) is the Valley Oaks Savannah.²¹ The proposed Project is located outside and to the north of the Valley Oaks Savannah. In addition, the Natural River Management Plan (NRMP) for the Santa Clara River was approved by the USACE to plan for the development and preservation of the natural resources and habitats along part of the main stem of the river to one-half mile east of the Los Angeles Department of Water and Power Aqueduct. The proposed Project is located approximately 1.5 miles southwest of the Santa Clara River and is outside the NRMP area. Therefore, the proposed Project would not interfere or conflict with any local policies or ordinances in protecting biological resources. No significant impact would occur.

Mitigation Measures: No mitigation measures are required.

f. No Impact.

The Project Site does not lie within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. As discussed in Section 5.4.e, the proposed Project would not conflict with any approved local, regional, or State plan. Therefore, no impacts would occur.

Mitigation Measures: No mitigation measures are required.

21 County of Los Angeles Department of Regional Planning, *Figure 9.3, Significant Ecological Areas and Coastal Resource Areas Policy Map* (February 2015).

5.5 CULTURAL RESOURCES

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

Discussion

a. Less Than Significant Impact.

A “historical resource” under CEQA, as defined by California Public Resources Code (PRC) Part 5020.1(j) is any object, building, site, area, place, record, or manuscript that is historically or archaeologically significant, or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. CEQA further defines a “historical resource” as any resource listed in or determined eligible for listing in the California Register of Historical Resources (CRHR), included in a local register of historical resources, or determined to be historically significant by the Lead Agency. Additionally, a resource would be automatically listed in the CRHR if it is listed in the National Register of Historic Places (NRHP) or formally determined eligible by an agency for listing in the NRHP. Under Section 106 of the National Historic Preservation Act, a “historic property” is defined as a resource that is listed in or determined by the lead federal agency to be eligible for listing in the NRHP. The NRHP recognizes properties that are historically significant at the local, State, or national level and uses criteria for evaluation that are similar to those of the California Register:

- Associated with events that have made a significant contribution to the broad patterns of our history (Criterion A)
- Associated with the lives of persons significant in our past (Criterion B)
- Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values (Criterion C)
- Has yielded, or may be likely to yield, information important in history or prehistory (Criterion D)

No locally designated historic resources are located within close proximity to the Project Site. The CRHR currently list 3 historical properties, sites, and landmarks in the City of Santa Clarita.²² The nearest local historic resource is Mentryville,²³ approximately 1.5 miles southwest of the Project Site. The identified historic resources are greater than 1.5 miles from the Project Site. Furthermore, Westridge Parkway, Old Rock Road, Valencia Boulevard, and the adjacent residential and community facility uses have been disturbed and graded for development. The trenching activities related to the construction of the proposed Project would occur in already-disturbed roadway rights-of-way and would not go below 6 feet below grade. As such, the potential to affect a historical resource is considered low. Therefore, potential impacts on historic resources would be less than significant.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant with Mitigation.

The Project Site and immediately surrounding areas do not contain any known archaeological sites or archaeological survey areas. The Project Site has been previously excavated and disturbed for roadways and water reservoirs. Thus, the potential for an impact to previously undisturbed archaeological materials is low. However, the proposed Project could uncover unknown archeological resources during grading and trenching activities; consequently, potential impacts could occur. Mitigation Measure **CUL-1** would temporarily suspend construction within the vicinity of the find and a professional archeologist would evaluate the nature and significance of the find. Proposed Project impacts to archeological resources would be less than significant with Mitigation Measure **CUL-1**.

Mitigation Measures: The following mitigation measure shall be implemented.

CUL-1: Inadvertent Discoveries. During construction, should subsurface archaeological resources be discovered, all activity in the vicinity of the find shall stop and the qualified archaeologist shall be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, the archaeologist shall determine, in consultation with CLWA and any local Native American groups expressing interest for prehistoric resources, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Methods of avoidance may include, but shall not be limited to,

22 California State Parks, Office of Historic Preservation, California Historical Resources, <http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=19>. Accessed July 24, 2016.

23 Los Angeles Department of Regional Planning, Historic Resources of Los Angeles County, <http://planning.lacounty.gov/preservation>. Accessed July 24, 2016.

rerouting or redesign, cancellation, or identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with CLWA and any local Native American representatives expressing interest in prehistoric archaeological resources. If an archaeological site does not qualify as a historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

c. Less Than Significant with Mitigation.

Westridge Parkway, Old Rock Road, Valencia Boulevard, and the adjacent residential and community facility uses have been disturbed and graded for development. The trenching activities related to the construction of the proposed Project would occur in already-disturbed roadway right-of-way and would not go below 6 feet below grade. As such, the potential to affect a unique paleontological resource or geologic feature is considered low. Based upon the low probability of discovery of potential paleontological resources, construction could potentially encounter unknown resources. Therefore, potential impacts on paleontological resources could occur. Implementation of Mitigation Measure **CUL-2** would divert ground-disturbing activities in the event of potential paleontological resources. Implementation of this mitigation would reduce impacts to less than significant.

Mitigation Measures: The following mitigation measure shall be implemented.

CUL-2: Inadvertent Discoveries. During construction, should paleontological resources be discovered when a paleontological monitor is not present, all activity in the vicinity of the find shall stop, an exclusion zone of 50 feet around the find shall be established, and the qualified paleontologist shall be contacted to assess the significance of the find. If any find is determined to be significant, the qualified paleontologist shall determine, in consultation with CLWA, appropriate avoidance measures or steps to salvage the resource quickly and safely.

d. Less Than Significant Impact.

The majority of ground disturbance resulting from the proposed Project would occur within the existing roadway right-of-way. Therefore, the potential to encounter human remains is low because this area has been disturbed by past roadway construction. Moreover, in accordance with the California Health and Safety Code and the Public Resources Code,²⁴ should human remains be discovered during trenching activities, trenching activities would immediately stop and the County Coroner would be contacted. The Coroner would have 2 working days to examine human remains after being notified by the responsible person. If the remains were found to be Native American, the Coroner would have 24 hours to notify the NAHC. The NAHC would immediately notify the person it believes to be the most likely descendent of the deceased Native American. The most likely descendent would have 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods. Should the descendent not make recommendations within 48 hours, the owner would reinter the remains in an area of the property secure from further disturbance; or should the owner not accept the descendant's recommendations, the owner or the descendent may request mediation by the NAHC. Therefore, potential impacts to human remains would be less than significant.

Mitigation Measures: No mitigation measures are required.

24 California Health and Safety Code, Sections 7050.5 and 5097.98.

5.6 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS – Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a.i No Impact.

The Santa Clarita Valley contains several known active and potentially active earthquake faults and fault zones. The San Gabriel Fault Zone is located in the City of Santa Clarita, greater than 2 miles northwest of the Project Site.²⁵ The nearest regional faults are the Del Valle and Holser Faults with numerous regional faults in the Santa Clarita Valley that are capable of producing strong seismically induced ground

²⁵ County of Los Angeles Department of Regional Planning, *Santa Clarita Valley Area Plan*, Exhibit S-1, Earthquake Faults (December 27, 2012).

shaking.²⁶ The Project Site is not located within an Alquist-Priolo Earthquake Fault Rupture Zone, as delineated by the California Geological Survey.²⁷ Because the Project Site is not located within a known earthquake fault or fault zone, no impacts from rupture of a fault on the proposed Project would occur.

Mitigation Measures: No mitigation measures are required.

a.ii. Less Than Significant Impact.

The area is subject to ground shaking and potential damage in the event of earthquakes. As noted previously, the most likely source of strong ground shaking within the region would be a major earthquake along the San Gabriel Fault Zone or from the Del Valle or Holser faults. Because the Project Site is located in a seismically active area, occasional seismic ground shaking is likely to occur within the lifetime of the proposed Project. Implementation of appropriate engineering design measures as required by the latest Standard Specifications for Public Works Construction “Greenbook”²⁸ and the *California Building Code* (CBC) would minimize potential structural failures caused by earthquakes or other geologic hazards. The proposed Project would be required to adhere to the provisions of the latest Greenbook and CBC. Compliance with the requirements of the latest Greenbook and CBC for structural safety during a seismic event would reduce hazards from strong seismic ground shaking. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

a.iii. Less Than Significant Impact.

Liquefaction refers to loose, saturated sand or gravel deposits that lose their load-supporting capability when subjected to intense shaking. Liquefaction usually occurs during or shortly after a large earthquake. The movement of saturated soils during seismic events from ground shaking can result in soil instability and possible structural damage.²⁹ The Project Site is located within an identified liquefaction zone.³⁰ However, the proposed pipeline would be located beneath the roadways and surrounded by certified base and fill and the design and construction of the proposed pipeline and pump station would be required to adhere to the latest Greenbook and CBC, which contains provisions for soil preparation to minimize hazards from liquefaction and other seismic-related ground failures. Accordingly, potential liquefaction impacts would be less than significant.

26 County of Los Angeles Department of Regional Planning, *Santa Clarita Valley Area Plan*, Exhibit S-1, Earthquake Faults (December 27, 2012).

27 California Department of Conservation (DOC), California Geological Survey, Regional Geological and Mapping Program (2015), <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>. Accessed July 2016.

28 Public Works Standards, Inc. 2015. *Standard Specifications for Public Works Construction*. BNi Publications, Inc.

29 Santa Clarita Valley Area Plan, Safety Element (2012).

30 Santa Clarita Valley Area Plan, Appendix II: Maps, *Seismic Hazards*, Exhibit S-3 (2012).

Mitigation Measures: No mitigation measures are required.

a.iv. Less Than Significant Impacts.

Landslides are the downslope movement of geologic materials that occur when the underlying geological support on a hillside can no longer maintain the load of material above it, causing a slope failure. The term landslide also commonly refers to a falling, sliding, or flowing mass of soil, rocks, water, and debris that may include mudslides and debris flows. The risks associated with landslides occur when buildings or structures are placed on slopes. The Project Site is located within an area susceptible to landslides.³¹ However, the proposed pipeline would be buried beneath roadways and the design and construction of the proposed pipeline and pump station would be required to adhere to the latest Greenbook and CBC, which contains provisions for soil preparation to minimize hazards from seismically-induced landslides. With adherence to the latest Greenbook and CBC, potential landslide impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impacts.

Erosion is the movement of rock fragments and soil from one place to another. Precipitation, running water, waves, and wind are all agents of erosion. Significant erosion typically occurs on steep slopes where storm water and high winds can carry topsoil down hillsides.

Construction of the proposed Project would result in the removal of soils from beneath Westridge Parkway, Old Rock Road, and Valencia Boulevard. Any fill removed from the pipeline trench would be stockpiled on site and replaced after the pipeline is installed. Standard best management practices as required under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity from Small Linear Underground Projects (Water Quality Order 2009-0009-DWQ, amended by 2010-0014-DWQ & 2012-0006-DWQ) would require covering of exposed material to minimize erosion impacts. Construction impacts would be less than significant with compliance to regulatory requirements.

The proposed pipeline would be located within the roadway right-of-way and the proposed pump station would be located on an existing concrete pad. As this would not occur within open space areas, there would be no loss of topsoil or soil erosion. No impact would occur during operation of the proposed Project.

31 Santa Clarita Valley Area Plan, Appendix II: Maps, *Seismic Hazards*, Exhibit S-3 (2012).

Mitigation Measures: No mitigation measures are required.

c. Less Than Significant Impact.

The proposed pipeline would be located within the roadway right-of-way. Where the pipeline would be installed beneath the paved road, the asphalt surface would be saw cut, and a backhoe would be used to excavate a trench for the pipe. The road would be restored to pre-construction conditions after installing the pipe and backfilling the trench. The proposed Project would not result in substantial hazards from unstable or expansive soils and would be required to adhere to the latest Greenbook and CBC, which contains provisions for soil preparation to minimize hazards from liquefaction and other unstable geologic features. With adherence to the latest Greenbook and CBC standards, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

d. Less Than Significant Impact.

Expansive soils contain significant amounts of clay particles that have the ability to give up water (shrink) or take on water (swell). When these soils swell, the change in volume can exert pressures that are placed on them, and structural distress and damage to buildings could occur. The proposed pipeline would be constructed beneath the existing roadway and right-of-way, which contains engineered fill. This fill material is not subject to significant expansion. Moreover, the impervious cover would minimize water infiltration, thereby minimizing soil expansion. The pump station would be located adjacent to the existing reservoir on an existing graded concrete pad. Finally, the proposed Project would be required to adhere to the latest Greenbook and CBC, which contains provisions for soil preparation to minimize hazards from soil expansion. Accordingly, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

e. No Impact.

Development of the proposed Project would not require the installation of a septic tank or alternative wastewater disposal system. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

5.7 GREENHOUSE GAS EMISSIONS

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

Discussion

a. Less Than Significant Impact.

The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H₂O). CO₂ is the reference gas for climate change because it is the predominant GHG emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e).

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, into law. AB 32 focuses on reducing GHG emissions in California, and requires the California Air Resources Board (CARB), the State agency charged with regulating Statewide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to Statewide levels in 1990 by 2020.

As a central requirement of AB 32, the CARB was assigned the task of developing a Scoping Plan that outlines the State's strategy to achieve the 2020 GHG emissions limit. The Scoping Plan, which was developed by CARB in coordination with the Cap-and-Trade program, was published in October 2008. The Scoping Plan proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce the State's dependence on oil, diversify the State's energy sources, save energy, create new jobs, and enhance public health. As required by AB 32, CARB must update its Scoping Plan every 5 years to ensure that California remains on the path toward a low-carbon future.

CARB updated the Scoping Plan in May 2014 through a Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED or 2014 Scoping Plan). CARB's updated projected "business as usual" (BAU) emissions in the 2014 Scoping Plan are based on current economic forecasts (i.e., as

influenced by the economic downturn) and certain GHG reduction measures already in place. The BAU projection for 2020 GHG emissions in California was originally estimated to be 596 MMTCO₂e. The updated calculation of the 2014 Scoping Plan's estimates for projected emissions in 2020 totals 509 MMTCO₂e. Considering the updated BAU estimate of 509 MMTCO₂e by 2020, CARB estimates that the State would have to reduce GHG emissions by 21.6 percent from BAU without Pavley regulations which reduce GHG emissions in new passenger vehicles and the 33 percent renewable portfolio standard (RPS), or 15.7 percent from the adjusted baseline (i.e., with Pavley regulations and 33 percent RPS) to return to 1990 emission levels (i.e., 427 MMTCO₂e) by 2020, instead of the 28.35 percent BAU reduction previously reported under the Scoping Plan.³² Further, Executive Order B-30-15 requires that California attain a reduction in GHG emissions of 40 percent below 1990 levels by 2030. Using the 40 percent below 1990 levels by 2030 reduction target, a project built out at 2030 would need to reach a bright-line threshold that is 40 percent below the 3,000 MTCO₂e per year threshold, or 1,800 MTCO₂e per year.

The Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375) supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

There are no federal, State, or local adopted thresholds of significance for addressing an infrastructure project's GHG emissions. Furthermore, neither the SCAQMD nor the CEQA Guidelines Amendments adopted by the Natural Resources Agency on December 30, 2009, provide any adopted thresholds of significance for addressing a project's GHG emissions. Nonetheless, Section 15064.4 of the CEQA Guidelines Amendments serves to assist lead agencies in determining the significance of the impacts of GHGs. Because CLWA does not have an adopted quantitative threshold of significance for a project's generation of GHG emissions, the following analysis is based on a combination of the requirements outlined in the *CEQA Guidelines*. As required in Section 15604.4 of the *CEQA Guidelines*, this analysis includes an impact determination based on the following: (1) an estimate of the amount of GHG emissions resulting from the proposed Project; (2) a qualitative analysis or performance-based standards; (3) a quantification of the extent to which the proposed Project increases GHG emissions as compared to the existing environmental setting; and (4) the extent to which the proposed Project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CalEEMod was utilized to prepare estimates of GHG emissions that would be generated by the construction of the proposed Project. Because construction would take place over approximately 2 months, emissions of GHGs generated by the proposed Project would be limited to the year 2017. Results of emissions modeling determined that construction of the proposed Project would result in

32 California Air Resources Board (CARB), Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED) (May 2014), Attachment D, p. 11.

approximately 37.5 MTCO₂e (see **Appendix A, Air Quality Modeling Results**). Operational emissions of GHGs would be limited to the maintenance of the pipeline extension, and were calculated to be 163.1 MTCO₂e per year following the completion of construction. The GHG emissions that would result from Project implementation are substantially below the recommended CAPCOA screening threshold of 900 MTCO₂e per year, the SCAQMD interim annual threshold of 3,000 MTCO₂e, and the 40 percent below threshold of 1,800 MTCO₂e. Accordingly, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impact.

As noted in discussion 7a above, the proposed Project would generate emissions below the CAPCOA screening threshold, the SCAQMD interim annual threshold of 3,000 MTCO₂e, and the 40 percent below threshold of 1,800 MTCO₂e. Therefore, the proposed Project would not conflict with an applicable plan, policy, or regulation for the purposes of reducing the emissions of GHGs. Accordingly, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

5.8 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to <i>Government Code</i> Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less Than Significant Impact.

Hazardous materials include any substance or combination of substances that may cause or significantly contribute to an increase in death or serious injury, or pose substantial hazards to humans and/or the environment.³³ The proposed pipeline and pump station would carry and deliver recycled water that has been chlorinated as part of the disinfection process. The recycled water would comply with Title 17 and

³³ Santa Clarita Valley Area Plan, Safety Element (2012).

Title 22 regulations of the California Water Code, which protects drinking water supplies through control of cross-connections with potential containments and establishes the quality and/or treatment processes required for an effluent to be used for a nonpotable application, respectively.³⁴ However, the concentration of chlorine in the distribution lines would not be at a level considered hazardous; therefore, no aspect of the proposed Project would involve the use of hazardous materials, and the proposed Project would not create a hazard-related to exposure to hazardous materials. Potential impacts would be less than significant with compliance to the applicable regulatory requirements.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impact.

As discussed in 5.8.a, the recycled water would comply with Title 17 and Title 22 regulations and the design of the proposed pipeline and pump station would be consistent with latest Greenbook and CBC standards. In the event of a release of water from a burst pipeline or pump station resulting from a seismic event, concentrations of chlorine within the distribution system would not be high enough to be considered hazardous. Therefore, impacts related to hazardous materials being released into the environment from the rupture of the pipeline would be less than significant.

Mitigation Measures: No mitigation measures are required.

c. Less Than Significant Impact.

Oak Hills Elementary School is located on the east side of the proposed Project along Old Rock Road. West Ranch High School is located in the northwest corner of Old Rock Road and Valencia Boulevard. Rancho Pico Junior High School is located south of the proposed Project along Valencia Boulevard. The construction phase of the proposed pipeline could potentially expose students at the schools to short-term hazardous emissions from diesel machinery and individual employee passenger vehicles. It should be noted that the construction emissions would be temporary and short term and would fall below applicable SCAQMD thresholds. There would also be a potential for the handling of hazardous materials, such as oils, grease or fuels, utilized during the construction of the proposed pipeline. As described previously, the chlorine used to disinfect recycled water would be at concentrations that would not be hazardous. Furthermore, compliance with all applicable federal, State, and local regulations for the handling, use, and disposal of hazardous substances would reduce potential impacts. No hazardous

³⁴ California Department of Public Health, Title 17 and Title 22, *Code of Regulations*, "Regulations Related to Recycled Water," June 18, 2014.

emissions or handling of hazardous materials would be conducted during the operational phase of the proposed Project. Accordingly, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

d. Less Than Significant Impact.

A geographical search for hazardous materials sites, as defined in Government Code Section 65962.5, utilizing the online environmental database GeoTracker produced one location of potential hazardous material within 1 mile of the Project Site. The location is classified as an Active Water Discharge Report (WDR) site for recycled water loading stands, and is located along the proposed pipeline alignment. As indicated by the database, the site does not contain contaminants of concern. The next nearest site is approximately 1 mile to the northeast and at a lower elevation than the Project Site. Therefore, the proposed Project would not create a significant hazard to the public or environment. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

e. No Impact.

The closest airport to the Project Site is the Agua Dulce Airpark located approximately 17 miles to the northeast. Therefore, the proposed Project would not be located within an airport land use plan or within 2 miles of a public airport or public use airport. No safety hazard impacts would occur to people residing or working in the area of the proposed Project.

All structures would be subsurface; no structures will be constructed aboveground that would obstruct any airport operations. Therefore, no safety hazards resulting from airport proximity are expected. No impact would occur.

Mitigation Measures: No mitigation measures are required.

f. No Impact.

The nearest airport, public or private, is the Agua Dulce Airpark located approximately 17 miles to the northeast. The Project Site would not be located near a private airstrip; therefore, the Project would not create a safety hazard for those working within the Project Site. No impact would occur.

Mitigation Measures: No mitigation measures are required.

g. Less Than Significant with Mitigation.

The proposed Project would not be constructed along any designated disaster routes.³⁵ Additionally the proposed Project would not cause permanent alterations to vehicular circulation routes and patterns and/or impede public access or travel on public rights-of-way. Westridge Parkway is four lanes, Old Rock Road is two lanes, and Valencia Boulevard is six lanes. Construction would require closure of one lane of the roadway at a time. However, all roadways have adequate vehicle capacity for one lane to be closed and for traffic to continue around construction. Additionally, implementation of Mitigation Measure **TRAF-1** would reduce potential impacts to emergency access during an emergency event. Therefore, impacts would be less than significant and the proposed Project would not conflict with an adopted emergency response plan or emergency evacuation plan.

The proposed pipeline would be located belowground, with a meter and fire hydrants located aboveground. When installed, these components would not interfere with traffic flow or otherwise hamper emergency response or evacuation plans. Periodic maintenance of components would be performed by vehicles traveling on surface roads to the meter and fire hydrants. The size and number of maintenance vehicles present at these components would not interfere with traffic flow. There would be no operation-related impacts.

Mitigation Measures: The following mitigation measure shall be implemented.

TRAF-1: For proposed plan phases that may affect traffic, implementing agencies shall require that contractors prepare a construction traffic control plan. Elements of the plan should include, but are not necessarily limited to, the following:

- Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible.
- To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours.
- Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers and/or signage to safely direct traffic through construction work zones.

35 County of Los Angeles, Department of Public Works, Disaster Routes with Road Districts Map, North Los Angeles County, (2012).

- Coordinate with facility owners or administrators of sensitive land uses, such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities.

h. Less Than Significant with Mitigation.

The Project Site is located in a Very High Fire Hazard Severity Zone (VHFHSZ).³⁶ The construction activities (e.g., the use of welding torches or other tools) within these areas may increase fire danger. The use of flames/sparks in hillside brushy areas would likewise increase the risk of wildfire. As such, impacts would be potentially significant. Mitigation Measure **HAZ-1** would reduce potential wildfire events to less than significant.

Operation of the proposed Project would not exacerbate the potential for wildfires. There are no ignitable materials or processes that would have the potential to create a fire. Therefore, impacts related to exposing people or structures to adverse effects from wildfires would be less than significant.

Mitigation Measures: The following approved mitigation measure shall be implemented.

HAZ-1: Implement Fire Hazard Reduction Measures. During construction of facilities located in areas designated as Very High Fire Hazard Severity Zones (VHFHSZs) by CAL FIRE, 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 Project facilities, all vehicles and crews working at the Project Site shall be required 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.

³⁶ Santa Clarita Valley Area Plan, Appendix II: Maps, *Very High Fire Hazard*, Exhibit S-6 (2012).

5.9 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY – Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. Less Than Significant Impact.

Water quality in surface and groundwater bodies is regulated by the State Water Quality Control Board (SWQCB) and Regional Water Quality Control Boards (RWQCBs). The Los Angeles RWQCB is responsible

for implementation of State and federal water quality protection guidelines near the Project Site.³⁷ The proposed Project is located within paved and urbanized areas within existing street right-of-way. Construction of the recycled water pipeline and pump station would include excavation activities that would have the potential to generate sediment-laden runoff during rain events. Stormwater runoff from construction sites is regulated by the General Permit for Storm Water Discharges Associated with Construction Activity from Small Linear Underground Projects (Water Quality Order 2009-0009-DWQ, amended by 2010-0014-DWQ and 2012-0006-DWQ) issued by the SWQCB. According to the fact sheet for Order 2012-0006-DWQ, construction activities associated with small linear underground projects that result in land disturbances greater than 1 acre (referred to as linear utility projects [LUPs]), are not like traditional construction projects. Small LUPs have a lower potential to impact receiving waters because these projects are typically short in duration and are constructed within or around hard-paved surfaces that result in minimal disturbed land areas being exposed at the close of the construction day.³⁸ Therefore, Water Quality Order 2012-0006-DWQ, and the NPDES General Permit have been adopted Statewide for storm water discharges associated with construction activity from small linear underground/overhead projects. Furthermore, the proposed Project would be required to comply with all applicable federal, State, and local regulations including the California Water Code, CCR Title 22, CCR Title 17, California Department of Public Health Guidelines, and the Los Angeles County Department of Health Services Cross-Connection and Water Pollution Control Program. The proposed Project will also receive a recycled water project permit from the RWQCB prior to operation to ensure that the proposed Project will not degrade groundwater quality. For construction activities that are regulated by the NPDES permit, coverage under and compliance with the NPDES Construction General Permit would ensure that the impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b. No Impact.

The construction of the proposed Project would occur within the existing roadway and existing developed pad (for the pump station) and would not result in an increase in the amount of impervious surface that would interfere with groundwater recharge. The proposed Project is also not located within the boundaries of a sole source aquifer as designated by the U.S. Environmental Protection Agency.³⁹ The proposed Project would not involve pumping of groundwater and would not otherwise have an impact on the depletion of groundwater supplies or interfere with groundwater recharge. The purpose of the

37 State and Regional Water Boards. State Water Control Board. California Environmental Protection Agency. http://www.waterboards.ca.gov/waterboards_map.shtml. Accessed June 2016.

38 Los Angeles Regional Water Quality Control Board, Water Quality Order 2009-0009-DWQ, as amended by 2012-0006-DWQ.

39 US Environmental Protection Agency, Sole Source Aquifers, 2015, <http://www2.epa.gov/dwssa>. Accessed March 2017.

proposed Project is to provide recycled water to users in the northern Stevenson Ranch area that are using potable water for irrigation needs. As discussed in Section 5.4.a, the proposed Project would not substantially reduce the amount of discharge effluent from the Valencia WRP. Furthermore, as development occurs over time within CLWA boundaries, the discharge effluent from the Valencia WRP would also increase, which would contribute to the replenishment of downstream groundwater basins along the Santa Clara River. Therefore, the proposed Project would have no adverse impact on the groundwater basin.

Mitigation Measures: No mitigation measures are required.

c. Less Than Significant Impact.

The construction of the proposed pipeline would occur within the existing roadways and the construction of the pump station would occur adjacent to an existing reservoir on already developed pad. Storm water runoff from the Project Site during construction could contain soils and sediments from these activities. Spills or leaks from heavy equipment and machinery, construction staging areas, or building sites can also enter runoff, which typically include petroleum products such as fuel, oil and grease, and heavy metals. According to the requirements of the NPDES permit, appropriate BMPs would be applied during construction activities to minimize water quality impacts.

The BMPs most often used during construction activities include surrounding the construction site with sand bags and/or silt fencing (to minimize sediment-laden runoff entering the storm drain system or downstream waters) and timing the grading activities to avoid the rainy season. Compliance with the NPDES Construction General Permit, the preparation and implementation of an SWPPP, and implementation of erosion and treatment control BMPs would ensure that any impacts to downstream waters resulting from construction activities associated with the proposed Project would be less than significant.

Operation of the recycled water pipeline and pump station would not alter the existing drainage pattern of the Project Site. Impacts would be less than significant.

As described in Section 5.4.a, the proposed Project would have the potential to affect the amount of surface flow within the Santa Clara River, which could potentially alter the course of the Santa Clara River. Depending on river flow and overall hydrologic conditions discharge reductions from the Valencia WRP would likely result in equivalent corresponding reductions in flow downstream. The annual average of effluent discharged from the Valencia WRP is 13.8 mgd. The proposed Project would use a portion of the discharge (approximately 0.2 mgd) from the Valencia WRP for recycled water use as the primary designated source of all recycled water in the RWMP. Thus, a reduction in the annual average of discharge

to 13.6 mgd would be above the 13 mgd minimum discharge requirements to sustain biological resources within and along the Santa Clara River. Accordingly, the proposed Project would result in less than significant indirect impacts to altering the course of the Santa Clara River.

Mitigation Measures: No mitigation measures are required.

d. Less Than Significant Impact.

There are no creeks or rivers in close proximity to the Project Site. The BMPs most often used during construction activities include surrounding the construction site with sand bags and/or silt fencing (to minimize sediment-laden runoff from entering the storm drain system or downstream waters) and timing the grading activities to avoid the rainy season. Compliance with the NPDES Construction General Permit, the preparation and implementation of an SWPPP, and implementation of erosion and treatment control BMPs would ensure that any impacts to downstream waters resulting from construction activities associated with the proposed Project would be less than significant.

The use of recycled water instead of potable water for irrigation purposes would not change existing irrigation application practices, and the application of recycled water for landscape irrigation would be managed to meet the transpiration demand. Therefore, the use of recycled water would not alter the rate or amount of surface runoff in a manner that would result in flooding.

The proposed pump station location would be located adjacent to an existing reservoir on an already developed pad. Additionally, the design of the proposed Project would allow post-construction water runoff to continue in existing directions. Therefore, the development of the pump station would not alter the rate or amount of surface runoff in a manner that would result in flooding. As such, the proposed Project would not alter the existing drainage pattern of the site or area, including through the alternation of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. Less than significant impacts would occur.

Mitigation Measures: No mitigation measures are required.

e. Less Than Significant Impact.

The proposed Project would construct a recycled water pipeline within roadway right-of-way and a pump station on an existing developed pad. Construction would be temporary and implementation of BMPs to during a rain event would minimize the amount of runoff entering the existing storm drain system. Construction impacts would be less than significant.

Large areas of impervious surfaces would not be created as a result of the proposed Project. The roadways would be restored to existing conditions to ensure that the existing surface water runoff is not altered. Impacts during operation would be less than significant.

Mitigation Measures: No mitigation measures are required.

f. Less Than Significant Impact.

As previously discussed, construction activities would include BMPs such as hay bales to minimize erosion and surface water runoff from the Project Site. The amount of impervious surface upon Project completion would be similar to existing conditions. The amount of runoff from the site would not be substantially changed to that of existing conditions because Project development would not increase the amount of runoff or contribute to the degradation of water quality. Recycled water would meet applicable federal, State, and local regulations including the California Water Code, CCR Title 17, and CCR Title 22 water quality standards and the Los Angeles County Department of Health Services Cross-Connection and Water Pollution Control Program. Therefore, no new pollutants that would degrade water quality would be added to the Project Site. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

g.-h. Less Than Significant Impact.

According to the Los Angeles County Santa Clarita Valley Area Plan Flood Plains Map, the Project Site is not located within an area subject to flooding by the 100-year chance flood.⁴⁰ Additionally, the proposed Project would not construct any new homes that would impede or redirect flood flows. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

i. Less Than Significant Impact.

The proposed Project would construct a recycled water pipeline within the roadway right-of-way and a pump station on an already developed pad. The proposed pump station would pump recycled water from the Valencia WRP through the proposed pipeline. However, the pump station would not contain sufficient amounts of recycled water at any one time. As a result, the proposed Project would not expose people or structures to flooding.

⁴⁰ Santa Clarita Valley Area Plan, Appendix II: Maps, *Flood Plains*, Exhibit S-4 (2012).

The proposed Project would not involve the construction of any housing, or inhabitable structures. As such, it would not expose people or structures to flooding. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

j. No Impact.

Tsunamis are large-scale sea waves produced from tectonic activities along the ocean floor. Seiches are freestanding or oscillatory waves associated with large enclosed or semi-enclosed bodies of water. Given that the Project Site is not located near the ocean or any large enclosed or semi-enclosed bodies of water, the proposed Project would not be located within designated tsunami or seiche zones. Debris and mudflows are typically a hazard experienced in the floodplains of streams that drain very steep hillsides within the watershed. These types of hazards are not expected to impact the Project because the Project Site would not place people or structures at risk of inundation by seiche, tsunami, or mudflow. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

5.10 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
LAND USE AND PLANNING – Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. Less Than Significant Impact.

The Project Site is located within existing roadway right-of-way and includes temporary staging areas on public and private property. The proposed pipeline would be located belowground, the proposed pump station would be enclosed and located adjacent to an existing reservoir, and existing transportation access would continue upon completion of construction. The construction staging areas would be short term and temporary in nature. The proposed Project is considered a public infrastructure improvement project that would serve the existing community adjacent to the Project Site. Upon implementation, these recycled water facilities would support and enhance existing land uses by providing the opportunity for recycled water use. There are no facilities proposed by the Project that could physically divide an established community. Potential impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impact.

Per Section 53091 of the California Government Code, State law does not apply specific local zoning, building, or permit requirements to this type of CLWA project.⁴¹ Development of the proposed Project would serve locally approved development and would not conflict with local zoning, land use designations, plans, policies, or regulations. The Project area is located more than 50 miles from the Pacific

⁴¹ California Government Code. Section 53091(d).

Ocean and more than 300 miles from the San Francisco Bay; therefore, the Coastal Zone Management Act would not apply.⁴² Accordingly, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

c. No Impacts.

According to the California Department of Fish and Wildlife, no Natural Community Conservation Plans or Habitat Conservation Plans exist within the Project area. Therefore, the proposed Project would not conflict with any of these types of plans. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

42 United States, Code, Title 16, Section 1453, Coast Zone Management Act of 1972 as amended through the Coastal Zone Protection Act of 1996.

5.11 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
MINERAL RESOURCES – Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. No Impact.

According to the Santa Clarita Valley Area Plan, the Project area is not located in an area where significant mineral deposits or oil or natural gas wells are present.⁴³ North of the proposed Project, there is an estimated oil and gas field. However, all the oil and gas wells in the area are abandoned. Additionally, the proposed Project would have no impact on any oil and gas wells surrounding the area. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

b. No Impact.

As previously discussed, the proposed Project is not located within important mineral resource or oil or gas production areas. Therefore, the proposed Project would not result in the loss of availability of locally important mineral resource recover sites delineated on the Santa Clarita Valley Area Plan. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

⁴³ Santa Clarita Valley Area Plan, Appendix II: Maps, *Mineral Resources*, Exhibit CO-2 (2012).

5.12 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
NOISE – Would the project:				
a. Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. Less Than Significant with Mitigation.

Noise can have an adverse effect to humans, animals, and structural components. Noise exposure regulatory criteria are concerned largely with controlling location of new residences in existing environments. The SCVAP⁴⁴ includes guidelines to evaluate ambient noise and land use compatibility. For the average community, outdoor noise levels up to 65 A-weighted decibels (dBA) and indoor noise levels up to 45 dBA are considered acceptable.

Ambient noise measurements were taken along the Project Site to define the local noise environment. Noise sources included vehicle travel and typical residential activities (i.e., landscaping/leaf blowing activities). **Table 5.12-1, Ambient Noise Levels**, shows the existing short-term (15-minute) ambient noise

44 Santa Clarita Valley Area Plan, Noise Element, Objective N-3.1 (2012).

levels at two different locations along the Project Site. **Figure 5.12-1 Noise Source Locations**, identifies the locations of the two measurements. Measured noise levels ranged from 49.8 to 51.6 dBA.

Table 5.12-1
Ambient Noise Levels

Location Description	Average Noise Levels (dBA)
1	49.8
2	51.6

*Note: For Noise Data, please refer to **Appendix B**.*

The County of Los Angeles has developed standards for construction noise. The maximum allowable level for construction-related noise during normal construction timeframes ranges from 75 dBA at single-family residential uses to 85 dBA at semi-residential/commercial uses, as shown in **Table 5.12-2, County of Los Angeles Daily Construction Noise Limits (dBA)**.⁴⁵

Table 5.12.2
County of Los Angeles Daily Construction Noise Limits (dBA)

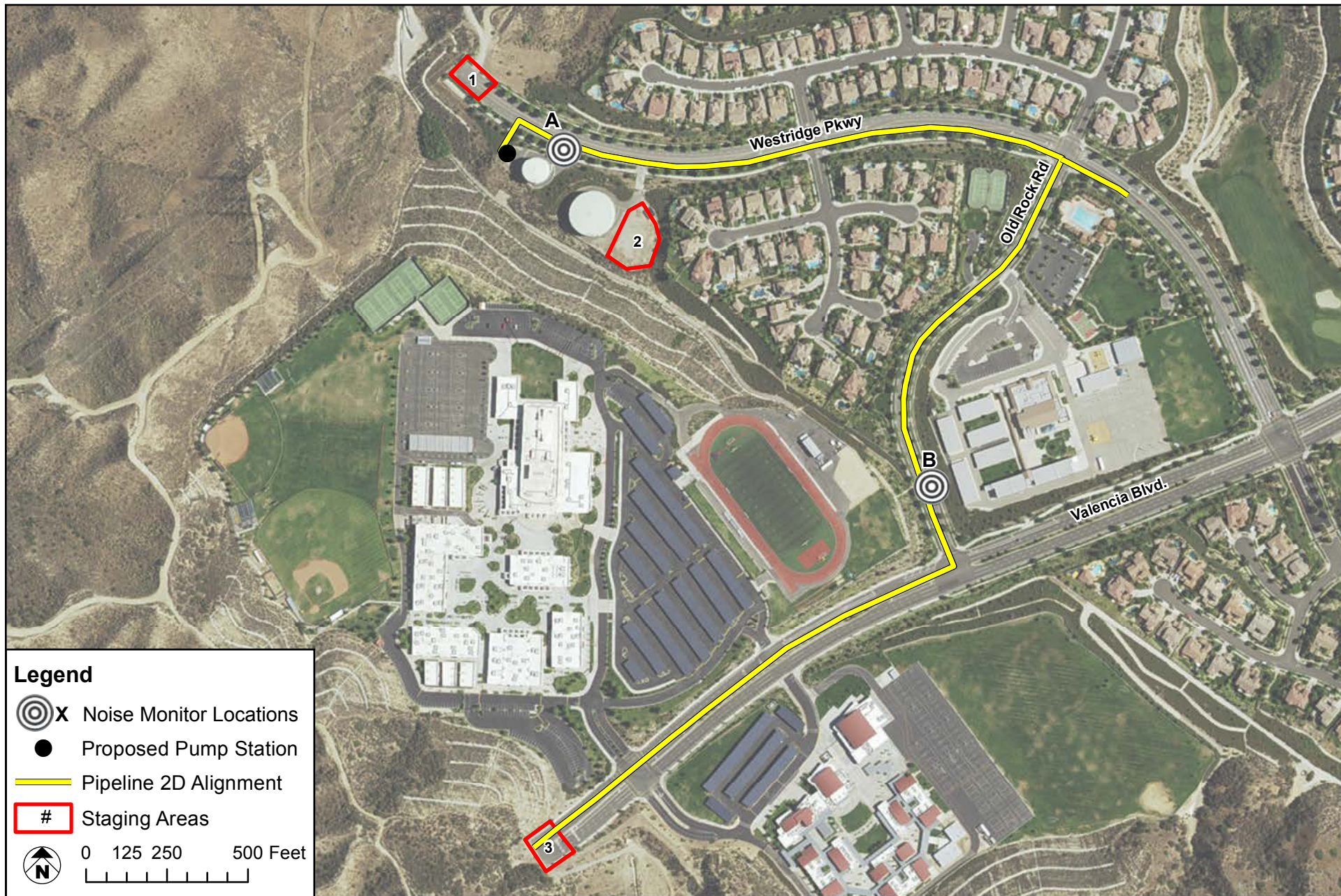
Construction Time	Single-Family Residential	Multifamily Residential	Semi-Residential/ Commercial
Mobile Equipment			
7:00 AM to 8:00 PM except Sundays and legal holidays	75	80	85
8:00 PM to 7:00 AM except Sundays and legal holidays	60	64	70
Stationary Equipment			
7:00 AM to 8:00 PM except Sundays and legal holidays	60	65	70
8:00 PM to 7:00 AM except Sundays and legal holidays	50	55	60

Source: Los Angeles County Code, Title 12 Environmental Protection, Chapter 12.08 Noise Control, Section 12.08.440, Construction Noise.

Mobile Equipment—maximum noise levels for nonscheduled, intermittent, short-term operation (less than ten days) or of mobile equipment.

Stationary Equipment—maximum noise level for repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment.

⁴⁵ Los Angeles County Sanitation Districts, Chapter 17 Noise, “Regulations for Construction Noise” (2005), 17-3.



SOURCE: CLWA - June 2016

FIGURE 5.12-1

Construction

It should be noted that the California Government Code exempts the development of water and wastewater infrastructure projects initiated by water agencies from County and City building and zoning ordinances.⁴⁶ However, for analysis purposes construction noise levels will be compared to Los Angeles County Noise Ordinance.

During construction of the proposed Project, adjacent sensitive receptors would be exposed to sporadic high noise levels and groundborne vibration. Estimated noise levels associated with the trenching activities are presented in **Table 5.12-3, Typical Maximum Noise Levels for Construction Equipment**. The average noise level for a grader is 85 dBA at 50 feet from source.

Table 5.12-3
Typical Maximum Noise Levels for Construction Equipment

Equipment	Approximate Leq dBA			
	25 Feet	50 Feet	100 Feet	200 Feet
Grader	91	85	79	73
Truck	90	84	78	72
Backhoe	86	80	74	68

Source: U.S. Department of Transportation, *Construction Noise Handbook*, Chapter 9.0, August 2006.

Note: Leq = equivalent sound level.

Construction activities would occur during normal workday time frames between 7:00 AM and 4:00 PM. Construction activities related to the proposed pump station would be located approximately 250 feet from the nearest residence, thus resulting in noise levels between 68 to 73 dBA, below the County Noise Ordinance. The nearest single-family residential use is located approximately 50 feet west of the proposed pipeline alignment along Old Rock Road and the nearest semi-residential/commercial use (school) is located approximately 100 feet to the north of the proposed pipeline alignment along Valencia Boulevard. Based on the attenuation loss of 6.0 dBA for every doubling of distance across hard surfaces, construction noise levels at these receptors would range from 74 to 79 dBA, respectively. The use of new muffler technology reduces sound levels from equipment approximately 2 dBA. With mufflers, noise levels at these sensitive receptors would experience approximately 72 to 77 dBA, which would exceed the County of Los Angeles Noise Ordinance for single-family uses. Construction activities will be performed in accordance with the County Noise Ordinance to minimize construction noise impacts. In order to minimize construction noise levels on adjacent sensitive receptors, the RWMP requires noise attenuating buffers near residential areas and orient stationary sources to direct noise away from sensitive uses, as specified

⁴⁶ California Government Code, Section 53091(d) and (e).

in Mitigation Measure Noise-1. With mitigation, the proposed construction noise levels would fall below the County of Los Angeles Noise Ordinance and potential impacts would be less than significant.

Operation

Sound associated with pipeline maintenance would result in short-term, random incidences that would not result in an increase of ambient noise levels within the surrounding area. In addition, pipeline work would be limited to daylight hours to avoid disturbing any sensitive receptors.

The pump associated with the Project would be located approximately 250 feet away from any residence and would be enclosed within a concrete and masonry building, fully grouted with appropriate wall thickness. Typical pump station noise levels range from 73 to 80 dBA at 50 feet from the pump station, depending on the size of the engine. The proposed pump station would be designed not to exceed 45 dBA at the property line of the nearest sensitive receptor. Therefore, impacts would be less than significant.

Project-Related Traffic

As discussed in **Section 5.16, Transportation and Traffic**, the proposed Project would construct a pump station and recycled water pipeline along Westridge Parkway, Old Rock Road, and Valencia Boulevard which would generate 10 construction-related trips. The increase in construction-related trips would be minimal and would not substantially increase the ambient roadway noise levels. Furthermore, vehicle trips generated during operation of the proposed Project would result in a single weekly trip. The increase in operation-related trips would result in a negligible increase in traffic volumes. Therefore, overall traffic noise would remain similar to existing conditions and impacts would be less than significant.

Mitigation Measures: The following mitigation measure shall be implemented.

Noise-1: CLWA and its contractors shall implement the following measures during all Project-related construction activities:

- Sensitive receptors (residences, residential areas, schools, and hospitals) within 1,500 feet of Project construction activities shall be identified and mapped, and this information shall be used to minimize noise impacts to sensitive receptors.
- Construction activities shall meet municipal code requirements related to noise. Construction activities shall be limited to between 7 AM and 7 PM Monday through Friday and 8 AM to 6 PM Saturday to avoid noise-sensitive hours of the day. Construction activities shall be prohibited on Sundays and holidays.

- Construction equipment noise shall be minimized by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools.
- Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from nearby sensitive receptors, including residences, schools, and hospitals.
- Should construction occur near a school, the construction contractor shall coordinate the timing of the highest noise-producing construction activities with school administration in order to limit disturbance to the campus.

b. Less Than Significant with Mitigation.

Construction activities could generate varying degrees of ground vibration, depending on the construction procedures, construction equipment used, and proximity to vibration-sensitive uses. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. Ground vibrations from construction activities rarely reach levels that could damage structures, but can achieve the perceptible ranges in buildings close to a construction site.

The closest sensitive receptor to the proposed pipeline is approximately 50 feet. It is assumed for the purpose of analysis that a loaded truck would generate the highest vibration levels at the sensitive receptor. The Federal Transit Administration (FTA) threshold for architectural damage to nonengineered timber and masonry buildings is approximately 94 VdB (vibration decibels). Loaded trucks are capable of producing approximately 92 VdB at 15 feet. Vibration levels attenuate (decrease) 6 decibels every doubling of distance; therefore, vibration levels would be approximately 76 VdB at the sensitive use to 50 feet away, below the FTA vibration threshold. However, in the event that groundborne specific construction activities occur within 43 feet of a sensitive receptor, then Mitigation Measure **Noise-2** would be implemented. Impacts would be less than significant with mitigation.

Mitigation Measures: The following mitigation measure shall be implemented.

Noise-2: CLWA shall implement the following measures when Project-related construction is planned to occur within the City/County limits and/or within 50 feet of sensitive receptors:

- Sensitive receptors (residences, residential areas, schools, and hospitals) within 50 of Project construction activities shall be identified and mapped, and this information shall be used to minimize ground-borne vibration and ground-borne noise impacts to sensitive receptors.

- Limit jack and bore drilling to at least 43 feet from sensitive receptors and 15 feet from any structures.
- If jack and bore drilling must occur within 15 feet of any structure, the construction contractor shall conduct crack surveys before drilling to prevent potential architectural damage to nearby structures. The surveys shall be done by photographs, video tape, or visual inventory, and shall include inside as well as outside locations. All existing cracks in walls, floors, and driveways shall be documented with sufficient detail for comparison after construction to determine whether actual vibration damage occurred. A post-construction survey shall be conducted to document the condition of the surrounding buildings after the construction is complete.

c. Less Than Significant.

As stated above, the construction phase of the proposed Project would be considered temporary and would not result in a substantial permanent increase in the ambient noise levels in the proposed Project's vicinity. Operation of the proposed Project would occur belowground. As discussed in Section 5.12.a, the proposed pump station would be enclosed and designed to generate 45 dBA at the nearest sensitive receptor property line. Therefore, the proposed Project would not result in the permanent increase in ambient noise levels, and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

d. Less Than Significant with Mitigation.

As stated above in discussion 5.12.a, the proposed Project would generate temporary elevated noise levels due to the construction phase of the proposed Project. These levels were determined to be consistent with the Los Angeles County Noise Ordinance with implementation of Mitigation Measures **Noise-1** and **Noise-2**. Therefore, temporary or periodic noise impacts would be less than significant with mitigation.

Mitigation Measures: Mitigation Measures **Noise-1** and **Noise-2** shall be implemented.

e. No Impact.

The closest airport to the Project Site is the Agua Dulce Airpark located approximately 17 miles to the east. Therefore, the proposed Project would not be located within an airport land use plan or within two miles of a public airport or public use airport. The Project would not expose people residing or working in the area to excessive noise levels. No impact would occur.

Mitigation Measures: No mitigation measures are required.

f. No Impact.

The proposed Project is located 17 miles to the west of the Agua Dulce Airpark. Therefore, the proposed Project would not expose people residing or working in the Project area to excessive noise levels. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

5.13 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
POPULATION AND HOUSING – Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. Less Than Significant Impact.

As described in the 2015 UWMP, the 2015 UWMP includes population projections based on the City and County General Plan Land Use designations within CLWA service boundaries. The anticipated recycled water supply and demand is then calculated based on the increase in population, which is dependent on the local County land use plans and policies to determine growth of the County. With this growth, the use of potable water as irrigation would be supplemented with recycled water. The proposed Project would supply 186 afy of recycled water to users within the Project area. The proposed Project would contribute to achieving the goal of providing more recycled water to supplement potable water in CLWA service area. Impacts would be less than significant.

Environmental Justice

Environmental justice issues relate to a minority or low-income population that has or would be exposed to more than its fair share of pollution or environmental degradation if a project is implemented.⁴⁷ The proposed Project is located in unincorporated Los Angeles County in the Santa Clarita Valley, where the existing population has a median income greater than \$87,000.⁴⁸ Development in this area is primarily single-family residential, public, and institutional uses. Therefore, the Project Site is not located within a neighborhood that suffers from exposure to adverse human health or environmental conditions. The proposed Project is considered a benefit to the existing population because it would provide recycled

47 Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994), <http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>.

48 City of Santa Clarita, Economic Development Department, "Population" <http://www.santa-clarita.com/city-hall/departments/community-development/demographics/population>. Accessed March 2017.

water to existing users along the pipeline route. Therefore, no impacts were found with regard to federal regulation Executive Order 12898, Environmental Justice.

Mitigation Measures: No mitigation measures are required.

b. No Impact.

Construction and operation of the proposed Project would occur within roadways right-of-way and would utilize three existing open areas for construction staging areas. Accordingly, the proposed Project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

c. No Impact.

Construction and operation of the proposed Project would occur within roadways right-of-way and would utilize three existing open areas for construction staging areas. Accordingly, the proposed Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

5.14 PUBLIC SERVICES

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

Discussion

a.–e. Less Than Significant Impact.

The proposed Project would not result in direct population growth requiring additional public facilities, as the recycled water supply would not be used for potable residential purposes. The proposed Project would not result in adverse physical impacts associated with the provision of a new or physically alter an existing government building. The proposed Project could be subject to vandalism and theft during construction and require support of local law enforcement; however, no new facilities would be required. The construction staging areas would be fenced to discourage vandalism and theft. In addition, the proposed pipeline would be located belowground upon completion of construction and the pump station would be enclosed and secured with locks.

Should the Project Site require emergency or fire services, the Los Angeles County Fire Department would be able to provide adequate response. In addition, Mitigation Measure **HAZ-1** would require that the construction contractor provide fire-fighting equipment, such as fire extinguishers, to the satisfaction of the Los Angeles County Fire Department. Therefore, the proposed Project would not increase demand on the existing Los Angeles County Fire Department services.

Indirect impacts to public services would be reduced to less than significant if the local government implements the policies of the Santa Clarita Valley Area Plan as it contains adequate measures to reduce or avoid potential impacts to public services, including Sheriff, Fire Department, schools, and libraries. Specific mechanisms for implementing these policies would be determined during Project-specific environmental review, as required by CEQA. Implementation of the adopted policies would reduce indirect Project impacts to less than significant.

Mitigation Measures: No mitigation measures are required.

5.15 RECREATION

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

Discussion

a. No Impact.

Recreational resources in CLWA Boundary area consist of State, county/regional, and local parks and designated regional and local recreational trails. The Los Angeles County Department of Parks and Recreation provides local parks and recreation facilities for northwestern Los Angeles County residents and provides regional parks for all residents of the county. The City of Santa Clarita also provides local parks within the City boundaries. Regional recreation areas under the control of the federal government include the Angeles National Forest, the Los Padres National Forest, and the Santa Monica Mountains National Recreation area.

The implementation of the proposed Project would not directly result in short-term growth in the Project area, and therefore would not directly increase the use of recreational facilities. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impact.

The implementation of the proposed Project would not directly result in growth in the Project area, and therefore would not require the construction or expansion of recreational facilities. Upon completion, the proposed Project, there would be approximately 186 afy of potable water available for use.

As described above, the proposed Project has been sized for the existing population along the pipeline to have use of nonpotable water while freeing up approximately 186 afy of potable water that could allow a growth in population. Therefore, potential significant growth-related impacts to recreational resources may include increased demand for recreational resources, such as public parks and trails and other recreation areas. Indirect impacts to public services would be reduced to less than significant if the local

government implements the policies of the Santa Clarita Valley Area Plan as it contains adequate measures to reduce or avoid potential impacts to parks, trails, and other recreation areas. Specific mechanisms for implementing these policies would be determined during Project-specific environmental review, as required by CEQA. Implementation of the adopted policies would reduce indirect Project impacts to less than significant.

Mitigation Measures: No mitigation measures are required.

5.16 TRANSPORTATION AND TRAFFIC

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

Discussion

a. Less Than Significant Impact.

Construction-related traffic would be generated during construction of the proposed Project, including worker vehicles traveling to and from the work site. The proposed Project is anticipated to generate 1.25 construction workers per piece of equipment. The proposed Project would utilize four to eight piece of construction equipment at any given time, including backhoes (2), a dump truck, excavators (2), a crane, and compaction machines (2). This would equate to approximately 10 workers arriving prior to 7:00 AM and leaving prior to afternoon peak-hour traffic (4:00 PM), thereby minimizing trips during peak hours. Short-term traffic impacts would be less than significant. Once construction activities are complete, traffic would revert to the current conditions.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impact.

The 2010 Congestion Management Program (CMP) in effect in Los Angeles County was adopted by the Los Angeles County Metropolitan Transportation Authority on October 28, 2010.⁴⁹ The nearest CMP-designated roadway is the I-5, approximately 1 mile east of the proposed Project. The proposed Project would generate an incremental increase in additional construction-related trips during off-peak hours and would not affect intersections along I-5. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

c. No Impact.

The Project is located approximately 17 miles to the southwest of Agua Dulce Airpark. The proposed Project would not result in a change in air traffic patterns. Airplane takeoffs and landings are at a sufficient distance from the locations not to pose as a safety risk. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

d. Less Than Significant with Mitigation.

The construction of the proposed Project could create roadway hazards due to temporary construction activities within roadways that would impact normal traffic flow. The construction activities of the proposed pipeline would require excavations and trenching within existing roadways, which would require traffic to be re-routed around the construction site. Oak Hills Elementary School, Rancho Pico Junior High School, and West Ranch High School are located along the proposed pipeline alignment. Therefore, construction activities have the potential to temporarily increase roadway hazards. Mitigation Measure **TRAF-1** shall be implemented to reduce potential impacts. Impacts would be less than significant with mitigation.

No changes are proposed as part of the proposed Project to the surrounding road system. Clear and uninterrupted access to the pipeline for emergency response vehicles would continue to be provided upon completion of the proposed Project. No operation-related impacts would occur.

⁴⁹ Los Angeles County Metropolitan Transportation Authority, 2010 Congestion Management Program, adopted October 28, 2010.

Mitigation Measures: Mitigation Measure **TRAF-1** shall be implemented. For reference, the mitigation measure is provided below.

TRAF-1: For proposed plan phases that may affect traffic, implementing agencies shall require that contractors prepare a construction traffic control plan. Elements of the plan should include, but are not necessarily limited to, the following:

- Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible.
- To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours.
- Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers and/or signage to safely direct traffic through construction work zones.
- Coordinate with facility owners or administrators of sensitive land uses, such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities.

e. Less Than Significant with Mitigation.

The construction of the proposed Project would not impact any emergency access areas. Additionally, the operation of the proposed Project would not result in inadequate emergency access because the facilities would not alter roadway alignments. Additionally, a Traffic Control Plan must be prepared to minimize potential emergency vehicle conflicts and to avoid complete blockage of any roadway during construction, as identified in Mitigation Measure **TRAF-1**. Impacts would be less than significant with mitigation.

Mitigation Measures: Mitigation Measure **TRAF-1** shall be implemented.

f. No Impact.

As previously stated, the proposed Project would not result in the increase of people, thereby eliminating the need for additional public transit services, nor would it result in straining the current system. Because the proposed Project would not result in any changes to the roadway system, current bus routes would remain the same. The proposed Project would not involve the alteration of or conflict with any policies, plans, or programs regarding public transit or other pedestrian facilities. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

5.17 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Tribal Cultural Resources – Would the project:				
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

i. Less Than Significant Impact.

As previously discussed in Section 5.5a, there are no designated historic resources within proximity of the Project Site. Therefore, less than significant impacts would occur.

Mitigation Measures: No mitigation measures are required.

ii. Less Than Significant Impact.

The proposed Project Site has been disturbed and excavated in the past. Approved by Governor Brown on September 25, 2014, AB 52 establishes a formal consultation process for California Native American tribes to identify potential significant impacts to tribal cultural resources, as defined in Public Resources Code Section 21074 as part of CEQA. In addition to the records search at the SCCIC, a search of the Sacred Lands File was conducted by the Native American Heritage Commission (NAHC). The NAHC responded on July 1, 2016, stating that the records search failed to indicate the presence of Native American cultural resources within the immediate Project area. CLWA sent out tribal notifications on May 24, 2016,

pursuant to AB 52. On June 2, 2016, the Fernandeno Tataviam Band of Mission Indians indicated that it did not want to consult on the proposed Project.⁵⁰ Thus, the potential for impact on human remains or a resource previously determined to be significant by the Fernandeno Tataviam Band of Mission Indians is less than significant.

Mitigation Measures: No mitigation measures are required.

50 Electronic communication between the Tribal Historic and Cultural Preservation Department of the Fernandeno Tataviam Band of Mission Indians and Principal Water Resources Planner for the Castaic Lake Water Agency (June 2, 2016).

5.18 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS – Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. No Impact.

The proposed Project would construct a recycled water pipeline and pump station. The proposed Project would result in the delivery of recycled water to customers in the unincorporated Los Angeles County area and would not result in wastewater generation. The proposed Project would not generate industrial wastewater or new point sources of wastewater such as mining, animal feed lots, wastewater treatment facilities, etc., that would require an individual permit beyond the capabilities of the existing wastewater treatment facilities serving the Los Angeles County. Accordingly, no impacts would occur.

Mitigation Measures: No mitigation measures are required.

b. Less Than Significant Impact.

The proposed Project would not result in the expansion of wastewater treatment facilities other than those needed to supply recycled water. The proposed Project would construct a recycled water pipeline and pump station to transport and supply the Project area with recycled water for use as irrigation. CLWA RWMP identifies the future need for recycled water within CLWA service area. CLWA Recycled Water Master Plan utilized the potable water supply and demand projections in CLWA 2015 UWMP to anticipate the future infrastructure needs to switch potable water use to nonpotable water use. Therefore, Project development would not require the construction or expansion of existing water treatment facilities other than those proposed in CLWA UWMP. No other additional facilities are required. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

c. No Impact.

The proposed Project would not produce substantial amounts of additional runoff to the existing storm water drainage facilities. There would not be a substantial increase in impervious surfaces from implementation of the proposed Project as the roadway would be restored to existing conditions and the pump station would be located on an existing, developed pad, as discussed in **Section 5.9, Hydrology and Water Quality**. Project development would not require the construction or expansion of storm water drainage facilities. The runoff from irrigation would not be increased by the use of recycled water as it would replace the use of potable water for irrigation. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

d. No Impact.

The proposed Project would construct a pipeline to transmit recycled water to offset potable water demands for the Project area. The proposed Project would provide a source of long-term irrigation supply for the area, as projected in CLWA RWMP and CLWA UWMP. Accordingly, no impacts to water supplies would occur.

Mitigation Measures: No mitigation measures are required.

e. No Impact.

The proposed Project would not generate any potential wastewater. No direct impact to wastewater treatment capacity would occur.

The proposed Project would, upon approval by the SCVSD, request 186 afy, or 0.2 mgd, of recycled water to CLWA service area which would be supplied by the SCVSD from Valencia WRP. This diversion of 0.2 mgd would represent approximately 1.4 percent of the 13.8 mgd of the average daily effluent produced by the Valencia WRP. As a result, potential impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

f. Less Than Significant Impact.

The proposed Project would generate small amounts of construction debris from the disposal of excess soils or other cement and asphalt debris and demolition activities are not required. The nominal amount of construction cement and asphalt debris generated by the proposed Project would be recycled and would not exceed the permitted capacity of the Sunshine Canyon Landfill, the Antelope Valley Landfill, or the Chiquita Canyon Landfill. Impacts would be less than significant.

Operation of the recycled pipeline would not generate solid waste. Project implementation would not require additional landfill capacity. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

g. Less Than Significant Impact.

The proposed Project is not required to comply with local zoning and building permits and ordinances. However, in order to reduce potential impacts to solid waste facilities that could result from the disposal of construction debris, the proposed Project would comply with the Chapter 20.87 of Los Angeles County Code requiring recycling of at least 65 percent of the waste generated during construction and preparation of a Construction and Demolition Debris Recycling and Reuse Plan. The proposed Project would not affect the County's ability to continue to meet the required AB 939 waste diversion requirements. Impacts would be less than significant and would not conflict with federal, State, and local statutes and regulations.

Mitigation Measures: No mitigation measures are required.

5.19 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE – Does the project:				
a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less Than Significant with Mitigation.

The proposed Project would not be constructed within or immediately adjacent to any creek, stream, or river. As described in **Section 5.4, Biological Resources**, approved and proposed mitigation has been identified, including provisions for pre-construction field surveys to determine the presence or absence of nesting bird species, to mitigate impacts to less than significant. As discussed in **Section 5.5, Cultural Resources**, the construction of the proposed Project could have the potential to unearth unknown archeological resources not previously identified. Therefore, mitigation has been identified, including the provision to stop work in the event of a find and to coordinate mitigation efforts with a qualified archeologist, to reduce potentially significant impacts to less than significant. Accordingly, the proposed Project would not have any significant impacts on the quality of the natural environment or on evidence of California's history or prehistory.

Mitigation Measures: The following mitigation measures will reduce impacts to wildlife species and cultural resources to less than significant.

Biological Resources

All pipeline construction activities and associated staging areas shall abide by Mitigation Measure **BIO-1** as identified in **Section 5.4, Biological Resources**.

Impacts would be less than significant with mitigation.

Cultural Resources

All pipeline construction activities and associated equipment shall abide by Mitigation Measures **CUL-1** and **CUL-2** as identified in **Section 5.5, Cultural Resources**.

Impacts would be less than significant with mitigation.

b. Less Than Significant Impact.

Development of the proposed Project would not result in “impacts that are individually limited, but cumulatively considerable.” The proposed Project would be consistent with CLWA Recycled Water Master Plan Update, CLWA UWMP, and the Santa Clarita Valley Area Plan, and would help to supply water to individuals located within the northern Stevenson Ranch area. Additionally, the issues relevant to the proposed Project are localized and confined to the immediate Project area.

Future expansions identified in the 2016 RWMP Update, including the proposed Project, would on average require approximately 4.7 mgd of future flows, which would leave an annual supply of effluent discharged from the WRPs at approximately 14.6 mgd to the Santa Clara River. The monthly recycled water demands would fluctuate between higher summer demands, and lower winter demands. The highest demand for recycled water would occur during July, which could require up to 6.5 mgd for recycled water reuse. This would lower the overall discharge from the WRPs to 13 mgd in the Santa Clara River, consistent with the Reduced Discharge Study.⁵¹ As the year progresses each month, the demand on recycled water would lessen. The reduction down to 13 mgd would be short term and only occur during summer months. The remainder of the year the demand would be far less, averaging an annual demand of 4.7 mgd.⁵² The amount of effluent is anticipated to increase as the population of the region grows; at the time of the completion of future expansions in 2025, the total discharge to the Santa Clara River is anticipated to be 17.8 mgd. After meeting the 13 mgd minimum discharge requirement to support aquatic species, the remaining amount of effluent available to meet future recycled water demands would be approximately 4.8 mgd in 2025. By 2050, there would approximately 15.3 mgd available for recycled water reuse after

51 Santa Clarita Valley Sanitation District, Santa Clarita Valley Facilities Plan Reduced Discharge Study, Section 6.1, 6-3 (November 2010).⁵² CLWA, Recycled Water Master Plan Update, Draft Programmatic EIR, October 2016, Table 3.3-4.

52 CLWA, Recycled Water Master Plan Update, Draft Programmatic EIR, October 2016, Table 3.3-4.

meeting the 13 mgd minimum discharge flows require to support aquatic species with the Santa Clara River. The current recycled water demand is 425 afy and the proposed Phase 2 projects could result in potentially significant impacts because they would require more than 1,600 afy recycled water, and would reduce some discharge of treated effluent to the river.

However, the amount of effluent available for recycled water reuse is based on the excess supply after the minimum discharge to the river is satisfied. CLWA will be required to comply with the eventual SCVSD baseline for required minimal flows discharged to the Santa Clara River as a result of the future studies and approved 1211 petition to divert discharges. A 1211 petition is required when a wastewater treatment plant makes changes to the discharge of treated wastewater. If changes are proposed, the owner of the wastewater treatment plant requires approval of the State Water Resources Control Board. If the proposed change could have an adverse impact to biological resources, the CDFW requires review and mitigation measures to ensure minimal impact to biological resources. Currently, SCVSD has gone through the 1211 petition process and has contract with CLWA for 1,600 AFY of recycled water. For the use of additional recycled water beyond the 1,600 AFY currently available to CLWA, SCVSD would need to go through a new 1211 petition process.

The use of recycled water has been accounted for in the 2015 UWMP, which is based on the County and City general plan land use designations at buildout. Therefore, any additional indirect growth resulting from the proposed Project has been accounted for within CLWA service area.

No significant cumulatively considerable impacts are anticipated to result from the proposed Project. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

c. Less Than Significant with Mitigation.

The proposed Project would supply the area with recycled water. It would consist of new recycled water pipelines and a new recycled water pump station. The implementation of the proposed Project would not directly impact human beings. The proposed Project would not adversely impact the surrounding economy of the Santa Clarita Valley. It would bring temporary construction jobs to the local area.

Energy

The proposed Project would require a nominal amount of additional electricity to function; this amount of electricity would not require the construction or expansion of energy supply infrastructure. The proposed Project would incorporate energy-efficient equipment and lighting to minimize energy impacts when feasible. Further, importing water is energy intensive; the electricity use for conveying, treating, and

distributing water is approximately 10,200 kWh/MG. The production and use of recycled water is more energy efficient than imported water, and thus the greater the use of recycled water to offset the need for imported water, the lower the potential impacts to local and regional energy supplies. The proposed Project is intended to accelerate expansion of the existing recycled water system to offset potable water demands. Therefore, impacts to local and regional energy supplies would be less than significant.

Mitigation Measures: The following mitigation measures shall be implemented to reduce impacts to less than significant.

Aesthetics

All pipeline construction activities and associated equipment shall abide by Mitigation Measures **AES-1**, **AES-2**, and **AES-3** as identified in **Section 5.1, Aesthetics**.

Hazards and Hazardous Materials

All pipeline construction activities and associated equipment shall abide by Mitigation Measure **HAZ-1** as identified in **Section 5.8, Hazards and Hazardous Materials**, and Mitigation Measure **TRAF-1** in **Section 5.16, Transportation and Traffic**.

Noise

All pipeline construction activities and associated equipment shall abide by Mitigation Measures **Noise-1** and **Noise-2** as identified in **Section 5.12, Noise**.

Transportation and Traffic

All pipeline construction activities and associated equipment shall abide by Mitigation Measure **TRAF-1** as identified in **Section 5.16**.

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APPENDIX A

Air Quality and Greenhouse Gas Modeling Data

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

Phase 2D Recycled Water Pipeline
South Coast Air Basin, Annual**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.00	1000sqft	0.57	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

Project Characteristics -

Land Use -

Construction Phase - Trenching based on client information. Assumed 150 feet of pipeline construction per day with site prep for pump station.

Off-road Equipment - Equipment for pump station

Off-road Equipment - Equipment for trenching.

Off-road Equipment -

Off-road Equipment -

Grading - Area of pipeline

Trips and VMT - Haul trips associated with construction

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 and 403.1. Tier 3 engine compliance with CARB Article 4 Off-Road Compression-Ignition Engines

Vehicle Trips - Up to 1 trip per week for maintenance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	5.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/1/2017	10/13/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	12/1/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	12/8/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	10/6/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	10/9/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	10/16/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	12/4/2017
tblGrading	AcresOfGrading	2.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblProjectCharacteristics	OperationalYear	2018	2019
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	25.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.01

2.0 Emissions Summary

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0415	0.3207	0.2483	4.2000e-004	4.8300e-003	0.0203	0.0251	1.2500e-003	0.0193	0.0205	0.0000	37.3169	37.3169	7.0600e-003	0.0000	37.4934
Maximum	0.0415	0.3207	0.2483	4.2000e-004	4.8300e-003	0.0203	0.0251	1.2500e-003	0.0193	0.0205	0.0000	37.3169	37.3169	7.0600e-003	0.0000	37.4934

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0109	0.1905	0.2385	4.2000e-004	4.6700e-003	0.0112	0.0159	1.2300e-003	0.0112	0.0125	0.0000	37.3169	37.3169	7.0600e-003	0.0000	37.4934
Maximum	0.0109	0.1905	0.2385	4.2000e-004	4.6700e-003	0.0112	0.0159	1.2300e-003	0.0112	0.0125	0.0000	37.3169	37.3169	7.0600e-003	0.0000	37.4934

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	73.73	40.61	3.95	0.00	3.31	44.57	36.64	1.60	41.77	39.33	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1020	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004
Energy	2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	114.3174	114.3174	4.1800e-003	1.2100e-003	114.7837
Mobile	8.0000e-005	4.3000e-004	1.1500e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.3481	0.3481	2.0000e-005	0.0000	0.3486
Stationary	1.0300e-003	3.3400e-003	3.7200e-003	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.4760	0.4760	7.0000e-005	0.0000	0.4777
Waste						0.0000	0.0000		0.0000	0.0000	6.2927	0.0000	6.2927	0.3719	0.0000	15.5900
Water						0.0000	0.0000		0.0000	0.0000	1.8341	23.9851	25.8192	0.1894	4.6500e-003	31.9401
Total	0.1055	0.0260	0.0239	1.3000e-004	3.0000e-004	1.8400e-003	2.1400e-003	8.0000e-005	1.8400e-003	1.9200e-003	8.1268	139.1272	147.2540	0.5655	5.8600e-003	163.1406

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1020	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004
Energy	2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	114.3174	114.3174	4.1800e-003	1.2100e-003	114.7837
Mobile	8.0000e-005	4.3000e-004	1.1500e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.3481	0.3481	2.0000e-005	0.0000	0.3486
Stationary	1.0300e-003	3.3400e-003	3.7200e-003	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.4760	0.4760	7.0000e-005	0.0000	0.4777
Waste						0.0000	0.0000		0.0000	0.0000	6.2927	0.0000	6.2927	0.3719	0.0000	15.5900
Water						0.0000	0.0000		0.0000	0.0000	1.8341	23.9851	25.8192	0.1894	4.6500e-003	31.9401
Total	0.1055	0.0260	0.0239	1.3000e-004	3.0000e-004	1.8400e-003	2.1400e-003	8.0000e-005	1.8400e-003	1.9200e-003	8.1268	139.1272	147.2540	0.5655	5.8600e-003	163.1406

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	10/9/2017	10/13/2017	5	5	
2	Trenching	Trenching	10/16/2017	12/1/2017	5	35	
3	Paving	Paving	12/4/2017	12/8/2017	5	5	
4	Site Preparation	Site Preparation	10/2/2017	10/6/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Graders	1	7.00	187	0.41
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Architectural Coating	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Trenching	Signal Boards	1	8.00	6	0.82
Trenching	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	1	8.00	46	0.45
Trenching	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	5	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	15.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Building Construction - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2000e-003	0.0319	0.0202	3.0000e-005		2.1500e-003	2.1500e-003		1.9800e-003	1.9800e-003	0.0000	2.6443	2.6443	8.1000e-004	0.0000	2.6645
Total	3.2000e-003	0.0319	0.0202	3.0000e-005		2.1500e-003	2.1500e-003		1.9800e-003	1.9800e-003	0.0000	2.6443	2.6443	8.1000e-004	0.0000	2.6645

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3.2 Building Construction - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.3200e-003	3.6000e-004	0.0000	6.0000e-005	1.0000e-005	7.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2493	0.2493	2.0000e-005	0.0000	0.2498
Worker	1.6000e-004	1.4000e-004	1.4700e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2981	0.2981	1.0000e-005	0.0000	0.2983
Total	2.1000e-004	1.4600e-003	1.8300e-003	0.0000	3.6000e-004	1.0000e-005	3.7000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.5474	0.5474	3.0000e-005	0.0000	0.5481

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.0000e-004	0.0153	0.0199	3.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	2.6443	2.6443	8.1000e-004	0.0000	2.6645
Total	7.0000e-004	0.0153	0.0199	3.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	2.6443	2.6443	8.1000e-004	0.0000	2.6645

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3.2 Building Construction - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.3200e-003	3.6000e-004	0.0000	6.0000e-005	1.0000e-005	7.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2493	0.2493	2.0000e-005	0.0000	0.2498
Worker	1.6000e-004	1.4000e-004	1.4700e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2981	0.2981	1.0000e-005	0.0000	0.2983
Total	2.1000e-004	1.4600e-003	1.8300e-003	0.0000	3.6000e-004	1.0000e-005	3.7000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.5474	0.5474	3.0000e-005	0.0000	0.5481

3.3 Trenching - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0309	0.2205	0.1773	2.7000e-004		0.0153	0.0153		0.0147	0.0147	0.0000	22.7991	22.7991	4.4800e-003	0.0000	22.9110
Total	0.0309	0.2205	0.1773	2.7000e-004		0.0153	0.0153		0.0147	0.0147	0.0000	22.7991	22.7991	4.4800e-003	0.0000	22.9110

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3.3 Trenching - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2000e-004	0.0141	2.7000e-003	3.0000e-005	6.9000e-004	7.0000e-005	7.6000e-004	1.9000e-004	7.0000e-005	2.6000e-004	0.0000	3.1300	3.1300	2.3000e-004	0.0000	3.1358
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5700e-003	1.3100e-003	0.0140	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.9000e-004	0.0000	2.8451	2.8451	1.1000e-004	0.0000	2.8478
Total	1.9900e-003	0.0154	0.0167	6.0000e-005	3.5700e-003	9.0000e-005	3.6600e-003	9.5000e-004	9.0000e-005	1.0500e-003	0.0000	5.9751	5.9751	3.4000e-004	0.0000	5.9836

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.4900e-003	0.1340	0.1651	2.7000e-004		8.8200e-003	8.8200e-003		8.8200e-003	8.8200e-003	0.0000	22.7991	22.7991	4.4800e-003	0.0000	22.9110
Total	6.4900e-003	0.1340	0.1651	2.7000e-004		8.8200e-003	8.8200e-003		8.8200e-003	8.8200e-003	0.0000	22.7991	22.7991	4.4800e-003	0.0000	22.9110

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3.3 Trenching - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2000e-004	0.0141	2.7000e-003	3.0000e-005	6.9000e-004	7.0000e-005	7.6000e-004	1.9000e-004	7.0000e-005	2.6000e-004	0.0000	3.1300	3.1300	2.3000e-004	0.0000	3.1358
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5700e-003	1.3100e-003	0.0140	3.0000e-005	2.8800e-003	2.0000e-005	2.9000e-003	7.6000e-004	2.0000e-005	7.9000e-004	0.0000	2.8451	2.8451	1.1000e-004	0.0000	2.8478
Total	1.9900e-003	0.0154	0.0167	6.0000e-005	3.5700e-003	9.0000e-005	3.6600e-003	9.5000e-004	9.0000e-005	1.0500e-003	0.0000	5.9751	5.9751	3.4000e-004	0.0000	5.9836

3.4 Paving - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6300e-003	0.0249	0.0184	3.0000e-005		1.5200e-003	1.5200e-003		1.4100e-003	1.4100e-003	0.0000	2.4610	2.4610	6.8000e-004	0.0000	2.4781
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6300e-003	0.0249	0.0184	3.0000e-005		1.5200e-003	1.5200e-003		1.4100e-003	1.4100e-003	0.0000	2.4610	2.4610	6.8000e-004	0.0000	2.4781

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3.4 Paving - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.2000e-004	2.4000e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4877	0.4877	2.0000e-005	0.0000	0.4882
Total	2.7000e-004	2.2000e-004	2.4000e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4877	0.4877	2.0000e-005	0.0000	0.4882

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6000e-004	0.0119	0.0173	3.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.4610	2.4610	6.8000e-004	0.0000	2.4781
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.6000e-004	0.0119	0.0173	3.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.4610	2.4610	6.8000e-004	0.0000	2.4781

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3.4 Paving - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.2000e-004	2.4000e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4877	0.4877	2.0000e-005	0.0000	0.4882
Total	2.7000e-004	2.2000e-004	2.4000e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4877	0.4877	2.0000e-005	0.0000	0.4882

3.5 Site Preparation - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1300e-003	0.0263	0.0109	2.0000e-005		1.1800e-003	1.1800e-003		1.0900e-003	1.0900e-003	0.0000	2.2669	2.2669	6.9000e-004	0.0000	2.2842
Total	2.1300e-003	0.0263	0.0109	2.0000e-005	2.7000e-004	1.1800e-003	1.4500e-003	3.0000e-005	1.0900e-003	1.1200e-003	0.0000	2.2669	2.2669	6.9000e-004	0.0000	2.2842

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3.5 Site Preparation - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1355	0.1355	1.0000e-005	0.0000	0.1356
Total	7.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1355	0.1355	1.0000e-005	0.0000	0.1356

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-004	0.0000	1.0000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0000e-004	0.0122	0.0146	2.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.0000	2.2669	2.2669	6.9000e-004	0.0000	2.2842
Total	6.0000e-004	0.0122	0.0146	2.0000e-005	1.0000e-004	6.0000e-004	7.0000e-004	1.0000e-005	6.0000e-004	6.1000e-004	0.0000	2.2669	2.2669	6.9000e-004	0.0000	2.2842

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3.5 Site Preparation - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1355	0.1355	1.0000e-005	0.0000	0.1356
Total	7.0000e-005	6.0000e-005	6.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1355	0.1355	1.0000e-005	0.0000	0.1356

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.0000e-005	4.3000e-004	1.1500e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.3481	0.3481	2.0000e-005	0.0000	0.3486
Unmitigated	8.0000e-005	4.3000e-004	1.1500e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.3481	0.3481	2.0000e-005	0.0000	0.3486

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.25	0.00	0.00	791	791
Total	0.25	0.00	0.00	791	791

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.0902	90.0902	3.7200e-003	7.7000e-004	90.4125
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.0902	90.0902	3.7200e-003	7.7000e-004	90.4125
NaturalGas Mitigated	2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.2272	24.2272	4.6000e-004	4.4000e-004	24.3711
NaturalGas Unmitigated	2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.2272	24.2272	4.6000e-004	4.4000e-004	24.3711

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	454000	2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.2272	24.2272	4.6000e-004	4.4000e-004	24.3711
Total		2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.2272	24.2272	4.6000e-004	4.4000e-004	24.3711

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	454000	2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.2272	24.2272	4.6000e-004	4.4000e-004	24.3711
Total		2.4500e-003	0.0223	0.0187	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.2272	24.2272	4.6000e-004	4.4000e-004	24.3711

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	282750	90.0902	3.7200e-003	7.7000e-004	90.4125
Total		90.0902	3.7200e-003	7.7000e-004	90.4125

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	282750	90.0902	3.7200e-003	7.7000e-004	90.4125
Total		90.0902	3.7200e-003	7.7000e-004	90.4125

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1020	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004
Unmitigated	0.1020	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0903					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004
Total	0.1020	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0903					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004
Total	0.1020	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004

7.0 Water Detail

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25.8192	0.1894	4.6500e-003	31.9401
Unmitigated	25.8192	0.1894	4.6500e-003	31.9401

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.78125 / 0	25.8192	0.1894	4.6500e-003	31.9401
Total		25.8192	0.1894	4.6500e-003	31.9401

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	5.78125 / 0	25.8192	0.1894	4.6500e-003	31.9401
Total		25.8192	0.1894	4.6500e-003	31.9401

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.2927	0.3719	0.0000	15.5900
Unmitigated	6.2927	0.3719	0.0000	15.5900

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	31	6.2927	0.3719	0.0000	15.5900
Total		6.2927	0.3719	0.0000	15.5900

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	31	6.2927	0.3719	0.0000	15.5900
Total		6.2927	0.3719	0.0000	15.5900

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Phase 2D Recycled Water Pipeline - South Coast Air Basin, Annual

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	25	50	0.73	Diesel
Fire Pump	1	2	0	50	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (50 - 75 HP)	1.0300e-003	3.3400e-003	3.7200e-003	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.4760	0.4760	7.0000e-005	0.0000	0.4777
Fire Pump - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0300e-003	3.3400e-003	3.7200e-003	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.4760	0.4760	7.0000e-005	0.0000	0.4777

11.0 Vegetation

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

Phase 2D Recycled Water Pipeline
South Coast Air Basin, Summer**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.00	1000sqft	0.57	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

Project Characteristics -

Land Use -

Construction Phase - Trenching based on client information. Assumed 150 feet of pipeline construction per day with site prep for pump station.

Off-road Equipment - Equipment for pump station

Off-road Equipment - Equipment for trenching.

Off-road Equipment -

Off-road Equipment -

Grading - Area of pipeline

Trips and VMT - Haul trips associated with construction

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 and 403.1. Tier 3 engine compliance with CARB Article 4 Off-Road Compression-Ignition Engines

Vehicle Trips - Up to 1 trip per week for maintenance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	5.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/1/2017	10/13/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	12/1/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	12/8/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	10/6/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	10/9/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	10/16/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	12/4/2017
tblGrading	AcresOfGrading	2.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblProjectCharacteristics	OperationalYear	2018	2019
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	25.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.01

2.0 Emissions Summary

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.8822	13.4411	11.1334	0.0190	0.2076	0.8791	1.0867	0.0554	0.8448	0.9002	0.0000	1,822.6440	1,822.6440	0.3705	0.0000	1,830.2310
Maximum	1.8822	13.4411	11.1334	0.0190	0.2076	0.8791	1.0867	0.0554	0.8448	0.9002	0.0000	1,822.6440	1,822.6440	0.3705	0.0000	1,830.2310

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.4850	8.4979	10.4364	0.0190	0.2076	0.5095	0.7171	0.0554	0.5093	0.5647	0.0000	1,822.6440	1,822.6440	0.3705	0.0000	1,830.2310
Maximum	0.4850	8.4979	10.4364	0.0190	0.2076	0.5095	0.7171	0.0554	0.5093	0.5647	0.0000	1,822.6440	1,822.6440	0.3705	0.0000	1,830.2310

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	74.23	36.78	6.26	0.00	0.00	42.04	34.01	0.00	39.72	37.28	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Energy	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Mobile	6.2000e-004	3.1400e-003	9.2900e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		3.0711	3.0711	1.6000e-004		3.0749
Stationary	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457
Total	0.7369	0.6602	0.7098	1.5500e-003	2.3500e-003	0.0576	0.0600	6.3000e-004	0.0576	0.0582		233.3615	233.3615	0.0147	2.6800e-003	234.5296

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Energy	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Mobile	6.2000e-004	3.1400e-003	9.2900e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		3.0711	3.0711	1.6000e-004		3.0749
Stationary	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457
Total	0.7369	0.6602	0.7098	1.5500e-003	2.3500e-003	0.0576	0.0600	6.3000e-004	0.0576	0.0582		233.3615	233.3615	0.0147	2.6800e-003	234.5296

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	10/9/2017	10/13/2017	5	5	
2	Trenching	Trenching	10/16/2017	12/1/2017	5	35	
3	Paving	Paving	12/4/2017	12/8/2017	5	5	
4	Site Preparation	Site Preparation	10/2/2017	10/6/2017	5	5	

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

Acres of Grading (Site Preparation Phase): 0.5**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Graders	1	7.00	187	0.41
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Architectural Coating	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Trenching	Signal Boards	1	8.00	6	0.82
Trenching	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	1	8.00	46	0.45
Trenching	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	5	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	15.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Building Construction - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2812	12.7589	8.0700	0.0114		0.8591	0.8591		0.7904	0.7904		1,165.9164	1,165.9164	0.3572		1,174.8473
Total	1.2812	12.7589	8.0700	0.0114		0.8591	0.8591		0.7904	0.7904		1,165.9164	1,165.9164	0.3572		1,174.8473

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.2 Building Construction - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0196	0.5176	0.1369	1.0400e-003	0.0256	4.4800e-003	0.0301	7.3700e-003	4.2900e-003	0.0117		111.1430	111.1430	8.0500e-003		111.3443
Worker	0.0661	0.0486	0.6251	1.3900e-003	0.1230	1.0200e-003	0.1240	0.0326	9.4000e-004	0.0336		137.9047	137.9047	5.2100e-003		138.0349
Total	0.0856	0.5662	0.7620	2.4300e-003	0.1486	5.5000e-003	0.1541	0.0400	5.2300e-003	0.0452		249.0477	249.0477	0.0133		249.3792

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,165.9164	1,165.9164	0.3572		1,174.8473
Total	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,165.9164	1,165.9164	0.3572		1,174.8473

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.2 Building Construction - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0196	0.5176	0.1369	1.0400e-003	0.0256	4.4800e-003	0.0301	7.3700e-003	4.2900e-003	0.0117		111.1430	111.1430	8.0500e-003		111.3443
Worker	0.0661	0.0486	0.6251	1.3900e-003	0.1230	1.0200e-003	0.1240	0.0326	9.4000e-004	0.0336		137.9047	137.9047	5.2100e-003		138.0349
Total	0.0856	0.5662	0.7620	2.4300e-003	0.1486	5.5000e-003	0.1541	0.0400	5.2300e-003	0.0452		249.0477	249.0477	0.0133		249.3792

3.3 Trenching - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7682	12.5980	10.1319	0.0152		0.8735	0.8735		0.8395	0.8395		1,436.0988	1,436.0988	0.2819		1,443.1466
Total	1.7682	12.5980	10.1319	0.0152		0.8735	0.8735		0.8395	0.8395		1,436.0988	1,436.0988	0.2819		1,443.1466

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.3 Trenching - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0239	0.7769	0.1491	1.8400e-003	0.0399	4.2200e-003	0.0442	0.0109	4.0400e-003	0.0150		198.4934	198.4934	0.0145		198.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0901	0.0663	0.8524	1.8900e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		188.0518	188.0518	7.1000e-003		188.2294
Total	0.1139	0.8432	1.0015	3.7300e-003	0.2076	5.6100e-003	0.2132	0.0554	5.3200e-003	0.0607		386.5453	386.5453	0.0216		387.0844

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3711	7.6548	9.4349	0.0152		0.5039	0.5039		0.5039	0.5039	0.0000	1,436.0988	1,436.0988	0.2819		1,443.1466
Total	0.3711	7.6548	9.4349	0.0152		0.5039	0.5039		0.5039	0.5039	0.0000	1,436.0988	1,436.0988	0.2819		1,443.1466

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.3 Trenching - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0239	0.7769	0.1491	1.8400e-003	0.0399	4.2200e-003	0.0442	0.0109	4.0400e-003	0.0150		198.4934	198.4934	0.0145		198.8550
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0901	0.0663	0.8524	1.8900e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		188.0518	188.0518	7.1000e-003		188.2294
Total	0.1139	0.8432	1.0015	3.7300e-003	0.2076	5.6100e-003	0.2132	0.0554	5.3200e-003	0.0607		386.5453	386.5453	0.0216		387.0844

3.4 Paving - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0532	9.9754	7.3425	0.0113		0.6087	0.6087		0.5636	0.5636		1,085.1071	1,085.1071	0.3018		1,092.6515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0532	9.9754	7.3425	0.0113		0.6087	0.6087		0.5636	0.5636		1,085.1071	1,085.1071	0.3018		1,092.6515

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.4 Paving - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1081	0.0796	1.0228	2.2700e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		225.6622	225.6622	8.5200e-003		225.8752
Total	0.1081	0.0796	1.0228	2.2700e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		225.6622	225.6622	8.5200e-003		225.8752

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2239	4.7579	6.9028	0.0113		0.2908	0.2908		0.2908	0.2908	0.0000	1,085.1071	1,085.1071	0.3018		1,092.6515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2239	4.7579	6.9028	0.0113		0.2908	0.2908		0.2908	0.2908	0.0000	1,085.1071	1,085.1071	0.3018		1,092.6515

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.4 Paving - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1081	0.0796	1.0228	2.2700e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		225.6622	225.6622	8.5200e-003		225.8752
Total	0.1081	0.0796	1.0228	2.2700e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		225.6622	225.6622	8.5200e-003		225.8752

3.5 Site Preparation - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1061	0.0000	0.1061	0.0115	0.0000	0.0115			0.0000			0.0000
Off-Road	0.8524	10.5148	4.3533	9.7700e-003		0.4726	0.4726		0.4347	0.4347		999.5201	999.5201	0.3063		1,007.1764
Total	0.8524	10.5148	4.3533	9.7700e-003	0.1061	0.4726	0.5786	0.0115	0.4347	0.4462		999.5201	999.5201	0.3063		1,007.1764

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.5 Site Preparation - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0300	0.0221	0.2841	6.3000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		62.6840	62.6840	2.3700e-003		62.7431
Total	0.0300	0.0221	0.2841	6.3000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		62.6840	62.6840	2.3700e-003		62.7431

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0414	0.0000	0.0414	4.4700e-003	0.0000	4.4700e-003			0.0000			0.0000
Off-Road	0.2382	4.8716	5.8579	9.7700e-003		0.2405	0.2405		0.2405	0.2405	0.0000	999.5201	999.5201	0.3063		1,007.1764
Total	0.2382	4.8716	5.8579	9.7700e-003	0.0414	0.2405	0.2819	4.4700e-003	0.2405	0.2450	0.0000	999.5201	999.5201	0.3063		1,007.1764

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

3.5 Site Preparation - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0300	0.0221	0.2841	6.3000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		62.6840	62.6840	2.3700e-003		62.7431
Total	0.0300	0.0221	0.2841	6.3000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		62.6840	62.6840	2.3700e-003		62.7431

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.2000e-004	3.1400e-003	9.2900e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		3.0711	3.0711	1.6000e-004		3.0749
Unmitigated	6.2000e-004	3.1400e-003	9.2900e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		3.0711	3.0711	1.6000e-004		3.0749

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.25	0.00	0.00	791	791
Total	0.25	0.00	0.00	791	791

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

5.0 Energy Detail

Historical Energy Use: N

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
NaturalGas Unmitigated	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1243.84	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Total		0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1.24384	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Total		0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Unmitigated	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Total	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Total	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003

7.0 Water Detail

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	25	50	0.73	Diesel
Fire Pump	1	2	0	50	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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Phase 2D Recycled Water Pipeline - South Coast Air Basin, Summer

10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457
Total	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457

11.0 Vegetation

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

Phase 2D Recycled Water Pipeline
South Coast Air Basin, Winter**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.00	1000sqft	0.57	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

Project Characteristics -

Land Use -

Construction Phase - Trenching based on client information. Assumed 150 feet of pipeline construction per day with site prep for pump station.

Off-road Equipment - Equipment for pump station

Off-road Equipment - Equipment for trenching.

Off-road Equipment -

Off-road Equipment -

Grading - Area of pipeline

Trips and VMT - Haul trips associated with construction

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 and 403.1. Tier 3 engine compliance with CARB Article 4 Off-Road Compression-Ignition Engines

Vehicle Trips - Up to 1 trip per week for maintenance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	5.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/1/2017	10/13/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	12/1/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	12/8/2017
tblConstructionPhase	PhaseEndDate	10/1/2017	10/6/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	10/9/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	10/16/2017
tblConstructionPhase	PhaseStartDate	10/2/2017	12/4/2017
tblGrading	AcresOfGrading	2.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblProjectCharacteristics	OperationalYear	2018	2019
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	25.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.01

2.0 Emissions Summary

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.8914	13.4595	11.0728	0.0188	0.2076	0.8792	1.0868	0.0554	0.8449	0.9003	0.0000	1,807.838 9	1,807.838 9	0.3708	0.0000	1,815.430 9
Maximum	1.8914	13.4595	11.0728	0.0188	0.2076	0.8792	1.0868	0.0554	0.8449	0.9003	0.0000	1,807.838 9	1,807.838 9	0.3708	0.0000	1,815.430 9

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.4943	8.5162	10.3758	0.0188	0.2076	0.5096	0.7172	0.0554	0.5093	0.5647	0.0000	1,807.838 9	1,807.838 9	0.3708	0.0000	1,815.430 9
Maximum	0.4943	8.5162	10.3758	0.0188	0.2076	0.5096	0.7172	0.0554	0.5093	0.5647	0.0000	1,807.838 9	1,807.838 9	0.3708	0.0000	1,815.430 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	73.87	36.73	6.29	0.00	0.00	42.04	34.01	0.00	39.72	37.27	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Energy	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Mobile	6.0000e-004	3.2400e-003	8.6700e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		2.9143	2.9143	1.5000e-004		2.9181
Stationary	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457
Total	0.7368	0.6603	0.7092	1.5500e-003	2.3500e-003	0.0576	0.0600	6.3000e-004	0.0576	0.0582		233.2048	233.2048	0.0147	2.6800e-003	234.3728

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Energy	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Mobile	6.0000e-004	3.2400e-003	8.6700e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		2.9143	2.9143	1.5000e-004		2.9181
Stationary	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457
Total	0.7368	0.6603	0.7092	1.5500e-003	2.3500e-003	0.0576	0.0600	6.3000e-004	0.0576	0.0582		233.2048	233.2048	0.0147	2.6800e-003	234.3728

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	10/9/2017	10/13/2017	5	5	
2	Trenching	Trenching	10/16/2017	12/1/2017	5	35	
3	Paving	Paving	12/4/2017	12/8/2017	5	5	
4	Site Preparation	Site Preparation	10/2/2017	10/6/2017	5	5	

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

Acres of Grading (Site Preparation Phase): 0.5**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Graders	1	7.00	187	0.41
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Architectural Coating	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Trenching	Signal Boards	1	8.00	6	0.82
Trenching	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	1	8.00	46	0.45
Trenching	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	5	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	15.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Building Construction - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2812	12.7589	8.0700	0.0114		0.8591	0.8591		0.7904	0.7904		1,165.9164	1,165.9164	0.3572		1,174.8473
Total	1.2812	12.7589	8.0700	0.0114		0.8591	0.8591		0.7904	0.7904		1,165.9164	1,165.9164	0.3572		1,174.8473

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.2 Building Construction - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0204	0.5194	0.1507	1.0200e-003	0.0256	4.5500e-003	0.0302	7.3700e-003	4.3500e-003	0.0117		108.2668	108.2668	8.6100e-003		108.4819
Worker	0.0724	0.0535	0.5724	1.3000e-003	0.1230	1.0200e-003	0.1240	0.0326	9.4000e-004	0.0336		129.3863	129.3863	4.9100e-003		129.5091
Total	0.0928	0.5728	0.7230	2.3200e-003	0.1486	5.5700e-003	0.1541	0.0400	5.2900e-003	0.0453		237.6531	237.6531	0.0135		237.9910

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,165.9164	1,165.9164	0.3572		1,174.8473
Total	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,165.9164	1,165.9164	0.3572		1,174.8473

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.2 Building Construction - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0204	0.5194	0.1507	1.0200e-003	0.0256	4.5500e-003	0.0302	7.3700e-003	4.3500e-003	0.0117		108.2668	108.2668	8.6100e-003		108.4819
Worker	0.0724	0.0535	0.5724	1.3000e-003	0.1230	1.0200e-003	0.1240	0.0326	9.4000e-004	0.0336		129.3863	129.3863	4.9100e-003		129.5091
Total	0.0928	0.5728	0.7230	2.3200e-003	0.1486	5.5700e-003	0.1541	0.0400	5.2900e-003	0.0453		237.6531	237.6531	0.0135		237.9910

3.3 Trenching - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7682	12.5980	10.1319	0.0152		0.8735	0.8735		0.8395	0.8395		1,436.0988	1,436.0988	0.2819		1,443.1466
Total	1.7682	12.5980	10.1319	0.0152		0.8735	0.8735		0.8395	0.8395		1,436.0988	1,436.0988	0.2819		1,443.1466

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.3 Trenching - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0245	0.7886	0.1604	1.8100e-003	0.0399	4.2900e-003	0.0442	0.0109	4.1000e-003	0.0150		195.3042	195.3042	0.0151		195.6809
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7805	1.7700e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		176.4359	176.4359	6.7000e-003		176.6033
Total	0.1232	0.8615	0.9409	3.5800e-003	0.2076	5.6800e-003	0.2133	0.0554	5.3800e-003	0.0608		371.7402	371.7402	0.0218		372.2842

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3711	7.6548	9.4349	0.0152		0.5039	0.5039		0.5039	0.5039	0.0000	1,436.0988	1,436.0988	0.2819		1,443.1466
Total	0.3711	7.6548	9.4349	0.0152		0.5039	0.5039		0.5039	0.5039	0.0000	1,436.0988	1,436.0988	0.2819		1,443.1466

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.3 Trenching - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0245	0.7886	0.1604	1.8100e-003	0.0399	4.2900e-003	0.0442	0.0109	4.1000e-003	0.0150		195.3042	195.3042	0.0151		195.6809
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7805	1.7700e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		176.4359	176.4359	6.7000e-003		176.6033
Total	0.1232	0.8615	0.9409	3.5800e-003	0.2076	5.6800e-003	0.2133	0.0554	5.3800e-003	0.0608		371.7402	371.7402	0.0218		372.2842

3.4 Paving - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0532	9.9754	7.3425	0.0113		0.6087	0.6087		0.5636	0.5636		1,085.1071	1,085.1071	0.3018		1,092.6515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0532	9.9754	7.3425	0.0113		0.6087	0.6087		0.5636	0.5636		1,085.1071	1,085.1071	0.3018		1,092.6515

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.4 Paving - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9366	2.1300e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		211.7231	211.7231	8.0300e-003		211.9240
Total	0.1184	0.0875	0.9366	2.1300e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		211.7231	211.7231	8.0300e-003		211.9240

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2239	4.7579	6.9028	0.0113		0.2908	0.2908		0.2908	0.2908	0.0000	1,085.1071	1,085.1071	0.3018		1,092.6515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2239	4.7579	6.9028	0.0113		0.2908	0.2908		0.2908	0.2908	0.0000	1,085.1071	1,085.1071	0.3018		1,092.6515

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.4 Paving - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1184	0.0875	0.9366	2.1300e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		211.7231	211.7231	8.0300e-003		211.9240
Total	0.1184	0.0875	0.9366	2.1300e-003	0.2012	1.6700e-003	0.2029	0.0534	1.5400e-003	0.0549		211.7231	211.7231	8.0300e-003		211.9240

3.5 Site Preparation - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1061	0.0000	0.1061	0.0115	0.0000	0.0115			0.0000			0.0000
Off-Road	0.8524	10.5148	4.3533	9.7700e-003		0.4726	0.4726		0.4347	0.4347		999.5201	999.5201	0.3063		1,007.1764
Total	0.8524	10.5148	4.3533	9.7700e-003	0.1061	0.4726	0.5786	0.0115	0.4347	0.4462		999.5201	999.5201	0.3063		1,007.1764

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.5 Site Preparation - 2017**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0329	0.0243	0.2602	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8120	58.8120	2.2300e-003		58.8678
Total	0.0329	0.0243	0.2602	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8120	58.8120	2.2300e-003		58.8678

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0414	0.0000	0.0414	4.4700e-003	0.0000	4.4700e-003			0.0000			0.0000
Off-Road	0.2382	4.8716	5.8579	9.7700e-003		0.2405	0.2405		0.2405	0.2405	0.0000	999.5201	999.5201	0.3063		1,007.1764
Total	0.2382	4.8716	5.8579	9.7700e-003	0.0414	0.2405	0.2819	4.4700e-003	0.2405	0.2450	0.0000	999.5201	999.5201	0.3063		1,007.1764

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

3.5 Site Preparation - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0329	0.0243	0.2602	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8120	58.8120	2.2300e-003		58.8678
Total	0.0329	0.0243	0.2602	5.9000e-004	0.0559	4.6000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8120	58.8120	2.2300e-003		58.8678

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0000e-004	3.2400e-003	8.6700e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		2.9143	2.9143	1.5000e-004		2.9181
Unmitigated	6.0000e-004	3.2400e-003	8.6700e-003	3.0000e-005	2.3500e-003	3.0000e-005	2.3900e-003	6.3000e-004	3.0000e-005	6.6000e-004		2.9143	2.9143	1.5000e-004		2.9181

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.25	0.00	0.00	791	791
Total	0.25	0.00	0.00	791	791

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

5.0 Energy Detail

Historical Energy Use: N

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
NaturalGas Unmitigated	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1243.84	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Total		0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1.24384	0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032
Total		0.0134	0.1219	0.1024	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003		146.3336	146.3336	2.8000e-003	2.6800e-003	147.2032

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Unmitigated	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Total	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0635					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003
Total	0.5587	2.0000e-005	2.5800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.4700e-003	5.4700e-003	1.0000e-005		5.8400e-003

7.0 Water Detail

Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	25	50	0.73	Diesel
Fire Pump	1	2	0	50	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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Phase 2D Recycled Water Pipeline - South Coast Air Basin, Winter

10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (50 - 75 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Fire Pump - Diesel (50 - 75 HP)	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457
Total	0.1641	0.5351	0.5955	7.9000e-004		0.0483	0.0483		0.0483	0.0483		83.9514	83.9514	0.0118		84.2457

11.0 Vegetation

APPENDIX B

Noise Measurement Data

Phase 2D Noise Measurements--Location 1

Record #	Date	Time	Duration	Run Time	Pause	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time	LApeak (max)
1	2016/06/30	12:30:39	00:15:00.0	00:15:00.0	00:00:00.0	49.8	79.3	33.8	12:43:14	69.5	12:31:21	96.5
2	2016/06/30	12:45:39	00:00:05.3	00:00:05.3	00:00:00.0	50.0	57.2	49.3	12:45:41	54.1	12:45:39	64.7

Phase 2D Noise Measurements--Location 1

LApeak (max) Time	SPL 1 Count	Duration	SPL 2 Count	Duration	Peak 1 Count	Duration	Peak 2 Count	Duration	Peak 3 Count	Duration
12:42:46	3	4.8	0	0.0	0	0.0	0	0.0	0	0.0
12:45:41	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Phase 2D Noise Measurements--Location 1

LAS1.67	LAS8.33	LAS25.00	LAS33.30	LAS50.00	LAS90.00	SEA	LCeq	LAeq	LCeq - LAeq	LAeq	LAeq	LAeq-LAeq	# Overloads	Duration
58.8	52.0	48.4	47.1	44.9	38.8	-99.9	60.7	49.8	11.0	60.3	49.8	10.5	0	0.0
53.8	52.7	51.6	51.1	50.7	49.7	-99.9	59.8	50.0	9.8	56.4	50.0	6.4	0	0.0

Phase 2D Noise Measurements--Location 1

# OBA Overloads	Duration	1/1 LAeq 8.0	16.0	31.5	63.0	125	250	500	1000	2000	4000	8000	16000	1/1 LASmax 8.0	16.0	31.5	63.0	125
0	0.0	-12.6	9.1	18.2	29.7	34.2	38.8	41.0	44.6	43.0	40.7	39.6	33.1	10.9	35.1	43.5	54.2	56.6
0	0.0	-8.5	-0.1	15.2	28.6	32.9	48.5	42.0	36.2	33.2	31.9	23.8	11.1	-2.4	9.3	22.4	34.2	40.5

Phase 2D Noise Measurements--Location 1

250	500	1000	2000	4000	8000	16000	1/1 LASmin	8.0	16.0	31.5	63.0	125	250	500	1000	2000	4000	8000	16000	1/3 LAeq	6.3	8.0
59.6	60.4	65.7	63.5	62.6	67.3	61.2		-24.3	-8.6	8.4	16.2	21.9	21.7	26.7	28.3	23.8	20.5	13.4	7.1	-24.7	-20.4	
50.6	45.4	45.9	46.3	40.2	43.9	37.2		-19.6	-0.2	14.6	28.5	32.8	46.2	40.7	32.6	32.3	30.8	26.5	16.6	-24.4	-17.2	

Phase 2D Noise Measurements--Location 1

10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
-13.8	-7.6	-1.9	8.5	14.9	9.1	14.1	19.3	25.1	26.6	28.2	30.2	29.9	30.7	34.3	35.7	35.8	36.1	36.3	37.9	39.2	41.9	39.9	36.9	36.2	38.1
-9.0	-0.7	-0.3	-0.5	9.6	6.1	12.9	19.5	23.1	26.3	28.6	26.5	30.3	36.2	44.0	46.3	36.7	38.8	34.1	28.5	33.0	31.8	27.7	29.3	27.5	28.9

Phase 2D Noise Measurements--Location 1

4000	5000	6300	8000	10000	12500	16000	20000	1/3 LASmax	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125
35.5	32.6	35.9	35.0	33.7	28.8	28.6	24.9		-2.4	0.7	9.7	13.9	23.5	34.5	39.7	32.4	37.6	44.8	51.4	49.6	51.8	53.9
27.4	24.1	21.5	18.6	14.3	9.3	4.4	0.8		-21.5	-11.9	-3.3	5.2	5.8	7.9	10.3	14.7	21.8	24.8	31.0	32.8	34.6	35.9

Phase 2D Noise Measurements--Location 1

160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000
50.7	52.9	56.0	53.4	56.2	56.8	55.9	58.5	60.6	62.3	60.2	57.2	56.9	60.6	59.2	57.1	62.8	63.1	62.0	56.3	56.9	53.7
39.5	39.4	46.0	48.5	40.8	42.0	38.0	40.9	40.9	43.2	45.1	40.0	37.3	36.1	35.6	35.0	42.0	37.5	36.6	35.0	31.7	23.9

Phase 2D Noise Measurements--Location 1

1/3 LASmin 6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125	160	200	250	315	400	500	630	800	1000
-30.1	-29.2	-28.2	-23.0	-17.0	-11.1	4.6	-2.6	2.4	4.6	4.8	12.9	8.5	18.9	6.8	15.3	15.6	19.8	21.9	21.2	21.2	23.0	24.1
-30.1	-29.2	-22.2	-11.5	-9.2	-1.1	9.0	5.6	11.8	17.8	21.9	26.0	27.9	26.6	30.7	34.5	41.4	43.8	35.6	36.9	32.2	28.2	27.5

Phase 2D Noise Measurements--Location 1

1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000
22.2	20.3	19.2	17.4	17.0	16.3	12.8	10.3	8.2	6.2	4.0	1.7	-0.1
27.4	28.0	27.6	27.2	27.3	26.1	24.3	24.3	20.8	17.9	14.6	10.8	4.4

Phase 2D Noise Measurements--Location 2

Record #	Date	Time	Duration	Run Time	Pause	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time	LApeak (max)
1	2016/06/30	12:48:49	00:15:00.0	00:15:00.0	00:00:00.0	51.6	81.2	38.8	12:58:16	70.6	12:58:44	94.9
2	2016/06/30	13:03:49	00:00:06.3	00:00:06.3	00:00:00.0	50.9	58.9	43.6	13:03:49	56.3	13:03:51	84.6

Phase 2D Noise Measurements--Location 2

L	Apeak (max) Time	SPL 1 Count	Duration	SPL 2 Count	Duration	Peak 1 Count	Duration	Peak 2 Count	Duration	Peak 3 Count	Duration
	13:02:45	4	7.1	0	0.0	0	0.0	0	0.0	0	0.0
	13:03:51	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Phase 2D Noise Measurements--Location 2

LAS1.67	LAS8.33	LAS25.00	LAS33.30	LAS50.00	LAS90.00	SEA	LCeq	LAeq	LCeq - LAeq	LAeq	LAeq	LAeq-LAeq	# Overloads	Duration
59.9	54.6	50.9	49.5	46.6	42.7	-99.9	62.3	51.6	10.7	58.5	51.6	6.8	0	0.0
56.2	54.7	52.3	51.5	49.4	45.3	-99.9	62.5	50.9	11.5	62.6	50.9	11.7	0	0.0

Phase 2D Noise Measurements--Location 2

# OBA Overloads	Duration	1/1 LAeq 8.0	16.0	31.5	63.0	125	250	500	1000	2000	4000	8000	16000	1/1 LASmax 8.0	16.0	31.5	63.0	125
0	0.0	-16.2	11.2	19.2	31.6	37.6	40.4	46.6	46.2	44.1	40.4	33.1	21.8	9.0	39.0	43.2	52.1	52.6
0	0.0	-12.6	8.8	17.8	30.6	42.8	38.9	40.6	45.5	45.5	39.1	33.6	25.0	-9.1	15.1	23.3	34.4	49.6

Phase 2D Noise Measurements--Location 2

250	500	1000	2000	4000	8000	16000	1/1 LASmin	8.0	16.0	31.5	63.0	125	250	500	1000	2000	4000	8000	16000	1/3 LAeq	6.3	8.0
57.4	66.0	67.7	62.6	63.2	58.7	47.3		-24.3	-5.9	10.2	24.6	30.2	29.9	31.0	31.3	30.6	27.1	16.1	7.1	-27.8	-23.1	
44.9	45.7	51.1	50.6	42.7	38.3	30.7		-24.3	-5.1	12.3	26.3	32.7	31.7	36.1	36.8	36.7	35.0	30.4	19.6	-28.2	-23.6	

Phase 2D Noise Measurements--Location 2

10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
-16.6	-8.9	-0.9	10.9	13.6	13.4	16.4	22.6	26.9	29.1	31.8	34.0	32.4	33.9	35.8	36.7	38.3	41.4	44.0	42.4	40.9	40.9	40.4	39.4	38.2	37.1
-14.2	-9.4	-0.5	8.2	11.0	11.2	18.0	23.7	27.2	26.6	28.9	38.8	40.3	36.5	32.2	34.3	37.4	37.0	36.5	36.3	38.3	43.9	44.0	38.1	35.6	36.3

Phase 2D Noise Measurements--Location 2

4000	5000	6300	8000	10000	12500	16000	20000	1/3 LASmax	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125
36.0	33.1	30.9	27.6	24.5	20.3	15.2	8.6		-10.9	-3.2	4.8	17.2	24.7	38.9	41.1	38.0	35.7	45.0	50.0	48.2	44.5	50.2
33.3	31.5	29.7	28.4	28.1	23.2	19.2	13.7		-25.0	-18.5	-10.5	-5.4	4.4	14.6	17.5	16.2	24.3	29.8	31.1	30.9	34.6	45.6

Phase 2D Noise Measurements--Location 2

160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000
46.6	54.0	53.8	53.1	55.9	60.9	63.2	65.0	61.9	60.8	60.1	57.0	57.5	57.4	60.5	58.0	56.7	53.3	50.3	46.0	40.3	32.6
47.3	43.1	36.9	40.6	43.2	42.8	42.0	39.8	43.5	49.0	48.7	42.6	39.4	39.5	37.0	34.6	33.4	33.0	34.1	29.0	24.9	19.9

Phase 2D Noise Measurements--Location 2

1/3 LASmin	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100	125	160	200	250	315	400	500	630	800	1000
-30.1	-29.2	-28.2	-21.2	-14.5	-8.0	-2.8	3.3	7.9	14.1	17.0	21.1	23.7	25.6	24.7	24.1	24.6	20.8	25.4	25.4	27.1	26.4	26.6	
-30.1	-29.2	-28.2	-17.3	-14.0	-6.1	-0.9	4.6	10.5	16.0	19.7	22.5	24.8	28.3	28.8	25.4	25.8	27.9	28.9	30.7	32.4	32.6	31.7	

Phase 2D Noise Measurements--Location 2

1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000
26.3	25.4	25.9	25.2	24.4	21.5	17.6	12.7	9.9	9.1	4.0	1.7	0.0
31.8	32.3	31.9	31.6	30.8	30.2	28.8	27.2	25.0	22.7	17.7	13.6	7.4

Castaic Lake Water Agency

Projects in Construction

Monthly Status Report

(Times and Dollar Amounts based on estimated work completed
through June 15, 2017)



Foothill Feeder Turnout CLWA-01 Project

General

Capital Project No: 200905

Description: Construction of a permanent turnout structure known as CLWA-01.

Facilities: Connection to the Foothill Feeder, including construction of a concrete valve vault equipped with a 36-inch conical plug valve, a new meter vault equipped with a 36-inch magnetic type flow meter and associated pipeline.

Function: Increase effective capacity of RVIPS and RVWTP.

Impacted Facilities: RVIPS, RVWTP.

CEQA: Environmental Impact Report for the RVWTP Expansion, which includes permanent Foothill Feeder Connection, was certified by the Board of Directors on June 28, 2006, and the Addendum to the Certified EIR was approved on March 11, 2009.

Construction Contract Status

Notice of Award: March 9, 2017
Notice to Proceed: April 27, 2017
Calendar Days to Complete: 335
Days by Change Order or Delays: 0
Completion Date: March 28, 2018
Contractor: GSE Construction Company, Inc.
Original Contract Amount: \$ 2,691,300
Amount by Change Order: \$ 0
Current Contract Amount: \$ \$2,691,300
Billings to date: \$ 0
Retention: \$ 0
Estimated Percent of Work Completed: 5%
Percent Billed: 0%
Percent Time Elapsed: 16%

Status: Pre-construction meeting held on March 30, 2017. Progress meetings held on June 8, 2017, June 22, 2017 and June 29, 2017. Submittals and RFIs are being submitted and processed

Significant Issues: None.

June 19, 2017

Earl Schmidt Filtration Plant (ESFP) Clearwell/CT Improvements Project

General

Capital Project No: 200105

Description: Construction of a new concrete contactor to improve disinfection contact time (CT) at ESFP.

Facilities: ESFP.

Function: Improves disinfection contact time at the ESFP and provides increased assurance of operating permit compliance.

Impacted Facilities: ESFP.

CEQA: Categorically Exempt (Class 1, Section 15301 of the State CEQA Guidelines).

Construction Contract Status

Notice of Award: March 9, 2017
Notice to Proceed: April 12, 2017
Calendar Days to Complete: 480
Days by Change Order or Delays: 0
Completion Date: August 5, 2018
Contractor: Clark Bros. Inc.
Original Contract Amount: \$ 5,623,745
Amount by Change Order: \$ 0
Current Contract Amount: 5,623,745
Billings to date: \$ 0
Retention: \$ 0
Estimated Percent of Work Completed: 3%
Percent Billed: 0%
Percent Time Elapsed: 13%

Status: Pre-construction meeting was held on April 12, 2017. Contractor mobilized the week of May 29, 2017. Critical path item submittals and RFI are being reviewed by the design engineer. Site slope grading is underway.

Significant Issues: None.

June 19, 2017

Planning and Engineering Committee
Planning Calendar
FY 2017/18

ITEM NO.
5

	Item	July 5 Comm	July 26 Board	Aug 1 Comm	Aug 23 Board	Sept 5 Comm	Sept 27 Board	Oct 3 Comm	Oct 25 Board	Oct 31 Comm	Nov 20 Board	Dec 5 Comm	Dec 27 Board	Jan 2 Comm	Jan 24 Board	Feb 6 Comm	Feb 28 Board	March 6 Comm	March 28 Board	April 3 Comm	April 25 Board	May 1 Comm	May 23 Board	June 5 Comm	June 27 Board
1	Monthly Committee Planning Calendar	P		P		P		P		P		P		P		P		P		P		P		P	
2	CIP Construction Status Report	P		P		P		P		P		P		P		P		P		P		P		P	
3	Update on Quagga Mussels					P	P					P	P					P	P					P	P
4	Recommend Approval of Construction Contract for SPTF Pressure Sustaining Modifications	P	P																						
5	Recommend (1) Approval of a Resolution Adopting a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, (2) Authorize the General Manager to Enter into a Cost Sharing Agreement with Valencia Water Company and (3) Approval of a Work Authorization for RMC Water and Environment for Final Design of the Recycled Water West Ranch (Phase 2D) Project	P	P																						
6	Recommend Approval of Groundwater Treatment Project Design Work Authorization			P	P																				
7	Recommend (1) Approval of a Resolution Adopting a Mitigated Negative Declaration, (2) authorize the General Manager to enter into a cost sharing agreement with the purveyors and (3) authorize final design funding for the Recycled Water South End (Phase 2C) Project			P	P																				
8	Recommend Approval of Construction Contract for ESIPS Pipeline Improvements			P	P																				
9	Recommend (1) Approval of a Resolution Adopting a Mitigated Negative Declaration, (2) authorize the General Manager to enter into a cost sharing agreement with the purveyors and (3) authorize final design funding for the Recycled Water Vista Canyon (Phase 2B) Project					P	P																		
10	Annual Resolution of Intent to Continue/Modify WSAs and Apportion Annual Capital Budget and Public Hearing					P	P		P																

**Planning and Engineering Committee
Planning Calendar
FY 2017/18**

	Item	July 5 Comm	July 26 Board	Aug 1 Comm	Aug 23 Board	Sept 5 Comm	Sept 27 Board	Oct 3 Comm	Oct 25 Board	Oct 31 Comm	Nov 20 Board	Dec 5 Comm	Dec 27 Board	Jan 2 Comm	Jan 24 Board	Feb 6 Comm	Feb 28 Board	March 6 Comm	March 28 Board	April 3 Comm	April 25 Board	May 1 Comm	May 23 Board	June 5 Comm	June 27 Board
11	Certify CEQA and Recommend Approval of Work Authorization for Replacement Wells/Dry Year Reliability Wells Design Contract					P	P																		
12	Recommend Approval of a Resolution Awarding a Contract for the Purchase of Electrical Equipment for SC-12					P	P																		
13	Recommend Approval of a Resolution Awarding a Contract for the Removal and Replacement of Asphalt at the Placerita Tank Facility					P	P																		
14	Recommend Approval of a Resolution Awarding a Contract for the Recoating of the Exterior of the Honby Tank #1							P	P																
15	Recommend Approval of a Resolution Awarding a Contract for the Recoating of the Exterior of the Bouquet Tank							P	P																
16	Recommend Approval of a Resolution Adopting a Mitigated Negative Declaration, Final Design, and cost sharing for the Recycled Water Program Phase 2A (Central Park) Project between CLWA and TBD							P	P																
17	Update on Engineering Technologies (GIS, Infomaster, Innovyze, CTS, SCADA Watch, etc.)							P	P																
18	Recommend Approval of Solicitation of Construction Bids for Groundwater Treatment Improvement Project											P	P												
19	Recommend Approval of Construction of a New 2.5 MG Deane Tank and Cost Sharing Agreement with Developer											P	P												
20	Recommend Approval of Construction of a New Deane Zone Pump Station and Cost Sharing Agreement with Developer											P	P												
21	Recommend Approval of Resolution Authorizing CLWA to Execute Consolidation and Water Service Agreement, and Financing Agreement for Construction of Pipeline to the Los Angeles Residential Community													P	P										
22	Recommend Approval of Resolution Awarding Construction Contract to FIRM NAME for Pipeline to the Los Angeles Residential Community													P	P										

**Planning and Engineering Committee
Planning Calendar
FY 2017/18**

	Item	July 5 Comm	July 26 Board	Aug 1 Comm	Aug 23 Board	Sept 5 Comm	Sept 27 Board	Oct 3 Comm	Oct 25 Board	Oct 31 Comm	Nov 20 Board	Dec 5 Comm	Dec 27 Board	Jan 2 Comm	Jan 24 Board	Feb 6 Comm	Feb 28 Board	March 6 Comm	March 28 Board	April 3 Comm	April 25 Board	May 1 Comm	May 23 Board	June 5 Comm	June 27 Board
23	Recommend Approval of Resolution Adopting a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program under CEQA and Design for the Construction of Two 1.6 MG tanks in the Placerita Pressure Zone															P	P								
24	Recommend Approval of Resolution Awarding Construction Contract to FIRM NAME for Pipeline in Rainbow Glen Drive															P	P								
25	Annual Review of Engineering and Operations Department Policies															P	P								
26	Recommend Approval of Solicitation of Construction Bids for ESFP Washwater Return and Sludge Systems															P	P								
27	Preliminary FY 2018/19 Capital Projects Budget Discussion																	P							
28	Recommend Approval of Construction Bids Solicitation for the Castaic Conduit Pipeline Reaches 1, 2 and 5 Modifications																	P	P						
29	Recommend Approval of Resolution Awarding Construction Contract to FIRM NAME to Replace Six (6) Service Laterals and Services to Business in West Newhall																	P	P						
30	Review Proposed FY 2017/18 Action Items																			P					
31	Review Proposed FY 2017/18 Capital Projects																			P	P				
32	Recommend Approval of Construction Contract for Groundwater Treatment Improvements Project																					P	P		
33	Follow-up Final Review Proposed FY 2018/19 Minor and Major Capital Projects, if needed																					P	P		

C = Completed Item
P = Planned Item